

## Department of Environmental Protection

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

David B. Struhs Secretary

September 9, 2002

The Honorable Michael Bilirakis Representative in Congress House of Representatives Washington, D. C. 20515-0909

Re: Florida Gas Transmission's Compressor Station No. 27

Thonotosassa, Florida

Final Air Construction Permit

Dear Mr. Bilirakis:

I appreciate your recent letter thanking me for attending the public forum in Thonotosassa.

As mentioned at the public meeting, the Department is not directly involved in the site selection process. For a typical project, an applicant's selected site must be approved through the zoning process with input from the public and local authorities. For gas transmission projects, site selection is ultimately approved by the Federal Energy Regulatory Commission.

We are required to act in a timely manner upon requests for air construction permits. Florida Gas Transmission Company provided us with reasonable assurance that the proposed project will meet all state and federal requirements regarding air pollution. An administrative hearing was held on July 18<sup>th</sup>, after which the petitioners withdrew their challenge. Accordingly, a final air construction permit was issued on August 12<sup>th</sup>.

Please be assured that the Department will promptly review any air permit application by the Florida Gas Transmission Company for construction at a different site. If you have any questions, please contact me at 850/921-9536.

Sincerely,

Jeffery F. Koerner

New Source Review Section

## STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

ELIZABETH A. ENLUND and DAVID A. PICKERING,

Petitioners,

Vs.

DOAH Case No.: 02-1678

FLORIDA GAS TRANSMISSION COMPANY and DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondents.

#### PETITIONERS' PROPOSED PRE-HEARING STATEMENT

Here comes the Petitioners, Elizabeth A. Enlund and David A. Pickering, to serve and file the Petitioners' Proposed Pre-Hearing Statement pursuant to the requirements of the "Order Of Pre-Hearing Instructions" made by the Honorable J. Lawrence Johnston, and dated May 10<sup>th</sup>, 2002.

#### (a) A concise statement of the nature of the controversy:

That the site parameters (cultural, topographical and geological) and other essential data including, but not limited to, altitude at stack base and accurate Potential To Emit N0x data were not submitted to FDEP during the permitting process nor made available to the public as required by 40 CFR 51.230(f), which mandates that FDEP make available to the public, including the petitioners, data on the nature and amounts of emissions as reported and as correlated with any applicable emission standards or limitations.;

- That Respondent FGT has misrepresented the amount of Potential N0x emissions from the proposed Compressor Station 27 (CS 27 hereafter) in the CS 27 P5 Final State Application and the FGT 27V Draft Permit No. 0571279-001-AC (Draft Permit hereafter), as well as in the Annual Operating Reports and Compliance Tests from similar FGT facilities;
- That misrepresentation is accomplished by the use of unauthorized and unnoticed amendments to 40 CFR 60.335 (c)(1), i.e. the equation to adjust the raw N0x data to ISO conditions.
- That the Potential To Emit (PTE) must be based upon the maximum capacity of an emissions unit or facility to emit a pollutant under its physical and operational design, pursuant to 62-210.200(203), F.A.C., and thus the PTE must be based upon the largest feasible emissions estimate available to Respondents FGT and FDEP at the time the Draft Permit was written. Such data is derived from the August 2001 Compliance Test Report for an identical model, a Cooper-Rolls 501 KC7-DLE engine (unit 2602), at the FGT facility in Lecanto, Florida.
- That therefore this and other calculations indicate that CS 27 is in fact a Title V Major Source for N0x emissions (100 tons per year) as defined by the U.S. Clean Air Act, 42 USC.s 7401 et seq., and as defined pursuant to 62-213.420(3)(c) 1., F.A.C., "Major Source Thresholds," and 62-210.200(157), F.A.C., and 62-210.200(159)(b), F.A.C.;
- That Respondent FGT, an ENRON affiliate, has engaged in a pattern of misrepresentation in past actions with the FDEP, the EPA and/or FERC, and thus is subject to provisions in 62-4.070(5), F.A.C., requiring that the department shall

demand strict proof, rather than reasonable assurance, that emissions at CS 27 will not exceed the minor source threshold as claimed in the Draft Permit;

- That Respondent FGT has circumvented the Florida State Implementation Plan by a failure to submit accurate site and Potential to Emit data and thereby violates 40 CFR 51.230(d), (e) and (f), as well as 403.0623, F.S., "Environmental data; quality assurance."
- That such misrepresentation and circumvention violates the rights of the residents of Thonotosassa, including the Petitioners, pursuant to 62-210.350, F.A.C., "Public Notice and Comment," and forecloses any meaningful public review and opportunity for comment as mandated under 62-210.300 (2) (b) 3., F.A.C.;
- That Petitioners have a right to clean air and quiet enjoyment of their home and property.

  Petitioners' lifestyle and work provides them with the necessity to be outdoors much of the time. Petitioners routinely keep the windows open at night and live without air conditioning, making a threat to air quality material to their safety and health. The value of their property will also be adversely affected by a noise and pollution nuisance approximately 250' away.

#### (b) A brief, general statement of each party's position:

Petitioners maintain that the Florida Department of Environmental Protection should not issue an Air Construction Permit to Florida Gas Transmission Company for the site on C.R. 579 in Thonotosassa, FL. Petitioners maintain that relevant site parameters and the amount of emissions from the proposed facility have not been adequately considered. As such, Petitioners maintain the health, safety and

welfare of the residents of Thonotosassa, including the Petitioners will be seriously impacted if the Air Construction Permit is issued for the site on C.R. 579 in Thonotosassa, FL.

#### (c) A list of all exhibits to be offered at the hearing:

- 1. Evidence pertinent to the probability that FGT will operate the CS 27 turbines above manufacturer's specifications for fuel throughput and/or heat input without applying for a new air construction permit, thus denying Petitioners the right of meaningful review and participation in the permit process:
  - a) Letter from Clayton Roesler, FGT, to Richard Kirby dated June 26,
     1997 concerning replacement engines 3001, 3002, and 3003.
  - b) FDEP Memorandum to Jerry Campbell, EPCHC, Jeff Koerner, PBCPHU, Jerry Kissel, SWD, from Al Linero, Administrator NSR Section, dated April 30, 1997.
  - c) Draft letter from A.A. Linero, NSR, requesting reasonable assurance from FGT that the limited life of the turbines is normal and not due to elevated operating parameters, sent with FDEP Memo dated April 30, 1997, to Jerry Campbell, EPCHC, Jeff Koerner, PBCPHU, and Jerry Kissel, SWD.
  - d) Letter from Clayton A. Roesler, FGT, to Jerry Kissel, received by FDEP Southwest District May 1, 2000, requesting authorization to replace turbine 2601 due to development of stress cracks.

- e) Letter from Jacob Krautsch, FGT, to Gerald Kissel, FDEP, dated March 18, 2002, providing notification of the need to replace engine 2602 due to a bearing failure.
- 2. Evidence pertinent to the inaccuracy of Respondent FGT's Potential To Emit N0x data, and thus the sufficiency of the stack parameters and site data. The laws, definitions, and methods applicable to stationary gas turbines are matters of judicial notice under Section 90.202(9), (1) and (12), Florida Evidence Code:
  - a) Conversion factors and other mathematical tools necessary to correlate the engine specifications with the applicable statutory standards and as required for comparison of FGT claims with the actual performance of other similar engines. Some conversion factors can be found in the AP-42, Appendix A, an EPA document. The application of common conversion factors to the Ideal gas law is required for temperature adjustment of standard (68 F) to ISO (59 F) and to convert the Ideal gas constant R in metric to R in English units.
  - b) The definition of "brake" horsepower is a fact that is not subject to dispute because it is capable of accurate and ready determination by resort to sources whose accuracy cannot be questioned. The inclusion of the Federal Aviation Administration and a textbook definition is offered as a courtesy only. Available upon request.
  - c) The <u>Final Application to Construct CS 26</u>, a similar FGT facility in Lecanto, dated April 1, 1993, pages D-5, D-7 and D-8.
    Facility ID: 0170035.

- d) The <u>Annual Operating Report for CS 26</u> for 2000, p. 5 "Calculations," and the revised "2000 AOR Calculations" table, page unnumbered. Facility ID: 0170035.
- 3. Evidence pertinent to the insufficiency and inaccuracy of Respondent FGT's site data:
  - a) Local meteorological evidence from Vandenberg Airport where records of wind speed and direction, temperature and humidity are recorded on an hourly basis. Daily summaries available on the Internet, Search "Underground Weather." At hearing records will be provided as copied from the official Vandenberg weather data archive. This data is subject to Judicial Notice under Section 90.202 (11).
  - b) Attachment B "Plot Plan" to the <u>Final State Application to Construct</u> for CS 27, dated January 4, 2002, showing the plot plan for Osceola County, not CS 27, and "Location Map" Figure 1.1 on page 2 of same document. As filed with EPCHC. Permit No.: 0571279-001-AC.
  - c) Maps derived from Computer access to County records and labeled "Petitioners' Thonotosassa Map" and "Petitioners' Topographical Map." This data is subject to Judicial Notice under Section 90.202 (11), Florida Evidence Code. Demonstrates that the stack is within Vandenberg Airport's Air Space.
  - d) The Respondent's corresponding map Figure 1 from the May 21, 2001, Notice of the Amended "FGT Phase V Expansion." FERC Public File, Docket Nos. CP00-40-000, -001, and -002.

e) Drawing No. 471-V-12 from the Draft EIS and Draft Permit filed at the EPC of Hillsborough County. Plot plan labeled as CS 27, but would not fit onto the 20 acre CR 579 site.

Permit No: 0571279-001-AC.

- f) Letter to Patricia Kemp from Jeff Koerner concerning CS 27 site, dated March 21, 2002, with two maps attached.
- g) Distances between the site for CS 27 and local residences and cultural resources are a matter of Judicial Notice under Section 90.202 (11), Florida Evidence Code, and witnesses may be provided if Respondent will not admit to the following: CS 27 is within a mile of downtown Thonotosassa, less than ½ mile from Thonotosassa Park, ¾ mile from the Thonotosassa Elementary School, ¾ mile from the Thonotosassa Post Office and Public Library, one mile from Lake Thonotosassa, the largest lake in Hillsborough County, within 100 feet of the highest point in Hillsborough County, altitude 143 feet above sea level, and under the flight path for nearby Vandenberg Airport.
- 4. Evidence demonstrating that CS 27 is a major (Title V) source for N0x emissions, and thus demonstrating the insufficiency of data concerning the stack parameters as well as the invalidity of the permitting process:
  - a) Data in the <u>Compliance Test Report for Unit 2602</u>, prepared by Cubix Corporation, dated August, 2001. This is the identical model to those to be installed at CS 27. Facility ID: 0170035.

- b) Federal Laws and Amendments as may be announced in the Federal Register pertaining to Test Methods and Calculations used by Cubix Corporation in the above Compliance Test Report, Appendix B.
- Appendix C, of the Final State Application to Construct CS 27, Draft Permit No. 0571279-001-AC.
- d) The Process Description from the AP-42, Fifth Edition, Volume I, Chapter 3.1, "Stationary Internal Combustion Sources," available from the EPA @ http://www.epa.gov/ttn/chief/ap42.
- 5. Evidence demonstrating that the Draft Permit violates the rights of the public, including the Petitioners, to data on the nature and amounts of emissions as reported and as correlated with any applicable emission standards or limitations, pursuant to 40 CFR 51.230(f). Included in this category will be evidence that Respondent FGT has misrepresented such data on related occasions:
  - a) The CS 27 P5 Final State Application to Construct, Draft Permit No.
     0571279-001-AC, and the Draft Permit itself.
  - b) EPA AIRData available at the Enviro-Warehouse search engine,
     request "Florida NET Air Pollution Point Sources—Nitrogen Oxides
     (1999) or @ <a href="http://oaspub.epa.gov/pls/airsdata">http://oaspub.epa.gov/pls/airsdata</a>.
  - c) Final Environmental Impact Statement for FGT Phase V Pipeline Project, Table 3.11.1-2, "FGT Phase V Expansion." FERC Public File, Docket Nos. CP00-40-000, -001, and -002.

- d) FERC RIMS DOC 2106247, p.o.18 of 36, available at <a href="http://rimsweb1.ferc.fed.us">http://rimsweb1.ferc.fed.us</a>, which quotes FGT that electric driven compressor units are as efficient as gas turbines, but more environmentally responsible, impeaching Respondents claim that Petitioners are solely responsible for delaying the re-firing of TECO's coal burning Gannon Plant.
- e) Map conflating the Taylor Road location with the CS 579 location until such time as FGT needed an accurate map for final order, from the civil suit FGTC v. Joan Johnston Crow, Case No. 0110002, Civil Division, Exhibit B (OR BK 11205 PG 0327) dated November 16, 2001, and Exhibit A (OR BK 11469 PG 1285) dated March 7, 2002.

#### (d) A list of the names and addresses of all witnesses:

Michael Lamphier 10436 Less Traveled Road, Thonotosassa, FL

Lynette Lamphier 10436 Less Traveled Road, Thonotosassa, FL

Toni Williams Thonotosassa County Park, Skewlee Road, Thonotosassa, FL

Charles Johnson 10416 Skewlee Road, Thonotosassa, FL

Elizabeth Matthew 9319 Eastfield Road, Thonotosassa, FL

Ann Fabel P.O. Box 1221, Thonotosassa, FL

Gerry Meisels 10815 Great White Oaks Lane, Thonotosassa, FL

Randy Pickett 10515 Skewlee Road, Thonotosassa, FL

Additionally Petitioners expect to have a Representative from Hillsborough County

Aviation Authority but due to security measures surrounding the July 4<sup>th</sup> holiday

we do not have a name at this time.

- (e) A concise statement of those facts which are admitted and will require no proof at hearing, together with any reservations directed to such admission:
- 1. CS 27 will consist of two 7222 bhp gas turbine.....admitted
- 2. CS 27 is subject to 40 CFR 60, Subpart GG.....admitted
- 3. CS 27 proceeding based on applicable rules......admitted
- 4. Land use issues are not subject of air construction permit.....admitted
- (f) A concise statement of those issues of law on which there is agreement:

- (g) A concise statement of those issues of fact which remain to be litigated:
- Petitioners' Proposed Finding Of Fact 1: That the equation to adjust to ISO conditions found in 40 CFR 60.335(c)(1) has been "amended" to yield an irrational model of N0x emissions and that such amendments are unauthorized and invalid, making the use of 40 CFR 60.335 revisions prior to 1988 necessary.
- Petitioners' Proposed Finding Of Fact 2: That the data presented by the manufacturer and FGT is not correlated to the applicable standard, and that the Example

Calculations, Appendix B of the Compliance Test Report for Unit 2602, August 2001, demonstrate that there is confusion within the Permitting Process between Standard Conditions (68 degrees F) and ISO Conditions (59 degrees F), requiring the public to apply conversion factors not readily available or provided by FDEP, in violation of 40 CFR 51.230(f), which mandates that FDEP make available to the public, including the Petitioners, data on the nature and amounts of emissions as reported and as *correlated with any applicable emission standards* or limitations.;

- Petitioners' Proposed Finding Of Fact 3: That FGT CS 27 will in fact emit 100 tons per year of N0x, making it a Title V facility, and that no federally enforceable restrictions on production or operating hours make it a "synthetic minor source."
- Petitioners' Proposed Finding Of Fact 4: That Respondent FGT failed to provide FDEP or the public, including the Petitioners, with appropriate or accurate site data (cultural, geographical and topographical) and that FDEP continued to provide insufficient topographical and inaccurate plot plan maps as late as March 21, 2002 when asked for better information by the residents and Representatives of Thonotosassa.
- Petitioners' Proposed Finding Of Fact 5: That Respondent FGT has misrepresented emissions data as demonstrated by discrepancies between EPA AIRData reports and the equivalent data reported in the Final EIS for the Expansion V Project as reported to FERC.
- Petitioners' Proposed Finding Of Fact 6: That FGT does trade natural gas for electricity to run compression turbines, one for one, and that such fuel option, as FGT states

- in FERC RIMS DOC 2106247, p.o. 18 of 36, offers operational and environmental benefits, as well as lower costs. Thus FGT has better options.
- Petitioners' Proposed Finding Of Fact 7: That Respondent FGT misrepresented the location of CS 27 throughout the Civil Suit in Eminent Domain, but then changed to the correct map when preparing the Stipulated Order of Taking, and thus FGT demonstrates knowledge and intent to deceive.
  - (h) A concise statement of those issues of law which remain for determination by the Administrative Law Judge:
- That CS 27 cannot be a "synthetic non-Title V [minor] source" as claimed in the rule basis for Section 3, number 6, "Specific Conditions" of the Draft Permit, within the meaning of 62-210.200 (254) F.A.C., as said definition requires that a "synthetic non-Title V [minor] source" be "A facility that would be classified as a Title V source but for a physical or operational limitation";
- Chapter 62-212.300(3)(a), F.A.C., requires the applicant to provide the nature and amounts of emissions from the emissions unit, and the operation of such unit, to the extent necessary to allow the department to determine whether construction or modification would result in violation of 403.021 (3) and (8), F.S., mandating that the mission of Florida Department of Environmental Protection is, first and foremost, to protect the public health and safety;
- That such manipulation of the rule basis for "synthetic minor sources" violates 40 CFR
  51.160, which requires that the Florida State Implementation Plan set forth legally
  enforceable procedures "that enable the state or local agency to determine

- whether the construction of a facility will violate applicable portions of the control strategy";
- That such misrepresentation and circumvention violates the rights of the residents of Thonotosassa, including the Petitioners, pursuant to 62-210.350, F.A.C., "Public Notice and Comment," and forecloses any meaningful public review and opportunity for comment as mandated under 62-210.300 (2) (b) 3., F.A.C.;
- That such misrepresentation and circumvention violates 62-212.300(1)(c), F.A.C., which states that FDEP shall not permit the construction of a facility that would exceed air quality standards at any point within a baseline area, specifically Thonotosassa and the property of the petitioners, yet FDEP failed to obtain the essential information to make such a determination;
- That such Circumvention of the Florida State Implementation Plan and Federal laws as above stated, violates the rights of citizens of the United States to due process and equal protection under the U.S. Clean Air Act, 42 USC.s 7401 et seq., to the cost and detriment of the property, health, and safety of the residents of Thonotosassa, including the Petitioners.
  - (i) A concise statement of any disagreement as to the application of the rules of evidence:
- Comes now the Petitioners to request that the Honorable J. Lawrence Johnston,

  Administrative Law Judge in the case, receive the above listed documents and
  materials under section (c) of this Petitioners' Proposed Pre-Hearing Statement

- into the evidence of record for DOAH Case No. 02-1678. The Petitioners make the following claims:
- That the documents and material listed in section (c) above contain facts necessary to establish proof of the facts at issue in this case;
- That the definition of "representative actual annual emissions" found in 40 CFR 52.21(b)(33) is adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referred to in 62-210.200(11) "actual emissions," and that therefore in projecting future emissions the Administrator [department] shall, pursuant to 40 CFR 52.21(b)(33)(i): "Consider all relevant information, including but not limited to, historical and operational data, the company's own representations, filings with the State or Federal regulatory authorities, and compliance plans under title IV of the Clean Air Act";
- That therefore FDEP was entitled to and should have considered the Compliance Test

  Report for unit 2602, a model identical to those to be installed in Thonotosassa, in

  order to validate the accuracy of FGT's data submitted in the application for

  construction of CS 27 before writing the Draft Permit;
- That, according to 120.57(1)(d), F.S., "Not-withstanding s. 120.569(2)(g), F.S., similar fact evidence of other violations, wrongs or acts is admissible when relevant to prove a material fact in issue, such as proof of motive, opportunity, intent, preparation, plan, knowledge," etc.;
- That therefore evidence that would require that FGT be held to a standard of strict proof rather than reasonable assurance is admissible;

- That, according to 120.57(1)(j), "Findings of fact shall be based upon a preponderance of the evidence...and shall be based exclusively on the evidence of record and on matters officially recognized."
- That therefore the material and documents listed above are admissible and relevant to

  Petitioner's claim that FGT has misrepresented facts concerning location and
  emissions of CS 27, and omitted necessary facts, and thereby circumvented the
  laws protecting the property and health of the Petitioners;
- That the witnesses to be called under section (d) are necessary to swear in some of the evidence listed in section (c), and that the other documents obtained from the files at FDEP, Division of Air Regulation, or the Environmental Protection Commission of Hillsborough County, are official actions of an executive department admissible under Section 90.202 (5), Florida Evidence Code;
- That the Petitioners' hereby give timely notice to Respondents FGT and FDEP, and having provided sufficient information to identify the evidence and witnesses above listed, and having provided copies of said documents sent during discovery attached to the stricken Petitioners' Proposed Findings Of Facts 4 through 8, and to the Petitioners' Interrogatories for the Respondent;
- That Petitioners have thus met the requirements of Section 90.203, Florida Evidence

  Code, and per also Conyers v. State, 98 Fla. 417, 123 So. 817 (1929), feel entitled to receive judicial notice;
- That therefore the Petitioners respectfully request that the Honorable J. Lawrence

  Johnston officially recognize and include into the record for this case all the

  witnesses, material, and documents listed in sections (c) and (d) above as required

to prove the seven Petitioners' Proposed Findings Of Facts. The Petitioners include this motion within the Petitioners' Proposed Pre-Hearing Statement and Notice and Service thereof is Notice and Service of this Motion also.

