Golder Associates Inc.

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October 26, 1999

9839537

Florida Department of Environmental Protection
New Source Review Section; Bureau of Air Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Fl 32399-2400

Attention: Mr. Jeffery Koerner, P.E.

RE: Lake Worth Generation, L.L.C. (LWG)
DEP File No. 099-056-001-AC; PSD-FL-266
Comments from EPA Region IV

Dear Jeff:

This correspondence provides comments to the October 22, 1999 letter from the Environmental Protection Agency (EPA) Region IV concerning the project. Comments to EPA's letter are provided in the same order as presented by EPA.

1. The comments provided by EPA Region IV suggest that BACT for NO_x emissions should be SCR combined with DLN combustor technology when operating in combined cycle mode and firing natural gas. The reasons indicated by EPA include the rationale that a majority of recent combined cycle combustion turbine facilities use SCR, that SCR would not be cost prohibitive and that ammonia handling and ammonia slip factors are inconsequential. The information provided by LWG and the Department's own analysis clearly suggest that EPA's suggested use of SCR is not warranted based on the project specific environmental, energy, and economic impacts.

   As provided in the Department's analysis, the potential use of ammonia is an environmental impact that should be considered in the BACT evaluation. While the transportation and handling of ammonia is not infeasible, it presents environmental risks that would not otherwise be at the LWG site except for SCR. The LWG site, as shown in the application, is unique from most combined cycle or cogeneration projects sites. Most of these projects are located within larger sites typically near industrial areas or in open/agricultural areas. Clearly, the proximity to a school (0.21 kilometer), residential areas (0.13 kilometer), and a major interstate highway (I-95) (0.10 kilometer) is unique relative to other projects. Moreover, I-95 is the primary evacuation route for natural disasters (e.g., hurricanes) and is in the primary downwind direction relative to LWG site. Even a small spill (i.e., 70 gallons or less than 2 percent of the storage) would have toxic endpoints from EPA's Risk Management Program Guidance beyond the distance to the school, residences, and I-95. In addition, the ammonia would have to be transported over 150 miles to the site on major interstate highways adding additional risks. The Department's use of these facts is appropriate based on both its regulations and EPA's own guidance in determining BACT.

   The Department's analysis and the information provided by LWG clearly indicate that SCR is an available technology. The cost evaluation by the Department indicated a cost

effectiveness of $6,090 per ton of NO_x removed. The cost effectiveness estimated by LWG was $7,130 per ton of NO_x removed. In responding to the National Park Service (NPS), the cost effectiveness was calculated as ranging from $5,500 per ton of NO_x removed for 100 capacity factor to $6,600 per ton of NO_x removed at 70 percent capacity factor. These calculations were made using the data and assumptions of the NPS. Clearly, the cost effectiveness estimated by the Department is reasonable. However, the suggestion by EPA Region IV that the installation of SCR is "not cost prohibitive" as a rationale for BACT goes beyond EPA's own regulations on BACT (40 CFR 52.21) and its guidance documents. Indeed, the cost effectiveness used by the Department is one of the key criteria used in determining BACT.

Although the estimated cost effectiveness was determined based solely on the operation of the LWG project, real air quality benefits will accrue as a result of the project as described in the draft permit. EPA indicated in Item 7 of their comment letter that the City of Lake Worth's Tom G. Smith Plant and LWG could reasonably be considered as one PSD facility. Units S-1, S-3, and S-4 will be related to the LWG project and their emissions should be considered in the PSD evaluation. The City of Lake Worth has agreed to relinquish the emission units for Units S-1 and S-4 in its Title V permit. The boiler for Unit S-3 will not operate as long as steam is available from the LWG Project. The draft permit includes an enforceable condition, i.e., Specific Condition 18, which provides for these offsets. The potential emission of Units S-1 and S-4, which will no longer be operated, is 1,161 tons of NO_x per year. Unit S-3, which will not be operated while the LWG is supplying steam, is 712 tons of NO_x per year. Based on the thermal efficiency of these units, NO_x is emitted at a rate of 3.5 lb/MW-hr. For the LWG Project will emit NO_x emissions at 0.26 lb/MW-hr or an order of magnitude less than these existing units. During 1997 and 1998, Unit S-3 emitted about 67 tons NO_x per year (based on CEM data reported for the Acid Rain Program). Since LWG will supply steam for this unit, there will be reduction of at least that amount over historical operation. This is about 25 percent of the calculated cost effectiveness of 241 tons/year of NO_x removed estimated by the Department, which if included in the analysis, further confirms the Department's conclusion. Moreover, experience at a newly operation combined cycle facility in Polk County indicate ammonia slip emissions of about 4 to 5 ppmvd. This would be about 56 tons/year of ammonia that would be emitted to the atmosphere. These emissions are an environmental consequence of SCR and were appropriately considered by the Department in its analysis.

2. The 24-hour averaging time is appropriate for demonstrating continuous compliance given the pollution prevention nature of DLN and consistent with PSD permits issued for other projects. The permit also provides 3-hour compliance tests that must be performed on an annual basis to demonstrate compliance.

3. LWG concurs with the Department's proposed condition for particulate matter. The use of a lb/hr emission limit is clearly not a requirement of BACT. Indeed, the definition of BACT in the Department's regulations and as defined in 40 CFR 52.21(b)(12) allows for the establishment of a visible emission standard as BACT [i.e., BACT is defined as "An emission limitation (including a visible emission standard) based on the..."].

4. Specific Condition 22 provides for the prohibition of excess emissions resulting from those specific items that EPA was concerned about. Specific Condition 23 only provides for excess emissions during those circumstances where the DLN combustor operates at a power level outside its optimum range. This condition is consistent with the Department's rules that allow for the establishment of specific periods of excess emissions and was included in the

draft permit by the Department only after detailed information was provided by LWG on the startup conditions. Best operational practices must still be adhered to during these periods. Specific Condition 23 also does not provide an exemption for monitoring, reporting and providing the basis for any excess emission in quarterly monitoring reports to the Department. LWG concurs with the Department's proposed conditions related to excess emission.

5. As described in the permit application, LWG intends to use one tank for storing distillate fuel oil. The emissions from this tank will be less than 1 ton per year of VOCs and will not affect PSD applicability. The maximum potential VOC emissions from the combined cycle unit are 16 tons/year.

6. The EPA comment is consistent with the comments provided in the LWG comments to the draft permit dated October 20, 1999. The 33.8 lb/hr was a typographical error and should be 74.8 lb/hr.

7. LWG and existing City of Lake Worth Tom G. Smith Power Plant should remain separate facilities for the purpose of PSD due to the legal requirements of the project. However, the linkage between the operation of Unit S-3 and the elimination of the emission units for Units S-1 and S-4 in the Title V permit should be considered in the case-by-case PSD analysis. The City of Lake Worth currently owns and operates Unit GT-2/S-5 (29.5 combined cycle), Unit GT-1 (30 MW simple cycle turbine) and 5-2,000kW diesel generators. These generating will continue to be owned and operated independent of LWG.

We appreciate this opportunity to provide comments. Please call if you have any questions.

Sincerely,

GOLDER ASSOCIATES INC.

Kennard F. Kosky, P.E.
Principal

KFK/jkk

Enclosures

cc: Mr. Brian Chatlosh, LWG
Mr. Paul Doherty, LWG
Mr. Leonard Shapiro, Energy Resources, Inc.
Mr. Richard Zwolak, Golder Tampa

CC: File
Palm Bch
SED
NPS
EPA

LWG

LAKE WORTH GENERATION, LLC

Date: 10/25/99

Pages: 9

including cover

245 Winter Street, Suite 300
Waltham, MA 02451
Tel: (781) 370-1500
Fax:: (781) 370-1501

Attention: JEFFERY KOERNER P.E

Of: FLDEP

Fax No: (850) - 922 - 6979

CC:

Sent by: Paul Doherty

Phone No: (781) - 370 - 1542

Message/Instructions:

Attached is rated conditions for steam and electrical equipment at the Tom G. Smith Power Plant in Lake Worth, FL. Back up data from plant records is included. Look forward to discussing with you.