# (j) A list of all pending motions or other matters which require action by the Administrative Law Judge:

- The Motion to enter into the officially recognized record for this case the Petitioners' Proposed Findings of Fact 1, 2, 3, 4, 5, 6, and 7, and the Petitioners' Proposed Pre-Hearing Statement.
- 2. The Petitioners' Motion to Request An Order To Amend The Original Petition.
- (k) An estimate as to the length of time required for the hearing: Two days.
  - (l) The signature of counsel for all parties.

Comes now the Petitioners to request entry into the officially recognized record for this case of the Petitioners' Proposed Pre-Hearing Statement pursuant to 120.569, F.S. and 120.57(1), F.S.;

That an original and a true copy of this Petitioners' Proposed Pre-Hearing Statement by the Petitioners has been sent by certified United States Mail to Anne Longman, Edwin A. Steinmeyer, and John W. Forehand, counsel for Respondent FGT, at LEWIS, LONGMAN & WALKER, P.A., Post Office Box 10788 (32302), 125 South Gadsden Street, Suite 300, Tallahassee, Florida, 32301;

That an original and a true copy of this Proposed Pre-Hearing Statement by the

Petitioners has been sent by certified United States Mail to W. Douglas Beason,

Assistant General Counsel, FDEP, 3900 Commonwealth Boulevard, Mail Station

35, Tallahassee, Florida, 32399-3000;

That NOTICE of the Proposed Pre-Hearing Statement is hereby given to the Respondents FGT and FDEP, this Aday of July, 2002;

That hereby the Petitioners respectfully request that the Honorable J. Lawrence Johnston enter the Petitioners Proposed Pre-Hearing Statement into the record for this case or allow the Petitioners to correct some unknown and unintentional insufficiency.

Submitted this Aday of July, 2002.

Elizabeth A. Enlund Post Office Box 778

Thonotosassa, FL 33592-0778

(813) 986-8992

David A. Pickering

Post Office Box 778

Thonotosassa, FL 33592-0778

(813) 986-8992

#### **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by U.S. Mail on Anne Longman, Edwin Steinmeyer, John Forehand, counsel for FGTC at LEWIS, LONGMAN & WALKER, P.A., 125 South Gadsden Street, Suite 300, Post Office Box 10788 (32302), Tallahassee, FL, 32301 and W. Douglas Beason, Assistant General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, FL, 32399-3000 this

Eliobeth a. Enling

## STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

ELIZABETH A. ENLUND and DAVID A. PICKERING,



Petitioners,

Vs.

DOAH Case No.: 02-1678

FLORIDA GAS TRANSMISSION COMPANY and DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respond	dents.
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#### (a) A concise statement of the nature of the controversy:

That the site parameters (cultural, topographical and geological) and other essential data (altitude at stack base and accurate Potential To Emit N0x data) were not submitted to FDEP during the permitting process nor made available to the public as required by 40 CFR 51.230(f), which mandates that FDEP make available to the public, including the petitioners, data on the nature and amounts of emissions as reported and as *correlated with any applicable emission standards* or limitations.;

- That respondent FGT has misrepresented the amount of Potential N0x emissions from the proposed Compressor Station 27 (CS 27 hereafter) in the CS 27 P5 Final State

  Application and the FGT 27V Draft Permit No. 0571279-001-AC (Draft Permit hereafter), as well as in the Annual Operating Reports and Compliance Tests from similar FGT facilities;
- That misrepresentation is accomplished by the use of fraudulent equations in violation of 40 CFR 60.335 (c) (1) and (3), and the use of inaccurate or inappropriate conversion units as demonstrated in the Petitioners' Proposed Findings of Facts;
- That if the Potential to Emit is 25 ppmvd as alleged in the Draft Permit, section 3, no. 6, by applying equation 20-6, of Method 20 pursuant to 40 CFR 60.335 (c) (3), the maximum expected emissions (PTE) is equal to 53 lbs/hour per unit, not 5.7 lbs/hour as stated by FGT;
- That the Potential To Emit must be based upon the maximum capacity of an emissions unit or facility to emit a pollutant under its physical and operational design, pursuant to 62-210.200(203), F.A.C., and thus the PTE must be based upon 175 ppm STD from Subpart GG of 40 CFR 60;
- That therefore this and other calculations indicate that CS 27 is in fact a Title V Major Source for N0x emissions as defined by the U.S. Clean Air Act, 42 USC.s 7401 et seq., and as defined pursuant to 62-213.420(3)(c) 1., F.A.C., "Major Source Thresholds," and 62-210.200(157), F.A.C., and 62-210.200(159)(b), F.A.C.;
- That Respondent FGT violates Rule 62-213, F.A.C., by manipulating the rule basis for "synthetic minor [sic] sources" as stated in the Draft Permit Section 3, no.6;

That Respondent FGT has in the past (FGT letter to Clair Fancy, 1993) amended by "Administrative Correction" Air Operating Permits to increase maximum heat inputs and fuel consumption rates over the manufacturer's values by 20% for multiple (Phase III) facilities similar to CS 27;

That an increase in heat input and fuel consumption necessarily increases N0x emissions;

That such increases may be creating a threat to public safety as the engines are thus run beyond the design capacity, and letters submitted with the Finding of Facts indicate the engines are failing in less than 5000 hours from the stress;

That an increase in heat input and/or fuel consumption of 20% requires a new Air Construction Permit pursuant to 62-210.300 (1) (b) 1., F.A.C.;

- That therefore the draft permit demonstrates no physical or operational limitation that is "federally enforceable" as defined by Chapter 62-210.200 (114) F.A.C., such as a restriction in hours or production that cannot by changed at the Respondent's convenience as demonstrated by the Clair Fancy letter (attached to Finding of Fact 5);
- That therefore CS 27 cannot be a "synthetic non-Title V [minor] source" as claimed in the rule basis for Section 3, number 6, "Specific Conditions" of the Draft Permit, under 62-210.200 (254) F.A.C., as said definition requires that a "synthetic non-Title V [minor] source" be "A facility that would be classified as a Title V source but for a physical or operational limitation";
- That such manipulation of the rule basis for "synthetic minor sources" violates 62-212.300(3)(a), F.A.C., which requires the applicant to provide the nature and amounts of emissions from the emissions unit, and the operation of such unit, to

the extent necessary to allow the department to determine whether construction or modification would result in violation of 403.021 (3) and (8), F.S., mandating that the mission of FDEP is, first and foremost, to protect the public health and safety;

- That such manipulation of the rule basis for "synthetic minor sources" violates 40 CFR 51.160, which requires that the Florida State Implementation Plan set forth legally enforceable procedures "that enable the state or local agency to determine whether the construction of a facility will violate applicable portions of the control strategy";
- That such misrepresentation and circumvention violates the rights of the residents of

  Thonotosassa, including the petitioners, pursuant to 62-210.350, F.A.C., "Public

  Notice and Comment," and forecloses any meaningful public review and

  opportunity for comment as mandated under 62-210.300 (2) (b) 3., F.A.C.;
- That such misrepresentation and circumvention violates 62-212.300(1)(c), F.A.C., which states that FDEP shall not permit the construction of a facility that would exceed air quality standards at any point within a baseline area, specifically Thonotosassa and the property of the petitioners, yet FDEP failed to obtain the essential information to make such a determination;
- That Respondent FGT, an ENRON affiliate, has engaged in a pattern of misrepresentation in past actions with the FDEP, the EPA and/or FERC, and thus is subject to provisions in 62-4.070(5), F.A.C., requiring that the department *shall* demand strict proof, rather than reasonable assurance, that emissions at CS 27 will not exceed the minor source threshold as claimed in the Draft Permit;

- That the Florida State Implementation Plan control strategy is based upon the permitting procedures in Chapter 62, F.A.C., which procedures include application of 42 USC.s 111 (b)(4), New Source Performance Standards (emission allowances) and;
- That respondent FGT has circumvented the Florida State Implementation Plan by a failure to submit accurate site and Potential to Emit data and thereby violates 40 CFR 51.230(d), (e) and (f), as well as 403.0623, F.S., "Environmental data; quality assurance," as well as Florida State Implementation Plan provisions in Chapter 62, F.A.C., that apply 42 USC.s 111 (b) (4) noted above;
- That Respondent FGT misrepresents "vendor's data" on the Draft Permit (and in the Annual Operating Reports from other facilities), and then subsequent to compliance testing (i.e. when caught), employs "Administrative Corrections" to the Air Construction Permit and/or the Air Operating Permit to adjust "allowable emissions" at Respondent's convenience;
- That such Circumvention of the Florida State Implementation Plan and Federal laws as above stated, violates the rights of citizens of the United States to due process and equal protection under the U.S. Clean Air Act, 42 USC.s 7401 et seq., to the cost and detriment of the property, health, and safety of the residents of Thonotosassa, including the petitioners.
  - (b) A brief, general statement of each party's position:

- (c) A list of all exhibits to be offered at the hearing:
- Shigehara, R.T. and R. M. Neulicht, W.S. Smith and J.W. Peeler. July, 1976.
   "Summary of F-Factor Methods for Determining Emissions from Combustion Sources." Taken from Source Evaluation Society Newsletter, Vol.1, No. 4, November 1976.
- Compliance Test Reports submitted to FDEP from natural gas fired turbines as needed.
- 3. <u>Annual Operating Reports</u> submitted to FDEP from natural gas fired turbines as needed.
- 4. Correspondence between FGT and FDEP as needed, copied from FDEP files.
- Air Construction Permits, and amendments and correspondence thereto, and Air
   Operation Permits, and amendments and correspondence thereto, from natural gas fired turbines as needed.
- 6. Final Applications as submitted to FDEP from natural gas fired turbines as needed.
- 7. Federal Regulatory Energy Commission (FERC) documents pertaining to Phase II to Phase VI Expansion Projects by Respondent FGT.
- 8. FERC Environmental Impact Statements relating to CS 27.
- 9. FERC and EPA data received from Respondent FGT.
- Definition of brake horsepower and conversion factor for brake horsepower to
   Kilowatts from Archer, R. Douglas and Maido Saarlas. <u>Introduction to</u>
   Aerospace Propulsion. Upper Saddle River; New Jersey: Prentice Hall, 1996.
   pp. 16, 195-198. and from –URL: <u>www.faa.gov</u> definition of brake horsepower.

- 11. Recommended Test Methods from Procedures For Preparing Emission Factor

  Documents. Office of Air Quality Planning and Standards, U.S. EPA, Research

  Triangle Park, NC: EPA-454/R-95-015, Revised. November, 1997.
- 12. Ambient temperature effect from Compilation of Air Pollutant Emission Factors

  AP-42. Fifth Edition, Volume I: Stationary Point and Area Sources. Chapter 3:

  Stationary Internal Combustion Sources. Update 2001. Available at URL:

  <a href="http://www.epa.gov/ttn/chief/ap42/ch03/">http://www.epa.gov/ttn/chief/ap42/ch03/</a>
- 13. E-mail from Jeff Koerner, New Source Review Section, FDEP, Tallahassee, to Patricia Kemp, dated March 21, 2002, with site plan and quad map attached.
- 14. FGTC v Joan Johnston Crow, et al., 13 Judicial Circuit Court, Hillsborough County, Florida, Case No. 0110002; Notice of Lis Pendens, Petition in Eminent Domain, November 16, 2001, exhibit B (OR BK 11205 PG 0327), and Stipulated Order of Taking, February 6, 2002, exhibit A (OR BK 11469 PG 1274-1285).
- 15. Hillsborough County Tax Assessors Office, Mapping Department; current township maps as needed.
- 16. U.S. Geological Survey Maps and/or SWFWMD topographical and other maps, as needed.
- 17. Compilation of Air Pollutant Emission Factors AP-42. Fifth Edition, Volume I: Stationary Point and Area Sources. Chapter 3: Stationary Internal Combustion Sources and Appendix A: Conversions. Update 2001. @

  <a href="http://www.epa.gov/ttn/chief/ap42/ch03/">http://www.epa.gov/ttn/chief/ap42/ch03/</a>
  - (d) A list of the names and addresses of all witnesses:

(e) A concise statement of those facts which are admitted and will require no proof at hearing, together with any reservations directed to such admission:

- (f) A concise statement of those issues of law on which there is agreement:

  To be determined.
  - (g) A concise statement of those issues of fact which remain to be litigated:
- Petitioners' Proposed Finding Of Fact 1: That application of the proper and correct conversion units to vendor's data, which is stated in (N0x) grams/bhp-hr, is equivalent to .539 lbs N0x/MMBtu, and therefore that the Potential to Emit for a unit with a heat input of 63MMBtu/hour, such as at CS 27, will be approximately greater than 140.6 tons per year according to the vendor's data, not 25 tons/year as claimed in the Draft Permit.
- Petitioners' Proposed Finding Of Fact 2: That according to Method 20, pursuant to 40 CFR 60, Appendix, Equation 20-6, the actual N0x emissions, as determined by the Compliance Test of July, 2001, of an identical engine model and size as will be installed at CS 27 (FGT unit 2602), amounted to 23.7 lbs/hour, i.e. 103.7 tons per year per unit.
- Petitioners' Proposed Finding Of Fact 3: That using the ISO correction equation pursuant to 40 CFR 60.335 (c), which equation corrects the measured N0x concentrations as measured at temperatures over 1000 degrees F and at pressures (872.7 psig) 60 times ISO conditions (14.7 psig or 1 atm), FGT engine 2602

- demonstrates in the Compliance Test of July, 2001, actual N0x emissions of 72.7 ppmvd, i.e. 20.75 lbs/hour or 91 tons per year.
- Petitioners' Proposed Finding Of Fact 4: That Respondent FGT failed to provide FDEP or the public, including the Petitioners, with appropriate or accurate site data (cultural, geographical and topographical) and that FDEP continued to provide insufficient topographical and inaccurate plot plan maps as late as March 21, 2002 when asked for better information by the residents and Representatives of Thonotosassa.
- Petitioners' Proposed Finding Of Fact 5: That the letter to Mr. Clair Fancy, dated August 11, 1993 from FGT documents the fact that the Respondent FGT increased the maximum heat inputs and fuel consumption rates by 20%, and that such change in process parameters increases N0x emissions, and that such change was accomplished through "Administrative Correction" for multiple facilities at Respondent FGT's convenience.
- Petitioners' Proposed Finding Of Fact 6: That Respondent FGT has misrepresented emissions data as demonstrated by discrepancies between EPA AIRData reports and the equivalent data reported in the Final EIS for the Expansion V Project as reported to FERC.
- Petitioners' Proposed Finding Of Fact 7: That FGT does trade natural gas for electricity to run compression turbines, one for one, and that such fuel option, as FGT states in FERC RIMS DOC 2106247, p.o. 18 of 36, offers operational and environmental benefits, as well as lower costs.

- Petitioners' Proposed Finding Of Fact 8: That Respondent FGT misrepresented the location of CS 27 throughout the Civil Suit in Eminent Domain, but then changed to the correct map when preparing the Stipulated Order of Taking, and thus FGT demonstrates knowledge and intent to deceive.
  - (h) A concise statement of those issues of law which remain for determination by the Administrative Law Judge:

- (i) A concise statement of any disagreement as to the application of the rules of evidence:
- Comes now the Petitioners to request that the honorable J. Lawrence Johnston,

  Administrative Law Judge in the case, receive the above listed documents and
  materials under section (c) of this Petitioners' Proposed Pre-Hearing Statement
  into the evidence of record for DOAH Case No. 02-1678. The Petitioners make
  the following claims:
- That the documents and material listed in section (c) above contain facts necessary to establish proof of the facts at issue in this case;
- That the definition of "representative actual annual emissions" found in 40 CFR 52.21(b)(33) is adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referred to in 62-210.200(11) "actual emissions," and that therefore in projecting future emissions the Administrator [department] shall, pursuant to 40 CFR 52.21(b)(33)(i): "Consider all relevant information, including but not limited to, historical and operational data, the company's own representations,

- filings with the State or Federal regulatory authorities, and compliance plans under title IV of the Clean Air Act";
- That therefore FDEP was entitled to and should have considered all listed items under section (c) above in order to validate the accuracy of FGT's data submitted within the Draft Permit and data submitted within the preceding application for construction of CS 27;
- That, according to 120.57(1)(d), "Not-withstanding s. 120.569(2)(g), similar fact evidence of other violations, wrongs or acts is admissible when relevant to prove a material fact in issue, such as proof of motive, opportunity, intent, preparation, plan, knowledge," etc.;
- That, according to 120.57(1)(j), "Findings of fact shall be based upon a preponderance of the evidence...and shall be based exclusively on the evidence of record and on matters officially recognized."
- That therefore the material and documents listed above under section (c) are admissible and relevant to Petitioner's claim that FGT has misrepresented facts, omitted necessary facts, and circumvented the law;
- That thus the rights and protections due to the residents of Thonotosassa have been violated and abrogated to the cost and detriment of the Petitioners;
- That therefore the petitioners respectfully request from the Honorable J. Lawrence

  Johnston official recognition, and inclusion into the record for this case, of all the

  material and documents as required from the sources listed under section (c)

  above. The Petitioners include this motion within the Petitioners' Proposed Pre
  Hearing Statement and Notice thereof is Notice of this Motion also.

- (j) A list of all pending motions or other matters which require action by the Administrative Law Judge:
  - The Motion under (i) above in the Petitioners' Proposed Pre-Hearing
     Statement to rule admissible such sources of information as are found in section (c) of said document.
  - The Motion to enter such documents and materials selected from sources listed under section (c) of this Petitioners' Proposed Pre-Hearing Statement as will be attached to the various Petitioners' Proposed Findings of Facts for this case.
  - 3. The Motion to enter into the officially recognized record for this case the Petitioners' Proposed Findings of Fact 1, 2, 3, 4, 5, 6, 7, and 8, and the Petitioners' Proposed Pre-Hearing Statement.

Other Motions as required.

- (k) An estimate as to the length of time required for the hearing:

  To be determined.
  - (l) The signature of counsel for all parties.
- Comes now the Petitioners to request entry into the officially recognized record for this case of the Petitioners' Proposed Pre-Hearing Statement pursuant to 120.569, F.S. and 120.57(1), F.S.;
- That an original and a true copy of this Petitioners' Proposed Pre-Hearing Statement by the Petitioners has been sent by certified United States Mail to Anne Longman,

Edwin A. Steinmeyer, and John W. Forehand, counsel for Respondent FGT, at LEWIS, LONGMAN & WALKER, P.A., Post Office Box 10788 (32302), 125 South Gadsden Street, Suite 300, Tallahassee, Florida, 32301;

That an original and a true copy of this Proposed Pre-Hearing Statement by the

Petitioners has been sent by certified United States Mail to W. Douglas Beason,

Assistant General Counsel, FDEP, 3900 Commonwealth Boulevard, Mail Station

35, Tallahassee, Florida, 32399-3000;

That NOTICE of the Proposed Pre-Hearing Statement is hereby given to the Respondents FGT and FDEP, this 4 day of June 2002;

That hereby the Petitioners respectfully request that the Honorable J. Lawrence Johnston enter the Petitioners Proposed Pre-Hearing Statement into the record for this case or allow the Petitioners to correct some unknown and unintentional insufficiency.

Dated the 4/1 day of June, 2002.

Elizabeth A. Enlund

Post Office Box 778 Thonotosassa, FL 33592-0778 David A. Pickering

Post Office Box 778

Thonotosassa, FL 33592-0778

Install O. Ellers

#### CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by U.S. Mail on Anne Longman, Edwin Steinmeyer, John Forehand, counsel for FGTC at LEWIS, LONGMAN & WALKER, P.A., 125 South Gadsden Street, Suite 300, Post Office Box 10788 (32302), Tallahassee, FL, 32301 and W. Douglas Beason, Assistant General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, FL, 32399-3000 this

Petitioner

### RECEIVED

## STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

JUN 14 2002

BUREAU OF AIR REGULATION

D and

COPY

ELIZABETH A. ENLUND and DAVID A. PICKERING,

Petitioners,

Vs.

DOAH Case No.: 02-1678

FLORIDA GAS TRANSMISSION COMPANY and DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondents.

#### PETITIONERS' INTERROGATORIES FOR RESPONDENT FGT, JUNE 3, 2002

Comes now the Petitioners Elizabeth A. Enlund and David A. Pickering to present the following first Interrogatories to Respondent FGTC:

- 1. What and where is the authorization for using the revised (non-statutory) equation for correction to ISO conditions of N0x emissions as used in the <u>Compliance Test</u> Report on Unit 2602, filed with FDEP August 23, 2001, page 6 of Appendix B?
- 2. Has FGT done air dispersion modeling using ISCLT2, or any other programs, to compare the relative effects on air quality among the alternate sites for CS 27?
- 3. Has FGT done air dispersion modeling using ISCLT2, or any other programs, to evaluate the impacts on local air quality given the CR 579 site characteristics and the proposed stack parameters of CS 27?
- 4. What Emissions Factors and heat inputs are being used upon which to base the above computer simulated air dispersion modeling studies?

- 5. Will intake and exhaust silencers be added to the stack and/or is the stack designed to accommodate such silencers?
- 6. What does "routine" replacement entail and if its routine, why isn't it predictable (see attached letter from Al Linero, New Source Review Section to FGT dated April 30, 1997)?
- 7. Does FGT make a profit from these overhauled engines, on resale or otherwise, and are such profits applied to reduce rates for the ultimate electric consumer by FERC or the Florida State regulatory agency?
- 8. For how many operating hours is the Cooper-Rolls Royce Model 501-KC& DLE covered by a warranty and what are the conditions to the warranty (please provide a copy of such warranty)?
- 9. Why and under what statutory authority is the FGT facility in Lecanto (0170035-005-AC) both a minor and Title V facility according to FDEP documents?
- 10. Has FGT applied for a General Permit under 40 CFR 70.6 (d) and/or is CS 27 one of several facilities granted authorization to operate under a General Permit, and if so, by what agency?
- 11. Please state the statutory basis for any claim that FGT CS 27 is exempt from any specific air quality regulation because TECO is re-powering with Natural Gas?
- 12. What is the manufacturer's N0x emission factor for Cooper-Rolls Royce Model 501-KC7-DLE stated in grams/hp-hr?
- 13. What is the manufacturer's N0x emission factor for Cooper-Rolls Royce Model 501-KC7-DLE stated in lbs/MMBtu?

- 14. Describe the "major maintenance overhaul" pertaining to gas fired turbine engines 3001, 3002, and 3003 at the FGT facility in Plant City and explain the necessity for scrapping the engines (see FGT letter to Richard C. Kirvey, IV, dated June 26, 1997, attached)?
- 15. Please explain why turbine unit 2601 developed stress cracks in May 2000 and why turbine unit 2602 required replacement in March 2002 (see attached letters from FGT to Jerry Kissel, dated April 26, 2000 and March 18, 2002)?
- 16. Do the Draft Permit N0x emissions limiting standards, as measured by the applicable Methods 19 and 20 and any other Methods used by CS 27, apply to thermal N0x emissions?
- 17. How will thermal N0x emissions be measured at CS 27?
- 18. Is the FGT CS 26 (0170035-005-AC) a minor or Title V emissions unit for the purposes of 62-297.310(7)(a) 1. and 4.(b), and please specify the rule, order or permit by which FGT equivocates between characterization as minor or Title V?
- 19. Has DEP waived compliance test requirements for FGT CS 26 under Rule 62-297.620, F.A.C. or 62-212.710, F.A.C., or 62-212.500, F.A.C. and if so, upon what basis?
- 20. Please specify the "federally enforceable" provisions of the Draft Permit for FGT CS 27 that have not been waived by FDEP, and/or any physical or operational limitation that cannot be changed upon request by FGT as demonstrated at other FGT facilities?
- 21. Is FGT using alternative methods and procedures for determining compliance with Subpart GG under section 40 CFR 60.335 (f)?

- 22. Will CS 27 be applying for a federally enforceable state operation permit (FESOP) under 62-210.300 (2)(b) 3., F.A.C.?
- 23. Has FGT applied for compliance options and/or alternative emissions limitations for its Compressor Stations under 40 CFR 72?
- 24. Has FGT requested that the permit be made federally enforceable at any of its Florida Compressor Stations?
- 25. Will an increase in heat-input constitute a change in production rate, and if so, is this change subject to requirements for a new Air Construction Permit?
- 26. Would an increase in production rate constitute an "administrative correction" under 62-210.360 (1), F.A.C.?
- 27. Would an increase in production rate constitute a "modification" under 62-210.200 (169), F.A.C.?
- 28. What is the Megawatt rating for CS 27?
- 29. What percentage of the brake horsepower is needed to drive the internal compressor for the Cooper-Rolls 501-KC7-DLE?
- 30. Is the gas exhausting from the first combustor re-mixed and/or re-ignited in the Cooper-Rolls 501-KC7-DLE engine?
- 31. How much water per hour does the unit (Cooper-Rolls 501-KC7-DLE) require at 100% load?
- 32. At 100% load, what is the rpm of the inlet air compression turbine, the power turbine and the exhaust turbine for units to be installed at CS 27?
- 33. What if any post-combustion catalytic controls will be used to control Nitrogen oxides?

Respectfully submitted this 4/1/2 day of June, 2002.

That an original and a true copy of this PETITIONERS' INTERROGATORIES FOR RESPONDENT FGT, JUNE 3, 2002 by the Petitioners has been sent by certified United States Mail to Anne Longman, Edwin A. Steinmeyer, John W. Forehand, counsel for Respondent FGT, at LEWIS, LONGMAN & WALKER, P.A., Post Office Box 10788 (32302), 125 South Gadsden Street, Suite 300, Tallahassee, Florida, 32301;

That an original and a true copy of this PETITIONERS' INTERROGATORIES FOR

RESPONDENT FGT, JUNE 3, 2002 by the Petitioners has been sent by certified

United States Mail to W. Douglas Beason, Assistant General Counsel, FDEP,

3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 323993000;

That PETITIONERS' INTERROGATORIES FOR RESPONDENT FGT, JUNE 3, 2002 has been properly noticed and is hereby submitted to be filed by the Court of Record, this Hin day of June 2002;

Elizabeth A. Enlund Post Office Box 778

Thonotosassa, FL 33592-0778

David A. Pickering

Post Office Box 778

Thonotosassa, FL 33592-0778

#### **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by U.S. Mail on Anne Longman, Edwin Steinmeyer, John Forehand, counsel for FGTC at LEWIS, LONGMAN & WALKER, P.A., 125 South Gadsden Street, Suite 300, Post Office Box 10788 (32302), Tallahassee, FL, 32301 and W. Douglas Beason, Assistant General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, FL, 32399-3000 this Aday of June 2002.

# Florida Department of MemorandumEnvironmental Protection

TO:

Jerry Campbell, EPCHC

Jeff Koerner, PBCPHU

Jerry Kissel, SWD

THRU:

Clair Fancy, Chief BAR

FROM:

Al Linero, Administrator NSR Section

DATE:

April 30, 1997

SUBJECT:

Florida Gas Transmission Company (FGT)

April 2, 1997, Letter Amendment Requests

We have reviewed Jerry Campbell's memo of April 25, 1997 and had discussions with at least some of you regarding the FGT request to allow replacement of the combustion turbines at several facilities for routine maintenance purposes and your concerns about it. We agree that the responsible District or Local office should have jurisdiction with respect to these requests if they do not involve PSD permits. Therefore EPCHC should handle the one within Hillsborough County, the SWD should handle the one in Citrus County, PBCPHU should handle the one within Palm Beach County, and we will take care of the one in Taylor County. For your information, none of the Title V permits for the subject facilities is being processed in Tallahassee.

Day "30" is May 6. At this time, we plan to send FGT Company an incompleteness letter (draft attached) based on the fact that their request is not clear and not signed by a professional engineer. Please send us any additional comments to incorporate into our letter as soon as possible. FGT will send a copy of its reply to each responsible office who can then reevaluate their respective project for completeness.

Attached is a "draft model revision" of the format we intend to adopt for the units in Taylor County, if we accept FGT's position regarding routine turbine repair, maintenance, and replacement. We recommend that you employ a similar format. Please provide us with your comments on the adequacy of this format. Feel free to adopt it as necessary to reflect historical reliability in your area.

Since these construction permits have expired, it will be necessary to reissue them following the procedures outlined in the Guidance memo of February 4, 1995 (DARM-PERM/GEN-16).

If you have any questions, please contact Teresa Heron at SC 278-1344.

Attachments

CHF/aal/l

file

#### May XX, 1997

#### DRAFT DRAFT DRAFT DRAFT DRAFT

Certified Mail - Return Receipt Requested

Mr. Clayton Roesler
Division Environmental Specialist
Florida Gas Transmission Company
P.O. Box 945100
Maitland, Florida 32794-5100

Re: Florida Gas Transmission Permit Modifications
1230034-004-AC, (PSD-FL-202), Station 15, Taylor County
0990333-003-AC, Station 21, Palm Beach County
0170035-003-AC, Station 26, Citrus County
0570438-004-AC, Station 30, Hillsborough County

Dear Mr. Roesler:

This letter is to confirm your April 9, 1997 telephone conversation with Ms. Teresa Heron, concerning your letter dated April 2, 1997. Your letter essentially requested treatment of turbine replacements as routine replacements not requiring construction permits or modifications. Based on your observations, the turbines have been lasting only approximately 5000 hours or so making their replacement routine rather than life extension projects or modifications subject to construction permitting.

It was our understanding that only the new (Phase III) turbines were unreliable to the extent that routine (possibly annual) replacement is foreseen. However it is not clear that the replacement is just for the gas turbines permitted during Phase III that are defective. Your request implies all existing gas turbines in the Florida Gas Transmission system. New units will be subject to 40 CFR 60, Subpart GG. Please be advised that a replacement of an old unit (pre-NSPS) for a new unit will have to be accomplished by the permitting process.)

Please provide the Department with reasonable assurance (e.g. a letter from the manufacturer of the turbine) that will indicate the limited life of the turbines and the need of routine repair, maintenance, or replacement for the affected turbines. Identify those FGT units that would be affected. Pursuant to Rule 62-4.050 F.A.C., please submit the above requested information under a professional engineer seal. This is required to provide reasonable assurance that the units to be replaced are identical in capacity and that the emissions will not exceed those of the already permitted turbine for that site or otherwise contravene a Department rule or permit condition.

Please direct a copy of your response to each of the individuals listed below. If you have any questions regarding this matter, please call Teresa Heron at (904) 488-1344.

Sincerely,

A. A. Linero, P.E. Administrator New Source Review Section

AAL/th/t

Mr. Clayton Roesler Page 2 of 2 May XX, 1997

cc: Jerry Campbell, EPCHC Jerry Kissel, SWD Jeff Koerner, PBCPHU Bob Leetch, NED

" delegated tresc | file - pave

#### Florida Gas Transmission Company

P. O. Box 9 (5100 - Mortland, Florida 32794-5100 - (407) 875-5800

June 26, 1997

CERTIFIED MAIL

Mr. Richard C. Kirby, IV, P.E. Chief, Air Permitting Section Environmental Protection Commission of Hillsborough County 1900 9th Avenue.

Tampa, Florida 33605

RE: Air Permit No. 0570438-003-AO

FGT Compressor Station No. 30, Hillsborough County

Dear Mr. Kirby:

Subject: Air Permit Application to Replace Turbines 3001, 3002 and 3003

Enclosed is an air permit application for Florida Gas Transmission Company's (FGT)
Compressor Station No. 30, located near Plant City in Hillsborough County. As discussed in out meeting on June 24, 1997, this is for the replacement of Compressor Turbines Nos. 3001, 3002 and 3003. These emission units are being replaced by identical units of the same models and sizes. There will be no change in emission rates for either of these emission units.

These replacements are being made due to the need for a major maintenance overhaul of the existing units that requires removal of these units to a maintenance facility at a remote location for a period of time. Since it is imperative that FGT provide a continuous supply of natural gas to users in Florida, replacement units must be put into place immediately in order to maintain the flow of natural gas. Due to the costs involved in returning the original units the site and the need to disrupt operations again in order to reinstall them. FGT has decided make the replacement units permanent.

Major maintenance on these turbines normally requires removal to a remote maintenance facility for a significant period of time. Additionally, a breakdown of these turbines requiring this type of major maintenance cannot always be predicted. Because FGT must maintain a continuous flow of natural gas to users, the time involved in the submittal and granting of a request for a permit modification for a new unit creates a delay that can result in potential interruptions of gas flow and unsafe operating conditions.

Permit No. 0570438-003-AO FGT Compressor Station No. 30 June 26, 1997

FGT therefore requests a construction permit for these replacements that is valid for a five year period so that when a turbine requires major maintenance and replacement in the future, FGT can quickly replace it with a unit of the same model and size.

A check in the amount of \$4,000.00 for the application fee is enclosed.

If you have any questions or need further information, please call me at (407) 875-5865.

Sincerely,

Clayton Roesler WiB

Division Environmental Specialist

David Parham, P.E.

Senior Environmental engineer

cc: Ms. Margaret Cangro, Air Quality Division, Florida Department of Environmental Protection, Southwest District, 3804 Coconut Palm Drive, Tampa, Florida 33619 - w/o enclosures

William Rome - FGT - w/o enclosures

FGT Plant City Compressor Station No. 30

ENCL

FILE: 30 replace applic cover.doc

Florida Gas Transmission Company P.O. Box 945100, Maitland, Florida 32794-5100 (407) 838-7000

April 26, 2000

**CERTIFIED MAIL** 

Mr. Jerry Kissel Florida Department of Environmental Protection Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619

FAX 407838-7101

Dear Mr. Kissel:

Re:

Air Permit Number 0170035-002-AO

Replace of Turbine for Florida Gas Transmission Station #26 LeCanto, Citrus County,

Florida

Florida Gas Transmission (FGT) would like to request authorization to replace turbine unit 2601 as soon as possible. The turbine currently in service at the facility has developed stress cracks, and FGT is concerned about the safety of facility personnel and pipeline reliability should the turbine fail.

The current turbine, a 6500 bhp (ISO conditions) Solar Centaur-Taurus F-6502 natural gas fired combustion turbine will be replaced with a 6500 bhp (ISO conditions) Solar Centaur-Taurus F-6502 natural gas fired combustion turbine. Please see the attached letter from Solar confirming the model, horsepower and emission rates of the replacement turbine.

Per NSPS guidelines, the replacement turbine will be tested within 60 day of installation to confirm permitted emission rates are being met. If you have any questions, please call me at 407-838-7123.

Thank you,

layton A. Roesler/wns Clayton A. Roesler

Division Environmental Specialist



1967 Commonwealth Lane, Tallahassec, FL 32303, (850) 350-5000, Fax (850,

62 you alsely lart the copy that was another LOTY

March 18, 2002

**UPS** Overnight

Mr. Gerald Kissel
Florida Department of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Re:

Notification of Power Turbine and Gas Generator Replacement

Florida Gas Transmission Company - Compressor Station 26

Facility No. 0170035

Unit No. 2602

Dear Mr. Kissel:

Florida Gas Transmission (FGT) is providing formal notification to the Florida Department of Environmental Protection of recent activities associated with the Lecanto Station 26 facility. On February 16, 2002 Unit 2602 had a bearing failure, which required the replacement of certain components of the turbine. The components that will be replaced include the power turbine and gas generator. The replacement components will be of the same make and model as authorized by Permit 0170035-007-AO. The new components were replaced and Unit 2602 was back on-line February 25, 2002.

Unit 2602 will be tested within 60 days of installation of the components to confirm permitted emission rates are being met.

Please call me at (850) 350-5042, if you have any questions.

Sincerely,

Jacob S. Krautsch

Division Environmental Specialist

Cc:

Marc Phillips

bucos 5. Knowton

William Kendrick

Lecanto C/S 26

Mike Teal

Duane Pierce, AQMs

L' W Frazs

# STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

ELIZABETH A. ENLUND and DAVID A. PICKERING,

Petitioners.



Vs.

DOAH Case No.: 02-1678

FLORIDA GAS TRANSMISSION COMPANY and DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Res	pond	lents.