FOR TRANSMITTAL PROBLEMS CALL (781) 370-1500

Lake Worth Utilities, Lake Worth Florida
Tom G. Smith Power Plant
Electrical and Steam Rated Conditions

Unit	KVA	PF	Nominal KW	Flow to Stm Turb LB/HR VWO
S-1	9375	0.80	7500	100000
S-2	9375	0.80	7500	100000
S-3	29412	0.85	26500	246224
S-4	38400	0.85	32580	333605
Total	86562		74080	779829

S-1 UNIT

BOILER:
BABCOX - WILCOXForced draft, positive pressure, gas or oil fired water tube boiler.
Operating Pressure: 620 PSIG. Operating Steam Temperature: 830 F
Evaporation Rate (Steam Flow): 100,000 PPH.
This boiler has drainable super heaters.

TURBINE:
18 Stage Turbine
Inlet steam conditions - 600 psig. - 825 (F
Exhaust Pressure 2 1/2" HG. .ABS.
Shaft Packing - Labyrinth
Speed Governor Woodward
Lubrication - Pressure

Auxiliary oil pump	Steam driven, centrifugal Capacity 120 gpm at 80 psig. Start pressure - 50 psig. Stop Pressure - 60 psig. Pressure switch activates alarm when pump starts
Overspeed trip	3960 rpm
Low oil Pre. trip	5 psig, reset pr. 7 psig
Low vacuum trip	15" ABS.
Oil dump valve	Solenoid operated, valve opens when energized, trip setting 25 psig must have 35 psig. governor oil pressure to reset.

Trip and throttle valve equipped with circuit breaker, trip switch trips circuit breaker when valve closes.

Casing Sentinel	Opens at 5 psig.
Steam inlet valves	5 venturi - cam lift
Extractions	3 uncontrolled
Bearing oil Pr.	12 psig.
Governor oil Pr.	80 psig.

Oil temp leaving cooler - 125(F., shell and tube type
Circulating water requirements:

Oil cooler	90 gpm	95(F
Gland Condenser	33 gpm	95(F
Generator air cooler	200 gpm	95(F

Critical speed	2174 rpm.
Main shaft pump	Positive displacement, gear type.
Steam auxiliary	Centrifugal, driven by single stage, single wheel turbine.
Oil strainers	Duplex, located before oil cooler - low bearing oil pressure
indicates	strainer needs to be cleaned. Clean strainers when
governor oil pressure	reaches 84 psig.

S-1 does not have conditioner oil filtering, it's oil is treated in batch.

GENERATOR:

S-1 Worthington	3600 rpm	P.F. 0.80
Air Cooled Generator		
KVA 9375	Volts 4300	Amps 1300
2 Poles	3 Phase	60 Cycles
Armature Temperature 60 C by Detector		
Field Temperature Rise 85 C By Resistance		
Field Volts 125	Field Amps 275	
Exciter - D.C. Generator	40 KW	3600 RPM
Volts 125	Amps 320	Shunt Wound
Temperature Rise 40 (C		

TURBINE OIL PUMPS:

Main Shaft	Provides hydraulic and bearing oil pressure.
Steam Driven	Provides hydraulic and bearing oil pressure.
Turning gear	Provides bearing oil.

SEALING STEAM REGULATOR:
Pressure regulated.
AIR EJECTOR:
Worthington-260 psig operating steam pressure
200 psig operating steam pressure for hogger.