#### PETITIONERS' PROPOSED FINDING OF FACT 1

Comes now the Petitioners to make the following Proposed Finding Of Fact 1;

- That Method 19 and 20 are used to calculate N0x emissions in the Draft Permit and such Methods are specified in 40 CFR 60, Appendix;
- That fuels including Natural Gas emit a constant volume of combustion gas per gross heat input (40 CFR 60 Appendix, 2.1 and 12.1, "Nomenclature") and;
- That this constant volume (Fd) or (Fc) is used in Method 19 and 20 as a ratio of combustion gas volumes to heat inputs (volume/MMBtu) and is called an F-factor (40 CFR 60 Appendix, 2.1 and 12.1, "Nomenclature");
- That the F-factor must be in scf/million Btu (40 CFR 60 Appendix, 12.2);
- That Hg = the *Heat input* rate to the gas turbine from all fuels fired in the gas turbine, in million Btu/hr (40 CFR 60, Appendix, 12.1, "Nomenclature");
- That pursuant to 40 CFR 60, Appendix, 12.2.8.1.2, Suitable methods shall be used to determine the heat input rates (Hg) to the gas turbine;

- That the term "heat input" means the total gross calorific value (where gross calorific value is measured by ASTM Method D2015-66, D240-64, or D1826-64) of all fuels burned pursuant to 40 CFR 52.01 (g);
- That a Horsepower (Hp) is equivalent to raising 33,000 pounds one foot per minute, or 550 pounds one foot per second (AP-42, Appendix A).;
- That a "brake" horsepower is equivalent to the above Hp, the reference "brake" or "shaft" being an indication of *net* power in the application (Definition of Brake Horsepower, attached).;
- That the Vendor's Manufacturing Data concerning N0x emissions for Engine 2601, a
  6500 Hp natural gas fired turbine at FGT's facility in Lecanto, is 0.622 grams N0x
  per brake horsepower—hour (Final Application to Construct CS 26, Appendix D,
  page D-5, April 1993, attached).;
- That 1 gram = 2.205E-3 pounds (avdp) and that 1 Hp-hr = 2543 Btu (mean). (AP-42, Appendix A, "Conversion Factors").;
- That an Emission Factor in lbs/hour is derived from a Pollutant in grams/bhp-hr, the latter units being the fundamental number guaranteed by the manufacturer,
- That the equation to convert the manufacturer's data in grams/bhp-hr to the applicable standard in lbs/hr is a simple application of common unit conversion factors;
- That the equation to convert the manufacturer's data in grams/bhp-hr to lbs/hr is as follows:

- That the Manufacturer's maximum heat input for engine 2601 is 59.6 MMBtu per hour according to the Final Application CS 26, p. D-5, attached;
- That therefore, the Manufacturer's N0x emissions factor (EF) in lbs/MMBtu (.539) when applied to the *gross heat input* (59.6) yields the Potential to Emit for unit 2601 as follows:

$$\frac{.539 \text{ lbs}}{\text{MMBtu}}$$
 X  $\frac{59.6 \text{MMBtu}}{\text{hr}}$  =  $\frac{32.1 \text{ lbs}}{\text{hr}}$  X  $\frac{24 \text{ hrs}}{\text{2000 lbs}}$  X  $\frac{365 \text{ days}}{\text{2000 lbs}}$  = 140.6 tons/yr.

- That therefore a 6500 Hp engine, similar to but smaller than those to be installed at CS 27, has the Potential to Emit N0x equal to 140.6 tons per year per unit;
- That, rather than multiply by heat input (gross) in MMBtus/hr, FGT has, in the Final Application for CS 26, replaced heat input with brake horsepower (6500 bhp), which is a net energy unit (see Final Application CS 26, p. D-7, attached);
- That Method 19 and 20 specifically requires that heat input, i.e. gross energy combusted, be used to calculate N0x emitted in lbs/hr, as stated above;
- That by using 6500 bhp (net energy) instead of 59.6 MMBtu/hr (heat input), FGT insures that the vendor's emission factor will be applied to only a fraction of engine combustion activity;
- That therefore FGT has misrepresented the Potential To Emit of engine 2601 as being "8.92 lbs/hour" (see p. D-8) when in fact the Potential to Emit is 32 lbs/hour, as above.;
- That the emissions from a larger gas turbine (7200 Hp) cannot be smaller by over 3 times the emissions from a comparable unit such as engine 2601 (6500 Hp);

- That if 2 engines comparable to engine 2601 are installed in Thonotosassa, the facility has the Potential to Emit 280 tons per year N0x;
- That therefore FGT has avoided PSD pre-construction reviews as mandated by Chapter 62, F.A.C., as well as on-going Major Source reporting and monitoring requirements;
- That the revised CS 26 Annual Operating Report (2000), p. 8, "Calculations" (attached), demonstrates an equation for N0x emissions that is invalid and does not substantiate the alleged N0x emission of 29.9 tons/year;
- That thus FGT has and is repeatedly misrepresenting Natural Gas as a cleaner fuel than it really is to avoid regulations that protect the residents of Thonotosassa, including the petitioners, and;
- That FGT facilities throughout the Phase III through V Expansion Project are thus fraudulently classified as "synthetic minor [sic] sources" on the applications for Air Construction Permits, when in fact, by "vendor's data," the Potential to Emit N0x makes such facilities major Title V sources as demonstrated above;
- That an original and a true copy of this Proposed Finding of Fact 1 by the Petitioners has been sent by certified United States Mail to Anne Longman, Edwin A.

  Steinmeyer, John W. Forehand, counsel for Respondent FGT, at LEWIS,

  LONGMAN & WALKER, P.A., Post Office Box 10788 (32302), 125 South

  Gadsden Street, Suite 300, Tallahassee, Florida, 32301;
- That an original and a true copy of this Proposed Finding of Fact 1 by the Petitioners has been sent by certified United States Mail to W. Douglas Beason, Assistant

General Counsel, FDEP, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000;

That NOTICE of the Proposed Finding of Fact 1 is hereby given to the Respondents FGT and FDEP, this 4 day of June 2002;

That therefore the Petitioners respectfully request that the Honorable Judge J. Lawrence

Johnston find that *The Potential To Emit* for units 2701/2702 (7200 Hp) is thus

fraudulently understated as 5.6 lbs/ hr in the Draft Permit for CS 27, whereas the

true Potential To Emit is at least 30 lbs/hr pursuant to the applicable method.

Dated the Mday of June, 2002.

Elizabeth A. Enlund Post Office Box 778

Thonotosassa, FL 33592-0778

David A. Pickering

Post Office Box 778

Thonotosassa, FL 33592-0778

#### CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by U.S. Mail on Anne Longman, Ed Steinmeyer, John Forehand, counsel for FGTC at LEWIS, LONGMAN & WALKER, P.A., 125 South Gadsden Street, Suite 300, Post Office Box 10788 (32302), Tallahassee, FL, 32301 and W. Douglas Beason, Assistant General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, FL, 32399-3000 this Aday of June 2002.

Elizabeth A. Enliery
Petitioner

#### 1. Definition of Brake Horsepower

1. Federal Aviation Administration definitions:

"Brake horsepower means the power delivered at the propeller shaft (main drive or main output) of an aircraft engine."

URL: www.faa.gov

- 2. "Engine output shaft power will be measured on test as brake power [BP]...Because of pumping, friction, and heat losses, BP will always be less than the IP [indicated power]..." Archer, 195.
- 3. "The output power P (= brake power BP = shaft power SP)" Archer,197.
- 4. "a brake power output BP of 240 bhp [is equivalent to] (179 kW)" Archer, 198.
- 5. Brake/shaft power is relevant to piston engines. Index, Archer 576-577.
  - Archer, R. Douglas and Maido Saarlas. <u>Introduction to Aerospace</u>
    <u>Propulsion.</u> Upper Saddle River; New Jersey: Prentice Hall, 1996.
    pp. 16, 195-198, 576-577.
- 6. "More than 50% of the shaft horsepower is needed to drive the internal compressor and the balance of recovered shaft horsepower is available to drive an external load." AP-42, 3.1-1.
  - Compilation of Air Pollutant Emission Factors AP-42. Fifth Edition, Volume I: Stationary Point and Area Sources. Chapter 3: Stationary Internal Combustion Sources. Update 2001. Available at URL: http://www.epa.gov/ttn/chief/ap42/ch03/

#### **CRITERIA POLLUTANT EMISSION CALCULATIONS**

#### **MAXIMUM HEAT INPUT:**

#### **COMPRESSOR ENGINE:**

#### Engine No. 2601:

Fuel Heating Value Engine Rating

Brake Specific Fuel Consumption

Maximum Heat Input = MMBtu/Hr

Gas Consumption = MMscf/hr

=1,040 Btu/scf

=6,500 bhp

=9,169 Btu/bhp-hr  $= (Btu/bhp-hr * hp)/10^6$ 

 $=(9,169 * 6,500)/10^6$ =59.60 MMBtu/hr

= (59.60 MMBtu/hr/1040 Btu/CF)

=0.057 MMscfh

#### POLLUTANT EMISSION FACTORS FOR SOLONOX TURBINE:

#### **COMPRESSOR ENGINES:**

#### Engine No. 2601:

#### **NORMAL OPERATION:**

0.622 grams/bhp-hr NO<sub>x</sub>:

CO: 0.451 grams/bhp-hr UHC: 0.26 grams/bhp-hr

NMHC: 0.026 grams/bhp-hr SO<sub>2</sub>:

10 grains/100 CF 0.114 grams/bhp-hr

5 lbs/10° CF PM:

0.020 grams/bhp-hr

Manufacturer's Data

Manufacturer's Data Manufacturer's Data

(10% of UHC)

Contract Limit on Sulfur Content

Table 1.4-1, AP-42

#### NO<sub>x</sub> EMISSIONS

#### **COMPRESSOR ENGINES**

#### Engine No. 2601:

#### NORMAL OPERATION:

ib NO<sub>x</sub>/hr = (grams/bhp-hr) \* (0.002205 lb/gram) \* (bhp) = (0.622 grams/bhp-hr) \* (0.002205 lb/gram) \* (6,500 bhp) = 8.92 lb/hour tons NO<sub>x</sub>/yr = (lb NO<sub>x</sub>/hr) \* (8760 hr/yr) / (2000 lb/ton) = (8.92 lb/hr) \* (8760 hr/yr) / (2000 lb/ton) = 39.05 tons/year

#### WORST CASE:

lb NO<sub>x</sub>/hr = (grams/bhp-hr) \* (0.002205 lb/gram) \* (bhp) = (0.639 grams/bhp-hr) \* (0.002205 lb/gram) \* (6,500 bhp) = 9.15 lb/hour

#### Emissions Summant

#### NORMAL OPERATION:

 $1b NO_x/hr = 8.92 1b NO_x/hr$ 

tons  $NO_x/yr = 39.05 TPY NO_x$ 

#### WORST CASE:

 $1b NO_x/hr = 9.15 lb NO_x/hr$ 

Facility ID: 0170035

**Emissions Unit ID: 001** 

SCC: 2-02-002-01

#### E. EMISSIONS INFORMATION BY PROCESS/FUEL

#### (1) PROCESS/FUEL INFORMATION

1. SCC 2-02-002-01	2. Description of Process or Type of Internal Combustion Engines Industrial	Fuel Natural Gas Turbine
3. Annual Process or Fuel Usage Rate 162.32	4. Ozone Season Daily Process or Fuel Usage Rate 0.5521	5. SCC Unit Million Cubic Feet Burned
6. Fuel Average % Sulfur	7. Fuel Average % Ash	8. Fuel Heat Content (mmBtu/SCC Unit) 1040

#### (2) EMISSIONS INFORMATION

1. Pollutant * CO Carbon Monoxide	CAS No. 630-08-0	[ ] Below Threshold [ ] Not Emitted	
2. Annual Emissions (ton/year)	3. Ozone Season Daily Emissions (lb/day)	4. Emissions Method Code	
11.072169	71.354661	5	

5. Emissions Calculation (Show separately both annual and daily emissions calculations)

Annual Emissions (Ton/Year) 11.072169 = EF g/hp-hr 0.45 \* Unit bhp 6500 \* Total Annual Operation (Hour/Year) 3434 / (g/lb 453.59 \* 2000)

Ozone Season Daily Emission (Lbs/Day) 71.354661 = (EF g/hp-hr 0.45 / g/lb 453.59) \* Unit bhp 6500 \* O3 Season hours <math>1018 / 92

1. Pollutant * NOX Nitrogen Oxides	CAS No. 10102-44-0	[ ] Below Threshold [ ] Not Emitted
2. Annual Emissions (ton/year)	3. Ozone Season Daily Emissions (lb/day)	4. Emissions Method Code
15.254988	98.310867	5

5. Emissions Calculation (Show separately both annual and daily emissions calculations)

Annual Emissions (Ton/Year) 15.254988 = EF g/hp-hr 0.62 \* Unit bhp 6500 \* Total Annual Operation (Hour/Year) 3434 / (g/lb 453.59 \* 2000)

Ozone Season Daily Emission (Lbs/Day) 98.310867 = (EF g/hp-hr 0.62 / g/lb 453.59) \* Unit bhp 6500 \* O3 Season hours 1018 / 92

DEP Form No. 62-210.900(5) - Form Effective: 2/11/99

<sup>\*:</sup> Pollutant subject to emissions limiting standard or emissions cap

#### FGT Station 26 LeCanto 2000 AOR Calculations

Op				9297 PRAISES 11 NOS			*** Elui 231 Off	Calculations		Starting See See Contraction		<u> </u>
Engine Number:		26	01	<u> </u>	Fuel Use				Annual Emissions (Tons per Year)			-
		i i		l	2000	1						
				!	Operating	<u> </u>					İ	
Operating Hrs./		Hours	MMcf	Unit	Hours	MMcf	НР	NOx	co	voc	\$02	PM
1999	Dec	535	26.657	2601	6741	585.50	6500	29.9	21.7	12.6	8.4	1.46
2000	Jan	589	49.600	7 May 12	J. 660 E	Daily Calculade	ns During t	he Ozone Season	i June li terou	igh August:3 f	ev galaga	in contrage
2000	Feb	606	49.400		Fuel	Use				sions (Pounds		
2000	Mar	711	47.930	2601	2138		6500	206.5	149.9	86.6	45.61	7.98
2000	Apr	690	47.900	<b>38.37</b> 40700388			::: Emission	Factors for Engl	nes 2601	\$6 <b>\$</b> 211		2. C 32.37
2000	May	676	47.750	Pollutant	Value	Units	Code					,
2000	Jun	687	49.400	NOx	0.62	gm/hphr	5	T	-			
2000	)ul	713	48.680	co	0.45	gm/hphr	5					
2000	Aug	738	48.800	VOC	0.26	gm/hphr	5					
2000	Sep	669	47.800	\$02	0.1	grain S/cf	2	Mass balance				
2000	Oct	131	49.700	PM	5	Lbs/MMcf	4	AP-42 Table 1.4-1	factor at time of	permitting		
2000	Nov	309	45.170			***	200	Fuel Heat Value	958.50 - 100.00		Marine and Marine of the	
2000	Dec	222	53.370	1040	Btu/scf					***************************************		
- 0.00 dest	otal: Operad	ng:Hours	2.4%, J. C.	12.00 may 3.00				Equations	2.55g, 300 (00 <b>2.</b> 55g)		X-0002 (00000) - 12-12	ogrammen. I
Year 2000		6741	585.500	Emissions (CO, N	Ox. VOC) = (emission	on factor in gm/hphr)	(2000 engine op	erating hours)*(Hp)/(46				21300 4 114
Dec 99 thru N	ov 00	7054						hours)*(64 lbs SO2/32				
Perce	nt Operatio	n by Quarte							,,	,		
Dec 99 - Feb 0	0	24.53	22.52	-						-		
Mar 00 - May	00	29.44	25.69									
Jun 00 - Aug 0	10	30.31	26.28		REVISED							
Sep 00 - Nov (	90	15.72	25.52									
Total		100,00	100.00									

# STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

ELIZABETH A. ENLUND and DAVID A. PICKERING,

Petitioners,

COPY

Vs.

DOAH Case No.: 02-1678

FLORIDA GAS TRANSMISSION COMPANY and DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Responde	ents.
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#### PETITIONERS' PROPOSED FINDING OF FACT 2

Comes now the Petitioners Elizabeth A. Enlund and David A. Pickering, to make the following <u>Proposed Finding of Fact 2</u>:

That pursuant to 40 CFR 60.335 (c) (3), Method 20 shall be used to determine Nitrogen Oxide concentrations.;

That pursuant to 40 CFR 60, Appendix, Method 20, N0x emissions in lbs/MMBtu (E) can be calculated using the following Equation 20-6:

$$E = (Cd) (Fd) \frac{20.9}{20.9 - \%O2}$$

where Cd is the observed N0x concentration on a dry basis,
where Fd is 8740 dscf/MMBtu for Natural Gas, from Table I, "F Factors For
Various Fuels." Summary for Determining Emissions From Combustion Sources,
July 1976.

Where %O2 is as measured by analyzer, dry basis.

That engine unit 2602 at the FGT Lecanto Facility is a Cooper-Rolls 501-KC7-DLE simple cycle combustion turbine, the identical model to be installed at CS 27,

That therefore relevant process and emissions data is available in the Compliance Test Report prepared by Cubix Corporation, August, 2001;

That on page 7 in the Summary of Results, Table 3, of said Compliance Test Report

(attached), measured emissions average 11.17 ppm, dry basis but uncorrected for
temperature and pressure.;

That on said page 7, the %O2 by volume, dry basis, is 15.48%;

That in said Compliance Test Report 11.17 ppmvd is equal to Cd, the observed N0x concentration on a dry basis;

That therefore by Method 20, equation 20-6 can be applied as follows:

$$E (N0x) as 1bs = 11.17 X 8740 dscf X 20.9 MMBtu 20.9 15.47$$

$$E(N0x) = .376 lbs/MMBtu$$

That at CS 27 each proposed identical Cooper Rolls 50l-KC7-DLE model will have a heat input of 63 MMBtu/hr;

That therefore, by Method 20 above, the Compliance Test indicates that actual N0x emissions at CS 27 will be: .376 lbs/MMBtu X 63 MMBtu/hr = 23.7 lbs/ hr;

That therefore as indicated by the performance of engine 2602 the actual N0x emissions at CS 27 will be:

23.7 lbs/hr X 24 hrs X 365 days X 
$$\frac{1 \text{ ton}}{2000 \text{ lbs}}$$
 = 103.7 tons per year per unit;

That therefore CS 27 will be a major source of N0x and subject to 40 CFR Part 70 and Title V of the Clean Air Act;

- That the present Draft Air Construction Permit for CS 27 is inapplicable to a major source of N0x;
- That Respondent FGT uses "vendor EF (lbs/hr) 5.6" in the Annual Operating Report for CS 26, 2001, p. 10 (attached), to misrepresent actual emissions of N0x from the Cooper Rolls model identical to the units to be installed at CS 27;
- That Respondent FGT in the CS 27 Application for Air Construction Permit, Attachment A, A-16 (attached), quotes potential emissions as 5.7 lbs/hr as referenced from "vendor's data," when in fact such number is a fabrication and, as seen above, is contradicted by Method 20;
- That Respondent FGT thereby has avoided more stringent pre-construction review and public notice requirements;
- That therefore by such misrepresentation of "vendor's data" FGT has violated the rights, health and safety of local residents who depend upon FDEP to obtain accurate essential data in order to enforce the Federal Clean Air Act, the Florida State Implementation Plan under Chapter 62, F.A.C, and as mandated by 403 F.S.
- That an original and a true copy of this Proposed Finding of Fact 2 by the Petitioners has been sent by certified United States Mail to Anne Longman, Edwin A.

  Steinmeyer, John W. Forehand, counsel for Respondent FGT, at LEWIS,

  LONGMAN & WALKER, P.A., Post Office Box 10788 (32302), 125 South

  Gadsden Street, Suite 300, Tallahassee, Florida, 32301;
- That an original and a true copy of this Proposed Finding of Fact 2 by the Petitioners has been sent by certified United States Mail to W. Douglas Beason, Assistant

General Counsel, FDEP, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000;

That NOTICE of the Proposed Finding of Fact 2 is hereby given to the Respondents FGT and FDEP, this 4th day of June 2002;

That therefore the Petitioners respectfully request that the Honorable Judge J. Lawrence
Johnston find that Respondent FGT fraudulently applied for a "synthetic minor
[sic] source" Air Construction Permit because FGT knew, or should have known
from its own compliance report from an identical unit, engine 2602, that
2701/2702 will emit a total of 206 tons per year, and thus CS 27 will exceed the
major source threshold as found in the U.S. Clean Air Act, 42 USC.s 740l et. seq.,
and as defined pursuant to 62-213.420(3)(c) 1., F.A.C., "Major Source
Thresholds," and 62-210.200 (157), F.A.C., and 62-210.200(159)(b), F.A.C.;

That therefore the Petitioners respectfully request that the Honorable Judge J. Lawrence

Johnston find that Respondent FGT failed to apply Method 20 at CS 26 in

violation of the 40 CFR 60.335 (c) (3) and applicable Florida law.

Dated the May of June, 2002.

Blizabeth A. Enlund Post Office Box 778

Thonotosassa, FL 33592-0778

David A. Pickering

Post Office Box 778

Thonotosassa, FL 33592-0778

#### CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by U.S. Mail on Anne Longman, Ed Steinmeyer, John Forehand, counsel for FGTC at LEWIS, LONGMAN & WALKER, P.A., 125 South Gadsden Street, Suite 300, Post Office Box 10788 (32302), Tallahassee, FL, 32301 and W. Douglas Beason, Assistant General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, FL, 32399-3000 this Add day of June 2002.

<u>Elizabeth G-Enliend</u> Petitioner

Emissions Unit Information Section	_1	of_	_6
Pollutant Detail Information Page	1	of	6

### D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

#### Potential Emissions

1 Dellesent Frank 1 MOV	<u> </u>						
1. Pollutant Emitted: NOX	2. Pollutant Regulatory Code: EL						
3. Primary Control Device 4. Secondary	Control Device 5. Total Percent Efficiency						
Code: NA							
6. Potential Emissions:	o. control.						
5.7 lb/hour 25.0	, , <u></u>						
8. Emission Factor: 5.7 lb/hr	tons/year [ ]						
6. Emussion factor: 5./16/hr	9. Emissions Method Code:						
Reference: Vendor's data							
	5						
10.01.11.							
10. Calculation of Emissions (limit to 600 char	acters):						
(5.7  lb/hr)(1  ton/2000 lb)(8760  hr/1 yr) = 24.97  tons/year							
/ Jan Jan Jan Long year							
11. Pollutant Potential Emissions Comment (limit to 200 characters):							
(							
Based on vendor's data. See Attachment C.							
Allowable Emissions1 of1							
1 Pagis for Allowable C C. 1							

Future Effective Date of Allowable     Emissions: NA			
4. Equivalent Allowable Emissions:			
5.7 lb/hour 25.0 tons/year			
rs):			
1			

Initial performance test.

- 6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):
- 40 CFR 60.332(a)(2) limits NOX emissions to 175 ppmv.

DEP Form No. 62-210.900(3) - Form Effective: 2/11/99

#### E. EMISSIONS INFORMATION BY PROCESS/FUEL

#### (1) PROCESS/FUEL INFORMATION

1. SCC 2-02-002-01	2. Description of Process or Type of Internal Combustion Engines Industrial	Fuel Natural Gas Turbine
3. Annual Process or Fuel Usage Rate 229.2	4. Ozone Season Daily Process or Fuel Usage Rate 0.8598	5. SCC Unit Million Cubic Feet Burned
6. Fuel Average % Sulfur	7. Fuel Average % Ash	8. Fuel Heat Content (mmBtu/SCC Unit) 1040

#### (2) EMISSIONS INFORMATION

Pollutant CO     Carbon Monoxide	CAS No. 630-08-0	[ ] Below Threshold [ ] Not Emitted	
2. Annual Emissions (ton/year)	3. Ozone Season Daily Emissions (lb/day)	4. Emissions Method Code	
15.89462	118.782391	5	

5. Emissions Calculation (Show separately both annual and daily emissions calculations) Annual Emissions (Ton/Year) 15.89462 = Vendor EF (lbs/hr) 6.86 \* Total Annual Operation (Hour/Year) 4634 / 2000

Ozone Season Daily Emission (Lbs/Day) 118.782391 = Vendor EF (lbs/hr) 6.86 \* Total Ozone Season Hours 1593 / 92

Based on AP-42, 5th Ed. Supplement F, 07/00, Table 3.2-2

1. Pollutant * NOX Nitrogen Oxides	CAS No. 10102-44-0	[ ] Below Threshold [ ] Not Emitted		
2. Annual Emissions (ton/year)	3. Ozone Season Daily Emissions (lb/day)	4. Emissions Method Code		
12.9752	96.965217	5		

5. Emissions Calculation (Show separately both annual and daily emissions calculations) Annual Emissions (Ton/Year) 12.9752 = Vendor EF (lbs/hr) 5.6 \* Total Annual Operation (Hour/Year) 4634 / 2000

Ozone Season Daily Emission (Lbs/Day) 96.965217 = Vendor EF (lbs/hr) 5.6 \* Total Ozone Season

Based on AP-42, 5th Ed. Supplement F, 07/00, Table 3.2-2

\*: Pollutant subject to emissions limiting standard or emissions cap DEP Form No. 62-210.900(5) - Form

Effective: 2/11/99

# TABLE 3: Summary of Results Unit 2602

Company: Florida Gas Transmission Company

**Full Load Testing** 

Facility: Compressor Station No. 26 Location: Lecanto, Citrus County, Florida Source: Cooper-Roils Model 501-KC7-DLE Technicians: LJB. RPO

2602-C-10	2602-C-11	2602-C-12	7	
			1	
				FDEP
14:10	15:22			Permit
	Full Load		Averages	Limits
14658	14647	14652		
9527	9458	9479		!
6,360	6,356	6,394		
90.7%	90.7%	91.2%	90.9%	
165	165	165	164.9	1
	86.2	85.4	85.5	
0.50	0.51	0.50	0.50	
		1388	1388	}
		867	872.7	
		75.0	75.0	
i		1080	1097.8	1
		110	110.9	1 1
471	494	508	491.1	
				1
			0.5870	
			8642	
				10
51.47	51.45	51.54	51.49	
				<u> </u>
			I 1	
			l	
0.0214	0.0209	0.0204	0.0209	
11.06	11 11			
			`	25.0
		1		190
		,	15.48	. [
3.15		3.21	3.18	
-		-	0	10
1.72	1.70	1.69	1.71	
<del></del> -				
2.52E+06	2.31E+06	2.33E+06	2.39E+06	
1.90E+06	1.91E+06	1.91E+06	1.91E+06	ľ
1.87E+06	1.85E+06	1.83E+06	1.85E+06	
3.39	3.07	3.10	3.19	5.60
	14658 9527 6,360 90.7% 165 84.8 0.50 1388 877 75.0 1115 112 471  1044.0 0.5870 8642 1027 0.042 54.78 57.19 51.47  29.86 89.6 82.1 0.0214  11.25 12.2 15.1 15.47 3.15 - 1.72  2.52E+06 1.90E+06 1.87E+06	7/12/01 13:10 14:22 14:10 15:22 Full Load  14658 14647 9527 9458 6,360 90.7% 90.7% 165 165 84.8 86.2 0.50 0.51 1388 1388 877 875 75.0 75.0 1115 1098 112 111 471 494  1044.0 0.5870 0.5870 8642 1027 0.042 0.042 54.78 54.76 57.19 57.17 51.47 51.45  29.86 89.9 82.1 10.0214 0.0209  11.25 11.11 12.2 12.1 15.1 14.8 15.47 15.48 3.15 3.18 - 0 1.72 1.70  2.52E+06 1.91E+06 1.95E+06 1.85E+06	7/12/01         7/12/01         7/12/01           13:10         14:22         15:31           14:10         15:22         16:31           Full Load           14658         14647         14652           9527         9458         9479           6,360         6,356         6,394           90.7%         90.7%         91.2%           165         165         165           84.8         86.2         85.4           0.50         0.51         0.50           1388         1388         1388           877         875         867           75.0         75.0         75.0           1115         1098         1080           112         111         110           471         494         508    1044.0  0.5870  0.5870  0.5870  0.5870  8642  8642  1027  0.042  0.042  0.042  0.042  54.78  54.76  54.85  57.19  57.17  57.27  51.47  51.45  51.54   29.86  89.9  88.6  82.1  81.7  80.8  0.0214  0.0209  0.0204  11.25  11.11  11.16  12.2  12.1  15.1  14.8  14.7  15.47  15.48  3.15  3.18  3.21  - 0 - 1.72  1.70  1.69  1.69  1.72  1.70  1.69  1.69  1.72  1.70  1.69  1.87E+06  1.81E+06  1.83E+06  1.80E+06  1.83E+06  1.83E+06  1.83E+06  1.80E+06  1.80E+06  1.80E+06  1.80E+06  1.80E+06  1.80E+06  1.80E+06  1.80E+06	7/12/01         7/12/01         7/12/01         13:10         14:22         15:31         14:10         15:22         16:31           Full Load         Averages           14658         14647         14652         14652.3         9527         9458         9479         9487.9           6,360         6,356         6,394         90.9%         6,370         90.7%         91.2%         90.9%           165         165         165         165         164.9           84.8         86.2         85.4         85.5           0.50         0.51         0.50         0.50           1388         1388         1388         1388           877         875         867         872.7           75.0         75.0         75.0         75.0           1115         1098         1080         1097.8           112         111         110         110.9           471         494         508         491.1           1044.0         1044.0         1044.0         1044.0           0.5870         0.5870         0.5870         0.5870           8642         8642         8642         8642     <

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# STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

ELIZABETH A. ENLUND and DAVID A. PICKERING,

Petitioners.



Vs.

DOAH Case No.: 02-1678

FLORIDA GAS TRANSMISSION COMPANY and DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondents.

#### PETITIONERS' FINDING OF FACT 3

Comes now the Petitioners to make the following Proposed Finding Of Fact 3;

That pursuant to 40 CFR 60.335 (c) (attached), the owner or operator "shall" determine compliance with the Nitrogen Oxide standards in 40 CFR 60.332 (NSPS) by using the following equation:

N0x = (N0x observed, ppmvd) X (reference combustor inlet absolute pressure in mmHg, i.e. 760 mmHg /divided by / observed combustor inlet absolute pressure at test, in mmHg) X (0.5) X (e) X (19) X (observed humidity of ambient air, in grams—0.00633) X (288 degrees Kelvin /divided by/ ambient temperature in degrees Kelvin) X (1.53);

That the FGT unit 2602, located at CS 26 in Lecanto, is a Cooper-Rolls 501-KC7-DLE simple cycle compression turbine and is the identical model to those to be installed at CS 27;

That said unit 2602 underwent compliance testing in July, 2001;

- That the data found in the Compliance Test Report prepared by Cubix Corporation,
  August, 2001, pursuant to the Air Construction Permit 0170035-005-AC, is
  representative of the performance of the units to be installed at CS 27;
- That in Table 3, "Summary of Results Unit 2602 Full Load Testing" on page 7 of said report:
  - The gas compressor suction pressure is 872.7 pounds per square in of Hg
  - The measured emissions of N0x (ppmv, dry basis) is 12.2
  - The O2 "F-factor" (DSCF ex / MMBtu, 2 0% excess air) is 8642
     dscf/MMBtu
  - The CO2 "F-factor" (DSCF ex / MMBtu, 2 0% excess air) is 1027
     dscf/MMBtu
  - The ambient temperature is 89.4 degrees F
  - The ambient humidity in lb moisture per lb air is .0209 lb/lb air
  - The stack volumetric flow rate is 2.39 MMDSCF per hour;
- That the above data when applied in equation 40 CFR 60.335 (c) (1) will demonstrate probable emissions of N02 at CS 27;
- That the observed combustor inlet absolute pressure (P-obs), 872.7 psig, must be converted to units identical to the reference combustor inlet absolute pressure (P-ref) as stated in 40 CFR 60.335 (c) (1);

That 101.3 kilopascals = 760 mmHg, and;

That 1 lb = 453.59 grams;

That 872.7 psig X (760 mmHg/14.7 psig) i.e. (1 ATM / 1 ATM ) converts to 45,119 mmHg;

That  $\frac{760 \text{ mmHg}}{45,119 \text{ mmHg}} = \frac{P-\text{ref}}{P-\text{obs}} = .01684;$ 

That the inverse of .01684 = 59.37;

That therefore the compression section of unit 2602 is compressing inlet air to almost 60 times (59.37) the ambient air pressure;

That according to AP-42, 3.1.2, "Process Description" (attached), ambient air is drawn in and compressed "up to 30 times ambient pressure";

That thus a question arises about FGT's operating safety and methods, particularly considering the correspondence between FGT and FDEP that indicate engine failures due to stress cracks, i.e. the so-called "major maintenance overhauls" (see the 4 letters attached to Petitioners first Interrogatories);

That an ambient temperature of 89.4 degrees F is equal to 305 degrees Kelvin;

That the observed humidity, .0209 lbs, must be converted to grams to be compatible with the constants in the equation, as stated in 40 CFR 60.335 (c) (1); "Ho=observed humidity of ambient air, g H20/g air.";

That therefore .0209 lbs must be converted to grams as follows:

 $0.0209 \ lbs \ X \ 453.6 \ grams / 1 \ lb = 9.48 \ grams;$ 

That therefore, employing the data from engine 2602 in the equation from 40 CFR 60.335 (c)(1):

```
N0x (EPA) = (12.22 ppmvd) X (760 mmHg) X (0.5) X (e)

(Measured N0x; and) (45,119 mmHg)

(Converted to ISO)

(Conditions, i.e. 1 ATM) X (19) X (9.48 grams--.00633)

(And 59 degrees F. from)

(60 ATMs and 1000 degrees) X (288 degrees Kelvin) X (1.53) = 72.7 ppmvd

(F., exhaust conditions) (305 degrees Kelvin)
```

- That considering the sampled gases are greater than 1000 degrees F., the adjustment from 12.22 to the applicable standard at ISO conditions of an alleged + 24%, to 15.1 ppmvd (2602 Compliance Test, page 6, Appendix B, "Example Calculations," attached), defies common sense;
- That therefore the equation used by FGT in Appendix B, "Example Calculations is not an equivalent method subject to approval from the Administrator;
- That the aberrant equation used instead of the one specified in 40 CFR 60.335 (c)(1) is not authorized nor noticed in the Federal Register as required by 40 CFR 60.335 (f)(1);
- That 72.7 ppmvd can be converted to lbs/scf using 40 CFR 60, Appendix Method 19,

  Table 19.1, "Conversion Factors for Concentration," ---"1 ppm N0x = 1.194 E -7

  lbs/SCF of N0x";
- That therefore, 72.7 ppmvd X  $\frac{1.194 (E-7) \text{ lbs}}{\text{SCF}} = \frac{8.68 (E-6) \text{ lbs}}{\text{SCF}}$  X  $\frac{2.39 (E+6) \text{SCF}}{\text{hour}}$  ISO adjusted Conversion Emissions per Measured total Measured N0x Factor volume in scf Volumetric Flow

= 20.75 lbs / hour

That 20.75 lbs/hour is equal to 91 tons per year per unit;

That therefore CS 27 is a Major Source for N0x because, by comparison with the identical model at the FGT facility in Lecanto, the compliance test demonstrates that 182 tons per year N0x will be emitted from the facility in Thonotosassa;

That hereby the Petitioners respectfully request that the honorable Judge J. Lawrence

Johnston find that FGT has violated 40 CFR 60.335 (c), which is applicable to CS

27 under Subpart GG, and that by comparison to the identical model, engine 2602

in Lecanto, FGT knows or should have known that CS 27 will emit over 175 tons per year of N0x and;

That therefore Respondent FGT is not entitled to a minor source air construction permit for CS 27.

Dated this What day of June, 2002.

Elizabeth A. Enlund Post Office Box 778

Thonotosassa, FL 33592-0778

David A. Pickering

Post Office Box 778

Thonotosassa, FL 33592-0778

#### **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by U.S. Mail on Anne Longman, Edwin Steinmeyer, John Forehand, counsel for FGTC at LEWIS, LONGMAN & WALKER, P.A., 125 South Gadsden Street, Suite 300, Post Office Box 10788 (32302), Tallahassee, FL, 32301 and W. Douglas Beason, Assistant General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, FL, 32399-3000 this

Elizabeth a. Enland
Petitioner

That an original and a true copy of this Proposed Finding of Fact 3 by the Petitioners has been sent by certified United States Mail to Anne Longman, Edwin A.

Steinmeyer, John W. Forehand, counsel for Respondent FGT, at LEWIS,

LONGMAN & WALKER, P.A., Post Office Box 10788 (32302), 125 South

Gadsden Street, Suite 300, Tallahassee, Florida, 32301;

That an original and a true copy of this Proposed Finding of Fact 3 by the Petitioners has been sent by certified United States Mail to Douglas W. Beason, Assistant General Counsel, FDEP, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000;

That NOTICE of the Proposed Finding of Fact 3 is hereby given to the Respondents FGT and FDEP, this 4th day of June 2002;

Elizabeth A. Enlund Post Office Box 778

Thonotosassa, FL 33592-0778

David A. Pickering

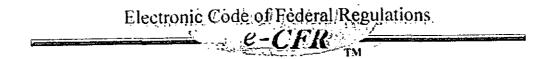
Post Office Box 778

Thonotosassa, FL 33592-0778

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Elysteth a Enland
Petitioner



#### THIS DATA CURRENT AS OF THE FEDERAL REGISTER DATED MAY 30, 2002

#### 40 CFR - CHAPTER I - PART 60

#### View Part

#### § 60.335 Test methods and procedures.

- (a) To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired.
- (b) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided for in § 60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.
- (c) The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in §§ 60.332 and 60.333(a) as follows:
- (1) The nitrogen oxides emission rate (NOx) shall be computed for each run using the following equation:

NOx=(NOxo) (Pr/Po) 0.5 e19(Ho -- 0.00633) (288°K/Ta) 1.53

#### where:

NOX = emission rate of NOX at 15 percent O2 and ISO standard ambient conditions, ppm by volume.

NOX = observed NOX concentration, ppm by volume at 15 percent O2.

Pr=reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

Po=observed combustor inlet absolute pressure at test, mm Hg.

Ho=observed humidity of ambient air, g H2O/g air.

e=transcendental constant, 2.718.

Ta=ambient temperature, °K.

- (2) The monitoring device of § 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with § 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.
- (3) Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NOx emissions shall be determined at each of the load conditions specified in paragraph (c)(2) of this section.
- (d) The owner or operator shall determine compliance with the sulfur content standard in § 60.333(b) as follows: ASTM D 2880-71, 78, or 96 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80 or 90 (Reapproved 1994), D 3031-81, D 4084-82 or 94, or D 3246-81, 92, or 96 shall be used for the sulfur content of gaseous fuels (incorporated by reference-see § 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.
- (e) To meet the requirements of § 60.334(b), the owner or operator shall use the methods specified in paragraphs (a) and (d) of this section to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.
- (f) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
- (1) Instead of using the equation in paragraph (c)(1) of this section, manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in § 60.8 to ISO standard day conditions. These factors are developed for each gas turbine model they manufacture in terms of combustion inlet pressure, ambient air pressure, ambient air humidity, and ambient air temperature. They shall be substantiated with data and must be approved for use by the Administrator before the initial performance test required by § 60.8. Notices of approval of custom ambient condition correction factors will be published in the Federal Register.