FEEDWATER HEATERS:
1 HP heater
2 Deacrator
3 LP heater

BOILER FEED PUMPS: Multi stage centrifugal pumps.
Allis Chalmers Motor 150 HP.
Byron Jackson Pumps 220 GPM.

CIRCULATING WATER PUMPS:
Worthington-single stage double suction
125 HP
5,200 GPM

COOLING TOWER:
FLOUR
2 cell, single flow
Fan motors 15 HP. slow 60 HP. fast
Capacity 86,000 gals.

S-2 Same as S-1 Unit

7500KW WORTHINGTON STEAM TURBINE
Inlet Steam Press 600 psig,
Inlet Steam temp 825 °F temp

TOM G SMITH POWER PLANT
UNIT S-3 INFORMATION
CURRENT 06-Sep-08

TURBINE DATA

MANF	WESTINGHOUSE
SERIAL #	13-A-3092-1
RATING	26500 KW
STAGES	13
STEAM	850 PSIG
CONDITIONS	900 F
EXHAUST	2.5 IN HG ABP
SPEED	3600 RPM

GENERATOR DATA

MANUF.	WESTINGHOUSE		
SERIAL #	1572P835		
GENERATOR H2 PRESSURE	30 PSIG	15 PSIG	0.5 PSIG
KVA	29412		
STATOR AMPS	1230		
STATOR VOLTS	13800		
ROTOR AMPS	458		
EXCITATION VOLTS	250		
POWER FACTOR	0.85		
POLES	2		
PHASES	3		
CONNECTION	"Y"		
FREQUENCY	60 HZ		

BOILER DATA

MANF	RILEY STOKER
CONTRACT #	65132-11
SERIAL #	3518
HEAT RELEA	133600 BTU/FT2/HR
WW SURFACE	2365 SQ.FT.
SH SURFACE	3285 SQ.FT.
BL SURFACE	18589 SQ.FT.
FURN. VOL.	8487 CU.FT.
FUEL	NAT. GAS
ALT FUEL	NO.5 OIL
STEAM RATE	225000 LB/HR
WW TUBES	3.25 in O.D.
SH TUBES	1.75 in O.D.
BLR TUBES	2.50 in O.D.
WATER CAP	105000 LBS(12200GALS)
--DESIGN PRESSURES--	
DRUM	1080 PSIG
SUPERHEAT	1080 PSIG
S.H OUTLET	900 PSIG @ 900 F

BOILER AUX

FORCED DRAFT FAN	
MANF	WESTINGHOUSE STURTEVANT
MODEL	2367 BWDI AIRFOIL,ARR63
SPEED	1200 RPM
LOW MOTOR	100 HP @ 720 RPM
HIGH MOTOR	400 HP @ 1200 RPM

AIR PREHEATER	
MANF	LJUNGSTROM
MODEL	18-VSI-48
HEAT SURFACE	20700 SQ.FT.
COLD END	12 in DEEP BASKETS
HOT END	36 in DEEP BASKETS

BOILER FEED PUMPS		BFP MOTORS	
MANF	BYRON JACKSON	MANF	GENERAL ELECTRIC
MODEL	3X6X9E-8STG DVMX	MODEL	5K8286388A8
3A SERIAL #	651E0482	3A SERIAL#	M99358057
3B SERIAL #	651E0481	3B SERIAL#	M99358056
FLOW	610 GPM	FRAME	82889
SUCTION	105 PSI	TYPE	K
DIFF PRESS	895 PSI	VOLTS	2300 VAC

FEEDWATER HEATERS	
MANUFACTURER	YUBA HEAT TRANSFER CO
3A SERIAL #	65-H-259-1
3C SERIAL #	65-H-259-2
3D SERIAL #	65-H-259-3