[54 FR 6675, Feb. 14, 1989, as amended at 54 FR 27016, June 27, 1989; 65 FR 61760, Oct. 17, 2000]



#### NOx Correction to 15% O2

refers to Test Run 2602-C-10

C<sub>NOx</sub> = observed NOx concentration

= 11.25 ppmv

 $C_{O_2}$  = concentration of oxygen

= 15.47% (from analyzer)

 $C_{NO_x@}$  = concentration of NOx corrected to 15% excess O2

$$= \frac{(C_{\text{NOx}} \times (20.9 - 15.0\% \text{ O}_2))}{20.9 - C_{\text{O}_2}}$$

$$= \frac{11.25 \times 5.9}{20.9 - 15.47}$$

 $C_{NO_{x}@} = 12.2(2) \text{ ppmv } @15\% O_2$ 

#### EPA ISO-day Correction for NOx

refers to Test Run 2602-C-10

 $H_{\text{obs}}$  = observed humidity of ambient air = 0.0214 (lbs  $H_2O$ / lb air)

 $C_{NO_x@}$  = concentration of NOx @15%O<sub>2</sub> = 12.22 ppmv @15% O<sub>2</sub>

Pref = reference combustor inlet pressure = 101.3 kpa

Pobs = observed combustor inlet pressure

 $= (29.86 \text{ "Hg} - 0.5/13.6) \times 3.3864 \text{ kpa/"Hg} = 100.993 \text{ kpa}$ 

Tinlet = ambient temperature of inlet air

=  $(84.8 \text{ °F} - 32 \text{ °F}) \times (5/9) + 273.15 \text{ °C}$  = 302.48 °K

 $NO_X(EPA) = NO_X$  concentration @ISO conditions

= 
$$C_{NOx@} \times \sqrt{\frac{P_{ref}}{P_{obs}}} \times \left(\frac{288^{\circ}K}{T_{inlet}}\right)^{1.53} \times 2.718^{19}(H - 0.00633)$$

= 
$$12.22 \times \sqrt{\frac{101.3}{100.993}} \times (\frac{288}{302.48})^{1.53} \times 2.718^{19}(0.0214 - 0.00633)$$

 $NO_X(EPA) = 15.1 \text{ ppmv } @ 15\%O_2 \& ISO Conditions}$ 

# NOx Mass Emission Rate (lbs/hr)

Refers to Test Run #2602-C-10

= observed concentration of  $NO_x = 11.25 \text{ ppmv}$ = 46.01 lb/lb-mole for nitrogen dioxide  $C_{NOx}$ 

MW<sub>NOx</sub> for ideal gas, 385.15 SCF = 1.0 lb/mole

= 2.522 x 10<sup>6</sup> SCFH (from ave. pitot tube volumetric flow)  $Q_d$ 

= mass emission rate of  $NO_x$  in (lb/hr)  $E_{NOx}$ 

$$= C_{NOx} \times 10^{-6} \times Q_d \times \frac{MW_{NOx}}{385.15}$$

= 
$$11.25 \times 10^{-6} \times 2.522 \times 10^{6} \times \frac{46.01}{385.15}$$

= 3.39 lbs/hr  $E_{NOx}$ 

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Stationery Intered Combission Succession
UKL: http://www.pn.gov/201/16/19/2

#### 3.1 Stationary Gas Turbines

#### 3.1.1 General<sup>1</sup>

Gas turbines, also called "combustion turbines", are used in a broad scope of applications including electric power generation, cogeneration, natural gas transmission, and various process applications. Gas turbines are available with power outputs ranging in size from 300 horsepower (hp) to over 268,000 hp, with an average size of 40,200 hp.<sup>2</sup> The primary fuels used in gas turbines are natural gas and distillate (No. 2) fuel oil.<sup>3</sup>

#### 3.1.2 Process Description<sup>1,2</sup>

A gas turbine is an internal combustion engine that operates with rotary rather than reciprocating motion. Gas turbines are essentially composed of three major components: compressor, combustor, and power turbine. In the compressor section, ambient air is drawn in and compressed up to 30 times ambient pressure and directed to the combustor section where fuel is introduced, ignited, and burned. Combustors can either be annular, can-annular, or silo. An annular combustor is a doughnut-shaped, single, continuous chamber that encircles the turbine in a plane perpendicular to the air flow. Can-annular combustors are similar to the annular; however, they incorporate several can-shaped combustion chambers rather than a single continuous chamber. Annular and can-annular combustors are based on aircraft turbine technology and are typically used for smaller scale applications. A silo (frame-type) combustor has one or more combustion chambers mounted external to the gas turbine body. Silo combustors are typically larger than annular or can-annular combustors and are used for larger scale applications.

The combustion process in a gas turbine can be classified as diffusion flame combustion, or lean-premix staged combustion. In the diffusion flame combustion, the fuel/air mixing and combustion take place simultaneously in the primary combustion zone. This generates regions of near-stoichiometric fuel/air mixtures where the temperatures are very high. For lean-premix combustors, fuel and air are thoroughly mixed in an initial stage resulting in a uniform, lean, unburned fuel/air mixture which is delivered to a secondary stage where the combustion reaction takes place. Manufacturers use different types of fuel/air staging, including fuel staging, air staging, or both; however, the same staged, lean-premix principle is applied. Gas turbines using staged combustion are also referred to as Dry Low NO<sub>X</sub> combustors. The majority of gas turbines currently manufactured are lean-premix staged combustion turbines.

Hot gases from the combustion section are diluted with additional air from the compressor section and directed to the power turbine section at temperatures up to 2600°F. Energy from the hot exhaust gases, which expand in the power turbine section, are recovered in the form of shaft horsepower. More than 50 percent of the shaft horsepower is needed to drive the internal compressor and the balance of recovered shaft horsepower is available to drive an external load.<sup>2</sup> Gas turbines may have one, two, or three shafts to transmit power between the inlet air compression turbine, the power turbine, and the exhaust turbine. The heat content of the exhaust gases exiting the turbine can either be discarded without heat recovery (simple cycle); recovered with a heat exchanger to preheat combustion air entering the combustor (regenerative cycle); recovered in a heat recovery steam generator to raise process steam, with or without supplementary firing (cogeneration); or recovered, with or without supplementary firing, to raise steam for a steam turbine Rankine cycle (combined cycle or repowering).

# STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

ELIZABETH A. ENLUND and DAVID A. PICKERING,

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FLORIDA GAS TRANSMISSION COMPANY and DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respond	lents.
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# PETITIIONERS' PROPOSED FINDING OF FACT 4

- Here comes the Petitioners, Elizabeth A. Enlund and David A. Pickering, to make the following proposed Finding of Fact 4:
- That, even if the maximum expected emissions of Nitrogen oxides are no higher than 25 ppm, as alleged by Respondent FGT, such a level nevertheless exceeds the level of significant harm for N0x under 40 CFR 51.151;
- That the level which results in significant harm is 2 ppm for a one hour exposure, and 0.5 ppm for a 24 hour exposure according to 40 CFR 51.151;
- That therefore the alleged emissions of N0x from CS 27 exceed by over 12 times the level of significant harm for a one hour exposure, and;
- That such emissions exceed by 50 times the level of significant harm for a 24 hour exposure;

- That therefore any delay caused by a deficiency in the stack parameters and the consequent need to reconsider the permit is fully justified and necessary to protect human health and safety as required by 403.021 F.S.;
- That the site on C.R. 579 demonstrates unusual topography that may concentrate pollutants and heat in certain pockets and directions;
- That this ill effect may be heightened during the winter and spring months when dense fogs roll northward from the highest points of land towards Petitioners' property and blankets the town of Thonotosassa until late morning hours;
- That the prevailing winds for many months of the year are from a south to southwesterly direction, which would cause the pollutants generated from this site to flow in the direction Petitioners' residence and property;
- That the most populated areas of Thonotosassa are within a mile of this site and downwind from the proposed facility;
- That Respondent FGT states that the proposed site is "near the city of Thonotosassa," whereas the site is in close proximity to the heart of a small rural town, less than ½ mile from Thonotosassa Park, a County Park which contains much used facilities for football, baseball, softball, little league, soccer, basketball and cheerleading, and also picnic pavilions, outdoor playground equipment, walking paths and a community center which has a children's daycare;
- That the proposed site for CS 27 is approximately ¾ mile from Thonotosassa Elementary School, which is adjacent to the park;
- That the site is about \( \frac{3}{4} \) mile from the Thonotosassa Post Office and Public Library;

. . 2 · -

- That Lake Thonotosassa, an environmentally sensitive but much appreciated community and recreational jewel, is about a mile to the northeast from this proposed compressor station site and is in the direction of the prevailing wind flow;
- That pursuant to 403.021 (8), F.S., the department shall consider the total well-being of the public and shall not consider solely the ambient pollution standards when exercising its powers, if there may be danger of a public health hazard;
- That because of all of the foregoing facts, there is the potential of a public health hazard if the air dispersion techniques are insufficient;
- That Respondent FGT has been negligent is providing a plot plan and displays an ignorance of the sites topography and cultural sensitivity;
- That specifically the plot plan, filed by FGT in the Final Application for an Air Construction Permit No. 0571279-001-AC, is not a plot plan for the site on C.R. 579 and therefore is a misrepresentation of fact (Final State App., Appendix B, map attached);
- That the altitude for the base of the stack cannot be determined from the plot plan which was designed for the original Taylor Road site, let alone be determined from the plot plan from the Osceola site,
- That the "Location Map," figure 1.1 from the Final State Application.doc, dated 1/04/02 (attached), has insufficient detail for the department to consider the health and safety of nearby residents as required by 403.021 (3) and (8), F.S., as can by seen by the Petitioners' enlarged map of the area (attached);
- That as can be seen on the Petitioners' attached map referred to above the site may present a hazard to Airplanes as it is very near the flight path in and out of

- Vandenburg Airport, yet the map provided by FGT neglected to include this significant feature;
- That the Petitioners' topographical map (attached) not only portrays a nearby terrain feature that reaches an altitude of 143 feet above sea level, but also shows nearby residences not shown on Respondent FGT's maps, Figure 1, "FGT Phase V Expansion" (attached) from the May 21, 2001 Notice and DWG No. 471-V-12 (attached) from the Draft EIS and Draft Permit at EPC of Hillsborough County;
- That the prevailing winds move from south-southeast towards north-northwest;
- That such local conditions will cause a downwash of excessive concentrations of heat and N0x from a 61 foot stack into the town of Thonotosassa;
- That Jeff Koerner, FDEP New Source Review Section, continued to provide the 30-acre

  Taylor Road plot plan and insufficient topographical map as late as March 21,

  2002, even when asked for the correct and complete information (see attached letter to Pat Kemp);
- That the position of the 6 acre site on the 20 acre parcel cannot as of June 1, 2002, be determined from the information provided by the Respondent FGT;
- That therefore the altitude and adequacy of the stack parameters as listed in section 3 of the Draft Permit cannot be ascertained by the public or the department;
- That therefore the "General Pre-construction Review Requirements" mandated by 62-212.300 (3) (a) 2., F.A.C., could not have been obtained by the department to the extent necessary to determine whether construction at this location will result in violations of any applicable provisions of Chapter 403, F.S.;

That thereby FDEP violated 62-204.220 (2), F.A.C., mandating that the department shall not issue an air permit authorizing the construction of any emissions unit or facility that would cause or contribute to an ambient N0x concentration that exceeds the applicable ambient air quality standard at any point within a baseline area, specifically Thonotosassa and the Petitioners' property;

That thereby FDEP fails to show that the Florida State Implementation Plan has actual legal authority to obtain the information necessary to enforce 40 CFR 51.230 (d), (e) and (f), thereby abrogating the federal rights of United States Citizens;

That thereby FDEP failed to implement legally enforceable procedures pursuant to 40 CFR 51.160 (f);

That thereby FDEP violated 403.0623, F.S., "Environmental data; quality assurance";

Therefore the Petitioners respectfully request that the Honorable Judge J. Lawrence

Johnston remedy the Petitioners' complaint by such means as the situation

demands.

Respectfully submitted this ## day of June, 2002.

Elizabeth A. Enlund Post Office Box 778

Thonotosassa, FL 33592-0778

David A. Pickering Post Office Box 778

Thonotosassa, FL 33592-0778

That an original and a true copy of this Proposed Finding of Fact 4 by the Petitioners has been sent by certified United States Mail to Anne Longman, Edwin A.

Steinmeyer, John W. Forehand, counsel for Respondent FGT, at LEWIS,

LONGMAN & WALKER, P.A., Post Office Box 10788 (32302), 125 South

Gadsden Street, Suite 300, Tallahassee, Florida, 32301;

That an original and a true copy of this Proposed Finding of Fact 4 by the Petitioners has been sent by certified United States Mail to W. Douglas Beason, Assistant General Counsel, FDEP, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000;

That NOTICE of the Proposed Finding of Fact 4 is hereby given to the Respondents FGT and FDEP, this 44 day of June 2002;

Elizabeth A. Enlund Post Office Box 778

Thonotosassa, FL 33592-0778

2 En lund

David A. Pickering

Post Office Box 778

Thonotosassa, FL 33592-0778

#### CERTIFICATE OF SERVICE

Mateth O. Enlund
Petitioner

# **AQMcs**

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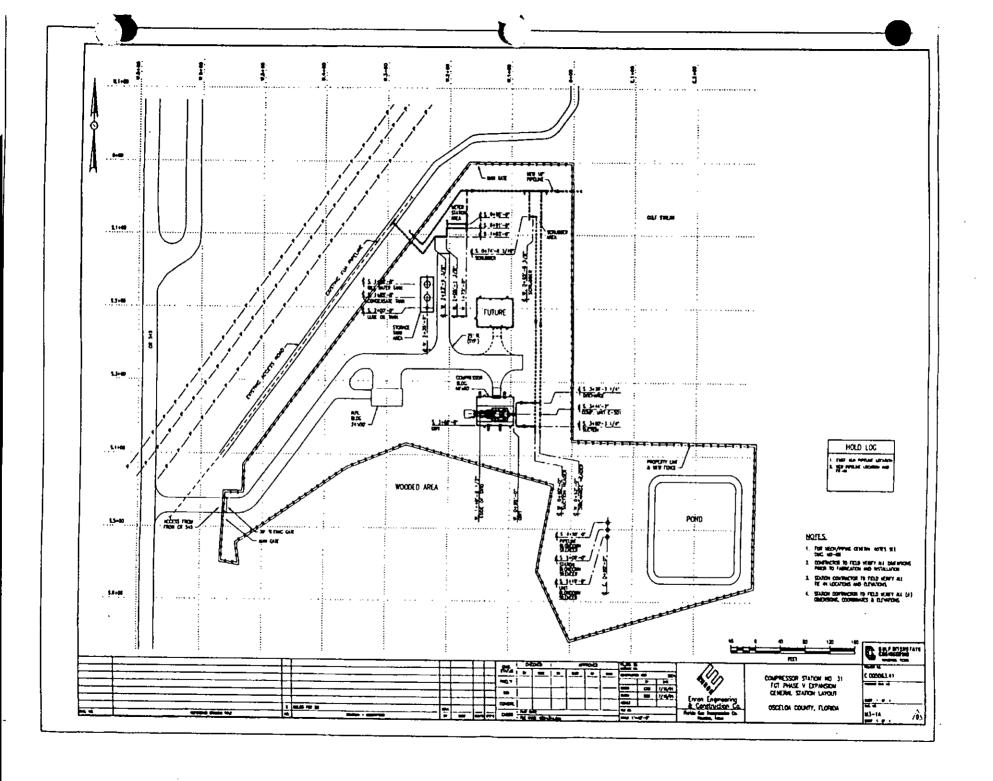
Attachment A FDEP Forms

Attachment B Plot Plan

**Attachment C Vendor Information** 

**Attachment D Calculations** 

Attachment B
Plot Plan



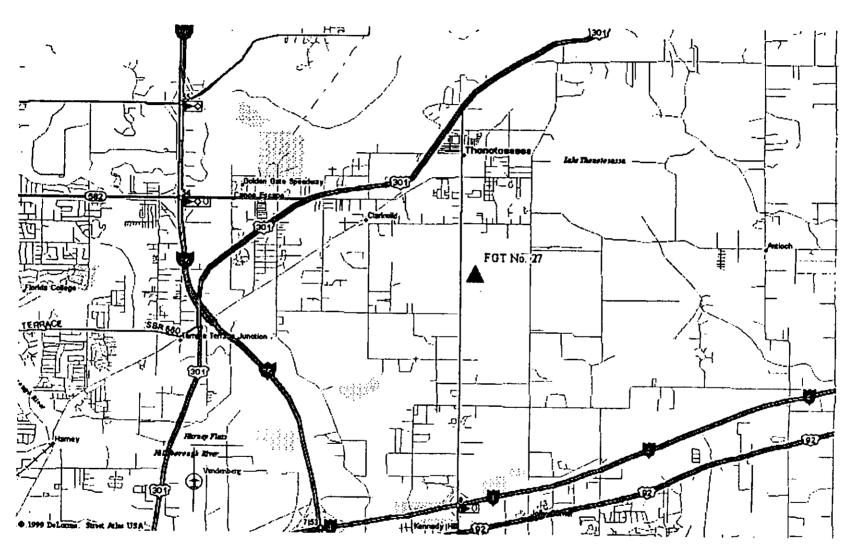
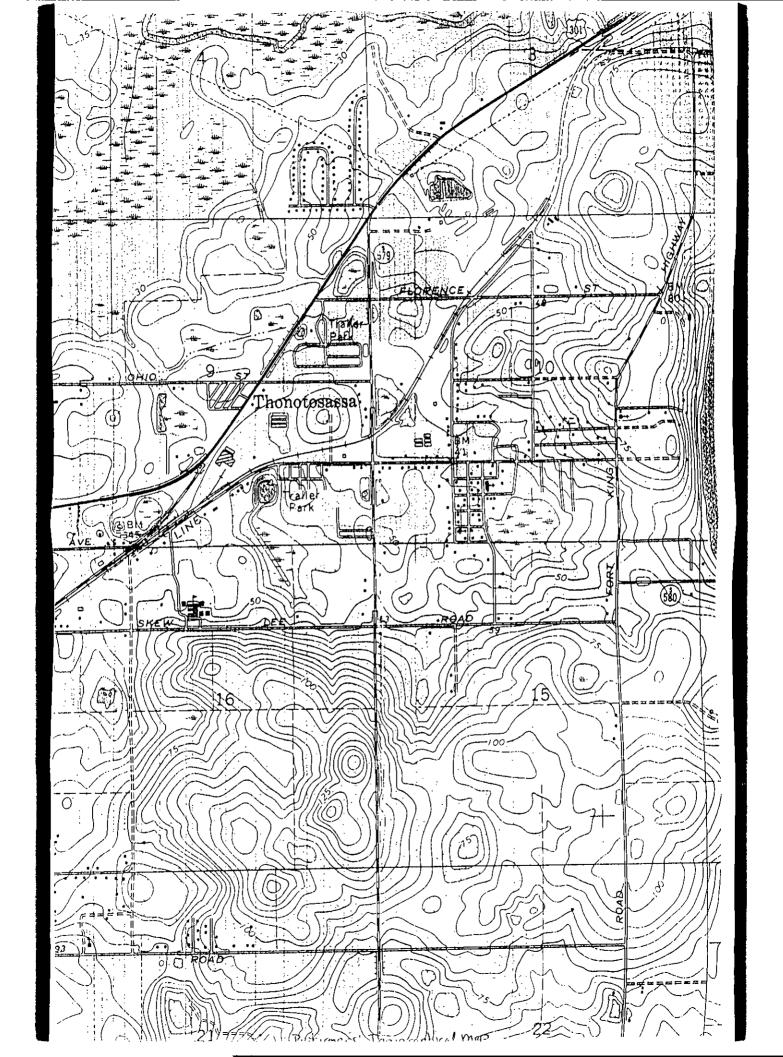
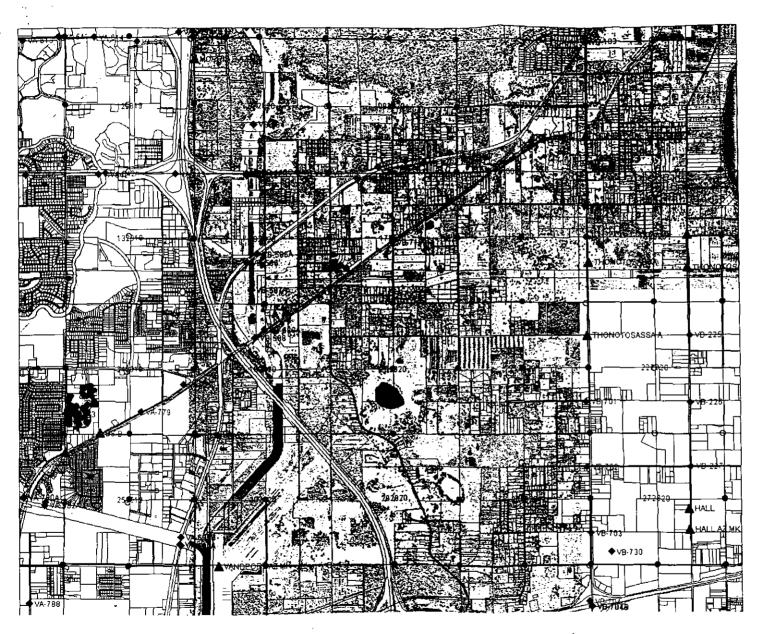


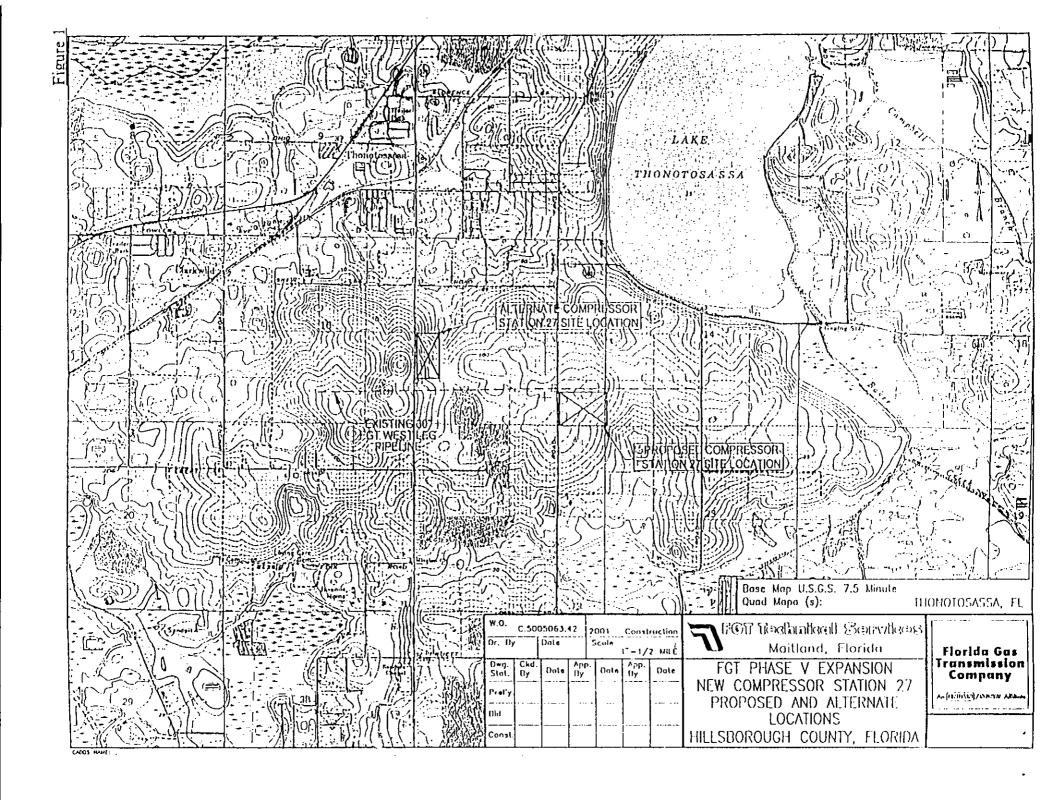
Figure 1.1 Location Map





file://C:\chuck.jpg

Petitioners' Enlarged Map of the Area





To: Mike D. Lamphier/EMPL/FL/Verizon@VZNotes

CC:

Subject: FW: Florida Gas Transmission Station No. 27 - Facility Plot Plan

#### Michael:

I have tried to call Lynnett at both her cell phone and home. Also, the County Zoning office tried to call her with the same result. I'll be trying again.

Pat Kemp

Office of Rep. Romeo

----Original Message----

From: Koerner, Jeff [mailto:Jeff.Koerner@dep.state.fl.us]

Sent: Thursday, March 21, 2002 10:56 AM

To: KEMP.PATRICIA

Cc: Ajhar, Rebecca; Fillingim, Mary; Halpin, Mike

Subject: Florida Gas Transmission Station No. 27 - Facility Plot Plan

#### Ms. Kemp:

Attached is a 2-page PDF file of the facility plot plan that was faxed last night and a topographical map showing more details of the proposed location. The topographical map came with an interesting twist in that it shows 2 sites proposed about a year ago: the originally proposed location and the final site that was selected. According to Jim Thompson at FGTC, here's the story:

- \* FGTC originally proposed the site east and slightly south of the site that was ultimately selected. The first site was much flatter and preferred by FGTC. An alternate site was also identified, which is the site identified consistently throughout the air permit application.
- \* The land owner of the original proposed site did not want to sell the property to FGTC. Although FGTC can exercise "eminent domain" and acquire the property through "condemnation" process, they typically use this authority sparingly.
- \* So, they approached the land owner for the alternate site, who was willing to sell.
- \* During a title search on the property, the history of ownership was unclear due to some minor claims to the property.

- \* FGTC did use the "condemnation" process to ensure that the title was free and clear from all claims and purchased the property.
- \* During this process, FGTC is subject to federal review by the Federal Energy Regulatory Commission (FERC). The FERC review does require noticing of landowners within a half mile radius of the proposed facility. It is my understanding that FGTC provided FERC with the list of names and FERC mailed notices last spring.

Jim Thompson is the environmental project manager for Florida Gas Transmission. He can be reached at 800-381-1477. Jim can fill in any details regarding the project and the federal review process used to acquire sites for gas pipelines and compressor stations, which is overseen by the Federal Energy Regulatory Commission (FERC).

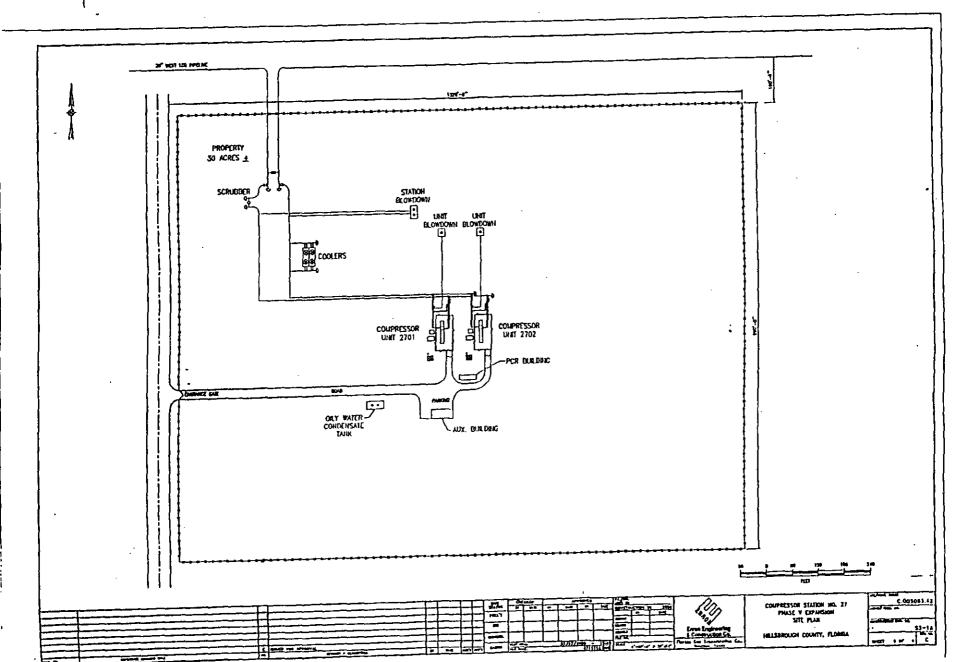
Again, the site is properly identified in the air permit application. I just thought the map needed some explanation. Please call me if you have any questions.

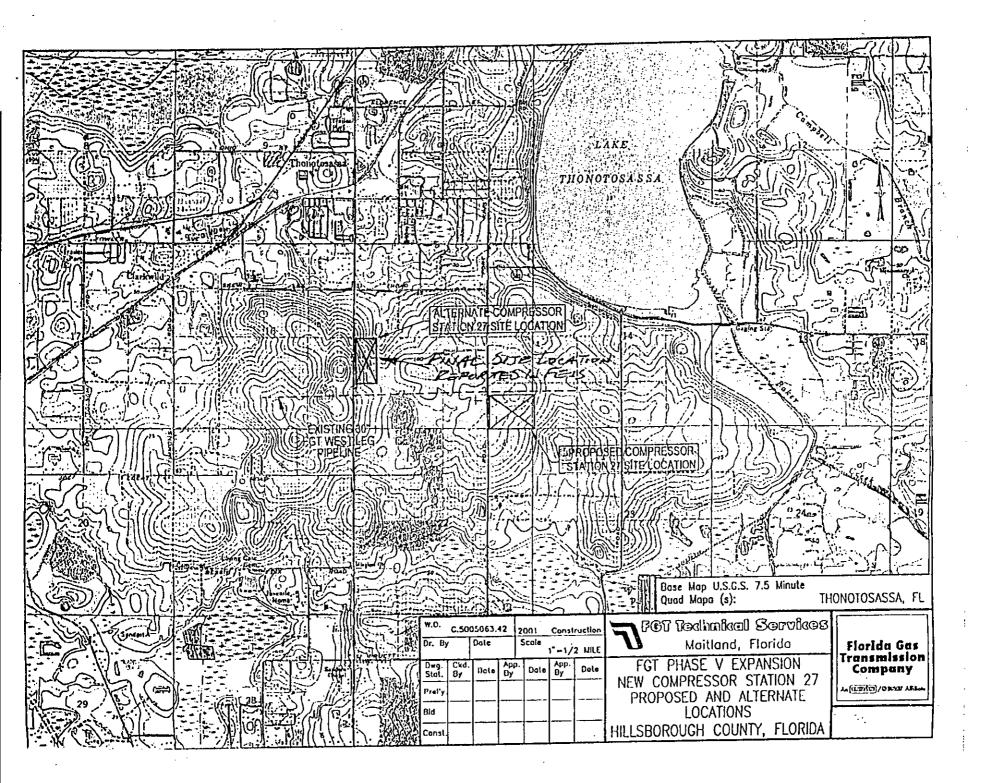
Sincerely,

Jeff Koerner New Source Review Section 850/921-9536

<<mapspdf.pdf>>

mapspdf.pdf





### STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

ELIZABETH A. ENLUND and DAVID A. PICKERING,

Petitioners,

COPY

Vs.

DOAH Case No.: 02-1678

FLORIDA GAS TRANSMISSION COMPANY and DEPARTMENT OF ENVIRONMENTAL PROTECTION,

# PETITIONERS' PROPOSED FINDING OF FACT 5

Here comes the Petitioners, Elizabeth A. Enlund and David A. Pickering, to make the following proposed Finding of Fact 5:

- That an increase in heat input or fuel consumption necessarily increases N0x emissions, all other factors remaining the same;
- That an increase in N0x emissions cannot be nullified by a change in stack parameters without obtaining an Air Construction Permit pursuant to 62-210.300 (1) b. and c., F.A.C.;
- That pursuant to 403.0623 F.S., "Environmental data; quality assurance," the department "must establish, by rule, appropriate quality assurance requirements for environmental data submitted to the department and the criteria by which environmental data may be rejected by the department.";
- That Respondent FGT has increased the heat input and/or fuel consumption by 20 % for multiple facilities (see attached letter to Clancy dated August 11, 1993);

That such change necessarily represents a net increase in thermal N0x emissions (in tons per year);

That such change is not therefore subject to an "Administrative Correction" under 62-210.360, F.A.C.;

That the procedure used to approve such change circumvents the rules designed to provide data quality assurance pertaining to N0x emissions pursuant to 403.0623, F.S.;

That such change without a properly obtained Air Construction Permit violates Chapter 62, F.A.C. and the rights of residents to notice and the public availability of true emission data pursuant to 40 CFR 51.116 and 40 CFR 52.05 and 40 CFR 51.161;

That FDEP has the duty to control emissions through a legally enforceable permitting process pursuant to 40 CFR 51.160;

That Respondent FGT has circumvented the permitting process by manipulating the definitions of "modification," "synthetic minor [sic] source," and "administrative correction";

Therefore the Petitioners respectfully request that the Honorable J. Lawrence Johnston find that the Respondent FGT has increased N0x emissions at Phase III facilities in violation of the legally enforceable procedures mandated by the Florida State Implementation Plan and Chapter 62, F.A.C.

Dated this Haday of June, 2002.

Elizabeth A. Enlund Post Office Box 778

Thonotosassa, FL 33592-0778

David A. Pickering

Post Office Box 778

Thonotosassa, FL 33592-0778

Mr. Clair Fancy FGT Phase III Permits August 11, 1993 Page 2

on our Phase II engines which indicate higher values than those provided by the engine manufacturers and used in the permits for Phase II engines. The values proposed in our applications for our Phase III engines are also based on values provided by the manufacturers. We believe it is necessary to increase these values for our Phase III engines, in order to prevent potential future compliance problems. We propose to increase these values by 20 %. We believe the new values will be more correct. Since the SO<sub>2</sub> and PM emission rates are based on fuel consumption, we are proposing to increase these also. These changes are provided in the attached table.

#### Item B

The emission limits in the permits (Specific Condition #1) represent the emission rates at 100% load conditions. We propose adding a statement or footnote to this emission limit table that indicates this.

#### Item C

On the same emission limit table the Emission Factor for  $SO_2$  is given as "10 gr/100scf." This suggests that the factor is based upon 10 gr of  $SO_2$  when it is actually sulfur. We suggest the following wording be used: "100 gr S/100/scf" to avoid confusion.

#### Item D

Specific Condition #12 (#11 for AC 56-230129 / PSD-FL-203 Compressor Station No. 20 and Ac 05-229322 Compressor Station No. 19) requires the source to be tested while operating "between 95% and 100% of maximum capacity." The permits for our Phase II engines require testing between 90% and 100% of maximum capacity. Due to the nature of our operations, it is sometimes difficult to reach even the 90% load on our engines when a test is scheduled. Raising this minimum level to 95% will make this a greater problem. We therefore request that this condition be changed to require testing "between 90% and 100% of maximum capacity" as required by our other permits.

Mr. Clair Fancy FGT Phase III Permits August 11, 1993 Page 3

Again FGT appreciates this opportunity to comment on these permit conditions and your consideration of our proposed changes. If you have any questions or need additional information, please do not hesitate to call me at (713) 853-3569.

Sincerely.

V. Duane Pierce, Ph.D.

Air Quality Supervisor

Phase III Expansion Project

Florida Gas Transmission Company

W. Hum Jane

cc: Carlon Nelson

William Osborne

Allan Weatherford

Barry Andrews - ENSR

Files

FILE: 00FDER01.LTR

7. Cole, NE Dict, a. 3 ahm, l'Itat, b. Shomas, SW Dick, I. Holdman, SE Dick

# Florida Gas Transmission Company

P. O. Box 1188 Houston, Texas 77251-1188 (713) 853-6161 Resources Management

August 11, 1993

Mr. Clair Fancy Chief, Bureau of Air Regulations Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Changes to FGT Phase III Expansion Project Air Permits RE:

Draft Air Permit AC 62-229319 / PSD-FL-202 Natural Gas Compressor Station No. 15, Taylor County

Draft Air Permit AC 05-229322 Natural Gas Compressor Station No. 19, Brevard County

Draft Air Permit AC 56-230129 / PSD-FL-203 Natural Gas Compressor Station No. 20, St. Lucie County

Draft Air Permit AC 50-229440 Natural Gas Compressor Station No. 21, Palm Beach County

Draft Air Permit AC 09-229441 Natural Gas Compressor Station No. 26, Citrus County

Draft Air Permit AC 29-228821 Natural Gas Compressor Station No. 30, Hillsborough County

Dear Mr. Fancy:

We respectfully propose the following changes to each of the above referenced draft permits.

#### Item A

We propose increasing the maximum heat inputs and maximum natural gas consumption rates for each engine (Specific condition #5). We are proposing this change as a result of test results

An ENRON/SCNAT Affiliate

That an original and a true copy of this Proposed Finding of Fact 5 by the Petitioners has been sent by certified United States Mail to Anne Longman, Edwin A.

Steinmeyer, John W. Forehand, counsel for Respondent FGT, at LEWIS,

LONGMAN & WALKER, P.A., Post Office Box 10788 (32302), 125 South

Gadsden Street, Suite 300, Tallahassee, Florida, 32301;

That an original and a true copy of this Proposed Finding of Fact 5 by the Petitioners has been sent by certified United States Mail to W. Douglas Beason, Assistant General Counsel, FDEP, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000;

That NOTICE of the Proposed Finding of Fact 5 is hereby given to the Respondents FGT and FDEP, this Uday of June 2002;

Elizabeth A. Enlund Post Office Box 778

Thonotosassa, FL 33592-0778

David A. Pickering

Post Office Box 778

Thonotosassa, FL 33592-0778

#### CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by U.S. Mail on Anne Longman, Ed Steinmeyer, John Forehand, counsel for FGTC at LEWIS, LONGMAN & WALKER, P.A., 125 South Gadsden Street, Suite 300, Post Office Box 10788 (32302), Tallahassee, FL, 32301 and W. Douglas Beason, Assistant General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, FL, 32399-3000 this

Mabeth a Cultural

# ORIGINALLY PROPOSED VALUES

	MAXIMUM HEAT	MAXIMUM GAS	SO <sub>2</sub> EMISSIONS		PM/PM <sub>10</sub> EMISSIONS	
STATION	INPUT (MMBtu/hr)	CONSUMPTION (MMscf/hr)	lb/hr	T/yr	lb/hr	T/yr
15	109.66	0.1054	3.01	13.19	0.53	2.31
19	38.3	0.0368	0.94	4.12	0.17	0.74
20	27.8	0.0267	0.70	3.33	0.13	0.57
21	59.60	0.057	1.64	7.18	0.29	1.26
26	59.60	0.057	1.64	7.18	0.29	1.26
30	13.13	0.013	0.37	1.62	0.064	0.28

# **NEW VALUES**

	MAXIMUM HEAT	MAXIMUM GAS	SO <sub>2</sub> EMISSIONS		PM/PM <sub>10</sub> EMISSIONS	
STATION	INPUT (MMBtu/hr)	CONSUMPTION (MMscf/hr)	lb/hr	T/yr	lb/hr	T/yr
15	131.59	0.1265	3.61	15.83	0.64	2.77
19	45.96	0.0442	1.13	4.94	0.20	0.89
20	33.36	0.0320	0.84	4.00	0.16	0.68
21	71.52	0.0684	1.97	8.62	0.35	1.51
26	71.52	0.0684	1.97	8.62	0.35	1.51
30	15.76	0.0156	0.44	1.94	0.077	0.34

FILE: COFDEROLLTR



#### STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

ELIZABETH A. ENLUND and DAVID A. PICKERING,

Petitioners,



Vs.