CONDENSER

MANF	FOSTER WHEELER
MODEL #	
SERIAL #	93-14244
SURFACE	25000 SQ.FT.
CCW FLOW	20,700 GPM
CCW TEMP	95 F MAXIM INLET
--TUBE DATA--	
PASSES	2
NUMBER	4,548
SIZE	7/8 IN O.DD
MATERIAL	ADMIRALTY/ STAINLESS
EFFECTIVE TUBE LENGTH	24'0"

TOM G SMITH POWER PLANT
UNIT S-4 INFORMATION
CURRENT · 06-Sep-00

TURBINE DATA

MANF	GENERAL ELECTRIC
SERIAL #	178826
RATING	32500 KW
STAGES	14
STEAM CONDITIONS	850 PSIG 900 F
EXHAUST	2.5 IN HG ABP
SPEED	3600 RPM

GENERATOR DATA

MANUF.	GENERAL ELECTRIC		
SERIAL #	8384384		
GENERATOR H2 PRESSURE	30 PSIG	15 PSIG	0.5 PSIG
KVA	38400	35328	26880
ARMATURE AMPS	1607	1478	1125
ARMATURE VOLTS	13800	13800	13800
FIELD AMPS	541	511	430
EXCITATION VOLTS	250	250	250
POWER FACTOR	0.85	0.85	0.85
HYDROGEN PURITY	98 %	98 %	98 %
POLES	2		
PHASES	3		
CONNECTION	"Y"		
FREQUENCY	60 HZ		

BOILER DATA

MANF	FOSTER WHEELER
CONTRACT #	2-78-861
SERIAL #	08-861-1
SH SERIAL#	75-861-1
RH SERIAL#	36-861-1
HEAT RELEA	150,500 BTU HR.SQ. FT.
RH SURFACE	2715 SQ. FT.
SH SURFACE	3690 SQ. FT.
RL SURFACE	16900 SQ. FT.
FURN. VOL.	2900 SQ. FT.
FUEL	NAT. GAS
ALT FUEL	NO.5 OIL
STEAM RATE	330,000 LB/HR
WW TUBES	3 IN. O.D.
SH TUBES	2 IN. O.D.
BLR TUBES	2 IN. O.D.
WATER CAP	100,400 LBS 12,063 GALS

--DESIGN PRESSURES--

DRUM	1050 PSIG
SUPERHEAT	1050 PSIG
S.H OUTLET	900 PSIG @ 900 F

BOILER AUX

FORCED DRAFT FAN	
MANF	WESTINGHOUSE STURTEVANT
MODEL	DWDI AIRFOIL,ARRG #3
SPEED	1200 RPM
LOW MOTOR	400 HP @ 1200 RPM
HIGH MOTOR	800 HP @ 1200 RPM

AIR PREHEATER	
MANF	LJUNGSTROM
MODEL	20-HRX-35 1/2
HEAT SURFACE	36900 SQ.FT.

BOILER FEED PUMPS

MANF	PACIFIC PUMP
MODEL	BFJTC SIZE 4X
4A SERIAL #	45646
4B SERIAL #	45645
FLOW	765 GPM
DISCHARGE	2530 FT HEAD
SPEED	3570 RPM

FEEDWATER HEATERS

MANUFACTURER	STRUTHERS WELLS	SPEC #
4A SERIAL #	3-69-06-30321	68146-6
4C SERIAL #	3-69-06-30319	68146-6 TYPE 29 17U14-5H
4D SERIAL #	3-69-06-30320	68146-3 TYPE 22 23U12-5H