DOAH Case No.: 02-1678

FLORIDA GAS TRANSMISSION COMPANY and DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Resp	ondents.
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### PETITIIONERS' PROPOSED FINDING OF FACT 6

Here comes the Petitioners, Elizabeth A. Enlund and David A. Pickering, to make the following proposed Finding of Fact 6:

That Respondent FGT has misrepresented N0x emissions data as demonstrated by comparing data reported to the EPA AIRData with the data reported to FERC in the Final Environmental Impact Statement of July, 2001 for the Phase V Expansion Project;

That the EPA AIRData can be accessed using the Enviro-Warehouse search engine,
request for "Florida NET Air Pollution Point Sources—Nitrogen Oxides (1999) or

@ http://oaspub.epa.gov/pls/airsdata;

That the same FGT facilities reported N0x emissions in Table 3.11.1-2, "Summary of Current and Proposed Total N0x and CO Emission Rates (tpy) for the FGT Phase V Pipeline Project," page 3-140 of the FEIS;

That for convenience the data is faithfully presented in the following table:

FGT Facility	N0x (tpy) from EPA AIRData	N0x (tpy) from FERC Final EIS
Document.	(1999)	(2001)
Milton, FL	612	1,159.3
Perry, FL	496	1,210.1
Silver Springs, FL	483	859.8
Caryville, FL	462	1,154.1
Quincy, FL	416	1,089.5
Brooker, FL	654	1,131.8
Lecanto, FL	18	88
	Location  Milton, FL  Perry, FL  Silver Springs, FL  Caryville, FL  Quincy, FL  Brooker, FL	Location EPA AIRData (1999)  Milton, FL 612  Perry, FL 496  Silver Springs, FL 483  Caryville, FL 462  Quincy, FL 416  Brooker, FL 654

That therefore FGT is thus subject to 62-4.070(5), F.A.C., and the department shall demand strict proof, rather than reasonable assurance, that emissions will not exceed the minor source threshold;

That therefore the Petitioners respectfully request that the Honorable Judge J. Lawrence

Johnston find that Respondent FGT has misrepresented emissions data in the past
and therefore must provide strict proof of emissions claims in this hearing;

Respectfully submitted this Way of June, 2002.

Elizabeth A. Enlund Post Office Box 778

Thonotosassa, FL 33592-0778

David A. Pickering

Post Office Box 778

Thonotosassa, FL 33592-0778

That an original and a true copy of this Proposed Finding of Fact 6 by the Petitioners has been sent by certified United States Mail to Anne Longman, Edwin A.

Steinmeyer, John W. Forehand, counsel for Respondent FGT, at LEWIS,

LONGMAN & WALKER, P.A., Post Office Box 10788 (32302), 125 South

Gadsden Street, Suite 300, Tallahassee, Florida, 32301;

That an original and a true copy of this Proposed Finding of Fact 6 by the Petitioners has been sent by certified United States Mail to W. Douglas Beason, Assistant General Counsel, FDEP, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000;

That NOTICE of the Proposed Finding of Fact 6 is hereby given to the Respondents FGT and FDEP, this 44 day of June 2002;

Elizabeth A. Enlund

Post Office Box 778

Thonotosassa, FL 33592-0778

David A. Pickering

Post Office Box 778

Thonotosassa, FL 33592-0778

# CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by U.S. Mail on Anne Longman, Edwin Steinmeyer, John Forehand, counsel for FGTC at LEWIS, LONGMAN & WALKER, P.A., 125 South Gadsden Street, Suite 300, Post Office Box 10788 (32302), Tallahassee, FL, 32301 and W. Douglas Beason, Assistant General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, FL, 32399-3000 this Handward day of June 2002.

Algaleth a Enland
Petitioner

Compressor Station 17A is located in Silver Springs, Marion County, Florida. This station is located within the Jacksonville (Florida) – Brunswick (Georgia) Interstate AQCR. The compressor station currently consists of five reciprocating engine-driven compressors totaling 10,400 hp. This station is currently a major source for NO<sub>x</sub> and minor source for CO.

Compressor Station 24 is located in Trenton, Gilchrist County, Florida. This site is located in the Jacksonville (Florida) - Brunswick (Georgia) Interstate AQCR. The compressor station currently consists of one turbine-driven compressor totaling 10,350 hp. This station is currently a minor source for both NO<sub>x</sub> and CO.

Compressor Station 26 is located in Lecanto, Citrus County, Florida. Citrus County is located in the West Central Florida Intrastate AQCR. The compressor station currently consists of two turbine-driven compressors totaling 13,670 hp. This station is currently a minor source for both NO<sub>x</sub> and CO. This site is about 24 km from the Chassahowitzka Wilderness Area in Citrus and Hernando Counties, Florida.

Compressor Station 27 would be a new station located in Thonotosassa, Hillsborough County, Florida. This county is located within the West Central Florida Intrastate AQCR. This new station would be about 77 km from the Chassahowitzka Wilderness Area in Citrus and Hernando Counties, Florida.

Compressor Station 31 would be a new station located in Kissimmee, Osceola County, Florida. Osceola County is located in the Central Florida Intrastate AQCR.

Table 3.11.1-2 presents the current and proposed total  $NO_x$  and CO emissions associated with the compressor stations.

TABLE 3.11.1-2
Summary of Current and Proposed Total NO<sub>x</sub> and CO Emission Rates (tpy)
for the FGT Phase V Pipeline Project

Station #	Current Emissions (tpy)		Proposed Total Emissions (tpy)		Impact on Emissions (tpy)	
Otation #	NO.	CO	NO,	CO	NO,	CO
44	0	0	22.5	61.2	22.5	61.2
11A	1,205.7	302.2	1,206.5	365.8	0.8	63.6
12A	1,159.3	276.3	1,131.3	352.9	-28.0	76.6
13A a/	1,154.1	228.4	. 0	0	0	0
14A	1,089.5	160.6	1,053.8	230.6	-35.7	70.0
15A	1,210.1	283.2	1,236.5	315.2	26.4	32.0
16	1,131.8	232.0	1,156.4	262.0	24.6	30.0
17A	859.8	172.9	881.5	245.1	21.7	72.2
24	36.4	44.5	46.5	56.7	10.1	12.2
26	88.8	58.3	74.4	60.0	-14.4	1.7
27	0	0	49.3	60.0	49.3	60.0
31	Õ	Ö	16.9	45.9	16.9	45.9

al The proposed equipment for Compressor Station 13A consists of electric equipment, thus there will be no additional direct emissions generated.

### 3.11.1.2 Environmental Consequences

During construction of the proposed pipeline sections, a temporary, short-term reduction of local ambient air quality due to fugitive dust and emissions generated by construction equipment may be realized. This short-term impact would occur only in the immediate vicinity of the pipeline rights-of-way. Once the

# STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

ELIZABETH A. ENLUND and DAVID A. PICKERING,

Petitioners,

COPY

Vs.

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DOAH Case No.: 02-1678

FLORIDA GAS TRANSMISSION COMPANY and DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondents
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### PETITIONERS' PROPOSED FINDING OF FACT 7

Here comes the Petitioners, Elizabeth A. Enlund and David A. Pickering, to make the following proposed Finding of Fact 7:

That FGT does trade natural gas for electricity to run electric turbines, particularly "volumes to be delivered in exchange for horsepower hours of electric service for compression" as stated in the FERC RIMS DOC 2106247, p.o. 18 of 36, available at <a href="http://rimsweb1.ferc.fed.us">http://rimsweb1.ferc.fed.us</a> (attached page);

That the efficiency of electricity is as good as that for gas, and thus it can be traded one for one, as FGT states, "The quantity of gas exchanged for horsepower hours is determined by the actual usage of the electric driven compressor units and is the same quantity of gas that would be consumed by a gas turbine at the usage levels.";

That the environmental impact of electricity is better than that of gas as Florida Gas further states that the "electric driven units offer operational and environmental

benefits, and will result in a lower annual cost of service than would result from the installation of a gas turbine unit.";

That therefore TECO's conversion to a cleaner burning fuel does not require natural gas fuel for CS 27 nor the sacrifice of air quality in Thonotosassa;

That therefore the Petitioners respectfully request that the Honorable Judge J. Lawrence

Johnston find that FGT has better options than natural gas for powering a

Compressor Station and;

That therefore the Petitioners respectfully request that the Honorable Judge J. Lawrence

Johnston strike from the record of this hearing any references to TECO's

conversion to cleaner fuels as immaterial to whether the Draft Air Construction

Permit for CS 27 is valid;

Respectfully submitted this 4 day of June, 2002.

Elizabeth A. Enlund

· , , , , ,

Post Office Box 778

Thonotosassa, FL 33592-0778

David A. Pickering

Post Office Box 778

Thonotosassa, FL 33592-0778

That an original and a true copy of this Proposed Finding of Fact 7 by the Petitioners has been sent by certified United States Mail to Anne Longman, Edwin A.

Steinmeyer, John W. Forehand, counsel for Respondent FGT, at LEWIS,

LONGMAN & WALKER, P.A., Post Office Box 10788 (32302), 125 South

Gadsden Street, Suite 300, Tallahassee, Florida, 32301;

That an original and a true copy of this Proposed Finding of Fact 7 by the Petitioners has been sent by certified United States Mail to W. Douglas Beason, Assistant General Counsel, FDEP, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000;

That NOTICE of the Proposed Finding of Fact 7 is hereby given to the Respondents FGT and FDEP, this 4 day of June 2002;

Elizabeth A. Enlund Post Office Box 778

Thonotosassa, FL 33592-0778

David A. Pickering

Post Office Box 778

Thonotosassa, FL 33592-0778

### CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by U.S. Mail on Anne Longman, Ed Steinmeyer, John Forehand, counsel for FGTC at LEWIS, LONGMAN & WALKER, P.A., 125 South Gadsden Street, Suite 300, Post Office Box 10788 (32302), Tallahassee, FL, 32301 and W. Douglas Beason, Assistant General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, FL, 32399-3000 this Aday of June 2002.

Whateth O- Calund
Petitioner

4

Docket Nos. CP00-40-000, et al. - 18 -

impose a condition in a NGA section 7 certificate proceeding which orders adjustments to rates approved in a previous NGA section 4 or 5 rate proceeding. <sup>27</sup> We agree with Florida Gas and deny FMNGA's request.

#### e. Fuel Reimbursement Charge Percentage

Florida Gas requests approval of its pro forma tariff Sheet Nos. 205, 206, 206B and 207 which provide for the determination of a Fuel Reimbursement Charge Percentage (FRCP), as described in Section 27 of the tariff's General Terms and Conditions (GT&C).

The tariff language states that in the calculation of the FRCP, Florida Gas will consider "actual volumes delivered to party(ies) as payment for compression services." Florida Gas is advised that when it submits its tracker filings for the FRCP, we will expect Florida Gas to provide detailed workpapers supporting the calculations.

We accept the pro forma tariff sheets, subject to Florida Gas filing actual tariff sheets which reflect that the <u>pro forma</u> tariff sheet filed as Sheet No. 207B should actually be Sheet No. 207. The actual tariff sheet should also ensure that Section 28, Order No. 497 Compliance, is not deleted from its tariff as indicated on the <u>pro forma</u> sheet.

Reedy Creek comments that fuel usage for compression could increase due to the different usage profile of new gas fired generation shippers from the usage profile of existing shippers. Reedy Creek is concerned that surcharges for fuel use and the proposed electric power tracker could be higher than current surcharges.

Florida Gas answers that it does not expect the Phase V Expansion to cause any increase in fuel usage as a percentage of throughput, including volumes to be delivered in exchange for horsepower hours of electric service for compression. The quantity of gas exchanged for horsepower hours is determined by the actual usage of the electric driven compressor units and is the same quantity of gas that would be consumed by a gas turbine at the usage levels. Florida Gas further states that the electric driven units offer operational and environmental benefits, and will result in a lower annual cost of service than would result from the installation of a gas turbine unit.

<sup>&</sup>lt;sup>27</sup>Citing Northern Natural Gas Co. v. FERC, 827 F.2d 779 (D.C. Cir. 1987), finding that the revenue crediting condition imposed in a NGA section 7 proceeding to adjust previously approved rates exceeded the Commission's statutory authority.

# STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

ELIZABETH A. ENLUND and DAVID A. PICKERING,

Petitioners,

COPY

Vs.

, Y

DOAH Case No.: 02-1678

FLORIDA GAS TRANSMISSION COMPANY and DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Resp	ponde	ents.
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# PETITIIONERS' PROPOSED FINDING OF FACT 8

Here comes the Petitioners, Elizabeth A. Enlund and David A. Pickering, to make the following proposed Finding of Fact 8:

- That the Repondent FGT has continually and repeatedly conflated the locations of the alternate and original sites for CS 27;
- That by creating confusion FGT has avoided public scrutiny of the Draft Permit to the detriment of the petitioners and residents of Thonotosassa who were entitled to public notice under 62-210.350, F.A.C.;
- That in the civil suit FGTC v. Joan Johnston Crow, Case No. 0110002, Civil Division,

  Respondent FGT by eminent domain took the parcel HI-027.052-CS;
- That during such proceeding the Respondent FGT used a map portraying CR 579 as "TAYLOR ROAD" (OR BK 11205 PG 0327, filed Exhibit B, November 16, 2001);

That the Stipulated Order Of Taking in such proceeding was recorded with a correct map from which the misleading label "TAYLOR ROAD" had been removed, indicating that FGT with knowledge and intent conflated the two locations to the detriment of those with substantial interests to consider, including the petitioners (OR BK 11469 PG 1285, filed Exhibit A, March 7, 2002);

That such tactics are also demonstrated in the Expansion V (including CS 27) Draft EIS placed in the Riverview Public Library for public comment;

That thereby Respondent FGT violated 40 CFR 51.161 "Public availability of information" and 40 CFR 51.116 "Data availability" and 62-210.350(4)(c)(5), F.A.C.;

That such violation resulted in the confusion and therefore delays in this case;

That hereby the Petitioners do respectfully request that the Honorable Judge J. Lawrence

Johnston find that the delays in the Permit approval process are due to

Respondent FGT's repeated misrepresentation of location and;

That hereby the Petitioners do respectfully request that the Honorable Judge J. Lawrence

Johnston find that the Petitioners are entitled to a full discovery period permitted

by 120.569 and 120.57 (1), F.S., to ascertain what other facts in this case have

been misrepresented by Respondent FGT.

Respectfully submitted this 44 day of June, 2002.

Elizabeth A. Enlund

Post Office Box 778

Thonotosassa, FL 33592-0778

David A. Pickering

Post Office Box 778

Thonotosassa, FL 33592-0778

That an original and a true copy of this Proposed Finding of Fact 8 by the Petitioners has been sent by certified United States Mail to Anne Longman, Edwin A.

Steinmeyer, John W. Forehand, counsel for Respondent FGT, at LEWIS,

LONGMAN & WALKER, P.A., Post Office Box 10788 (32302), 125 South

Gadsden Street, Suite 300, Tallahassee, Florida, 32301;

That an original and a true copy of this Proposed Finding of Fact 8 by the Petitioners has been sent by certified United States Mail to W. Douglas Beason, Assistant General Counsel, FDEP, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000;

That NOTICE of the Proposed Finding of Fact 8 is hereby given to the Respondents FGT and FDEP, this 44 day of June 2002;

Elizabeth A. Enlund Post Office Box 778

Thonotosassa, FL 33592-0778

David A. Pickering

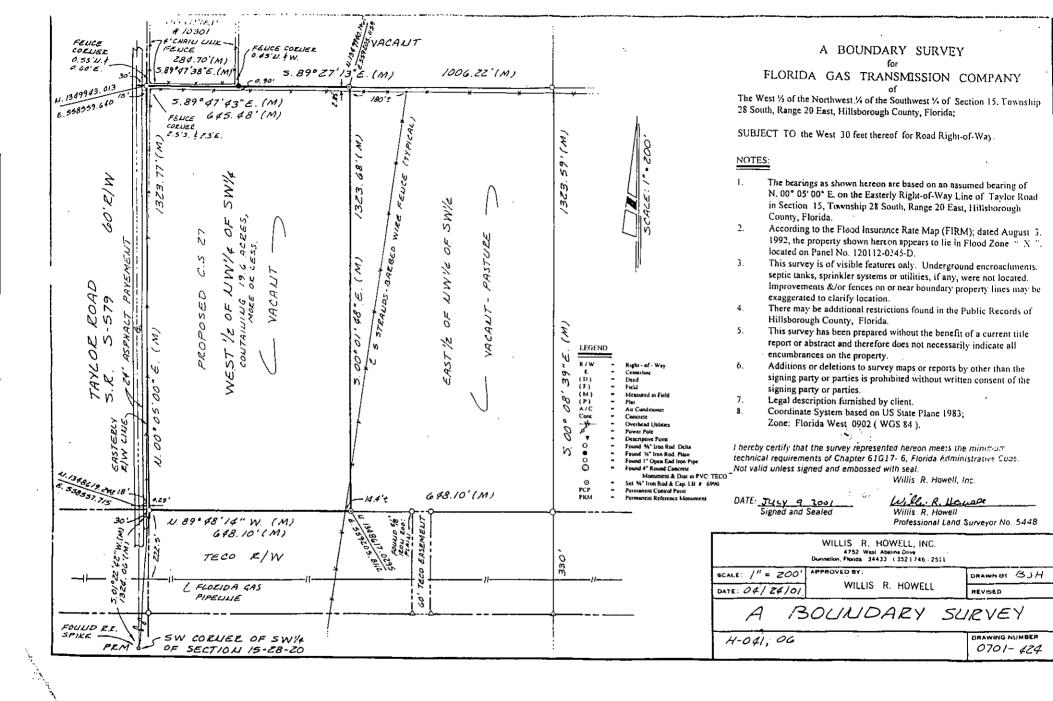
Post Office Box 778

Thonotosassa, FL 33592-0778

#### CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by U.S. Mail on Anne Longman, Ed Steinmeyer, John Forehand, counsel for FGTC at LEWIS, LONGMAN & WALKER, P.A., 125 South Gadsden Street, Suite 300, Post Office Box 10788 (32302), Tallahassee, FL, 32301 and W. Douglas Beason, Assistant General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, FL, 32399-3000 this 444 day of June 2002.

Maleth a Enland
Petitioner



#### BEST IMAGE AVAILABLE