CONDENSER

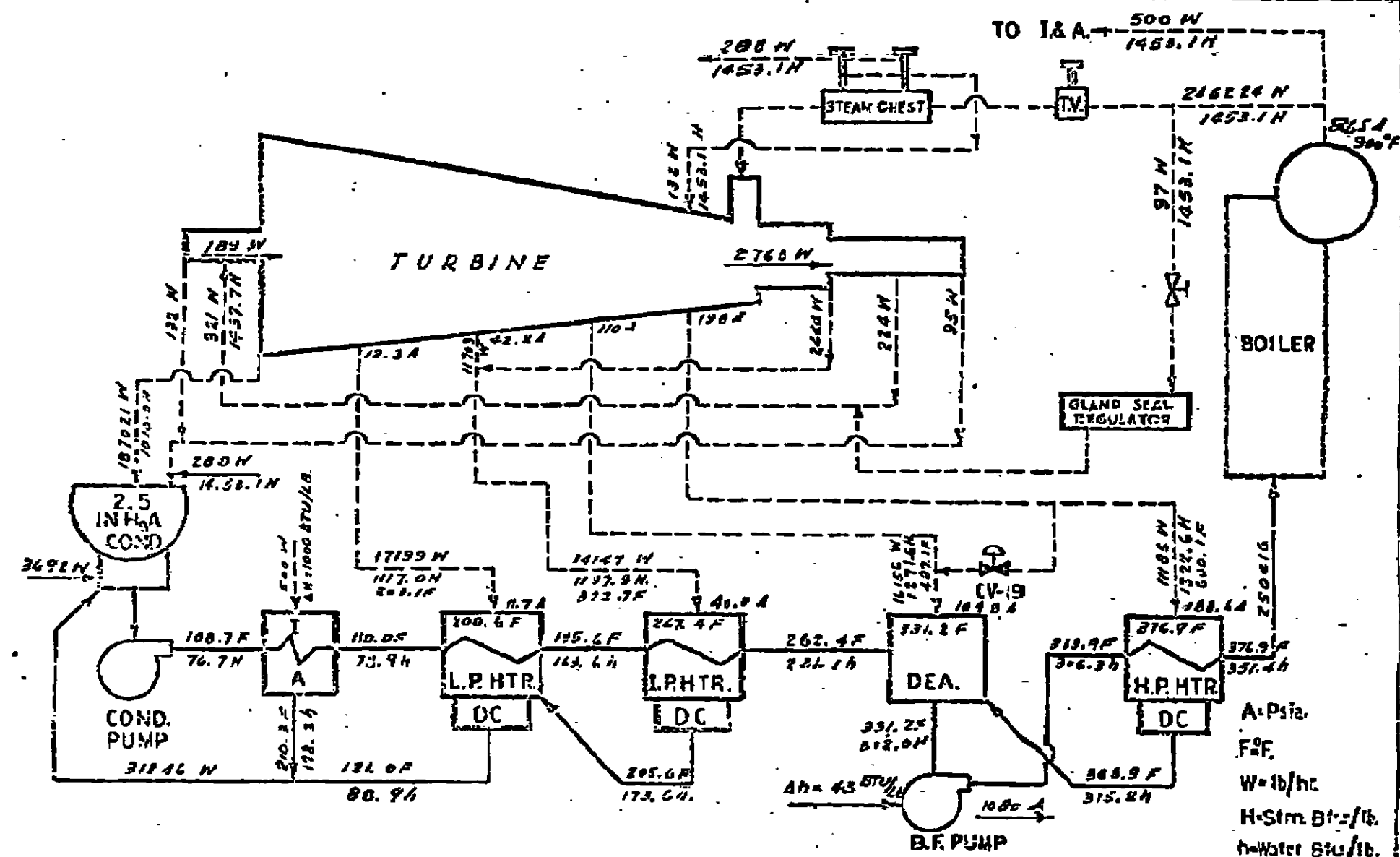
MANF	De LAVAL
MODEL #	138A
SERIAL #	500112
SURFACE	27500 SQ.FT.
CCW FLOW	25,500 GPM.
CCW TEMP	95 F. MAX INLET TEMP.

--TUBE DATA--

PASSES	2 EFFECTIVE TUBE LENGT 24'0"
NUMBER	4,996
SIZE	7/8 O.D.
MATERIAL	ADMIRALTY/STAINLESS

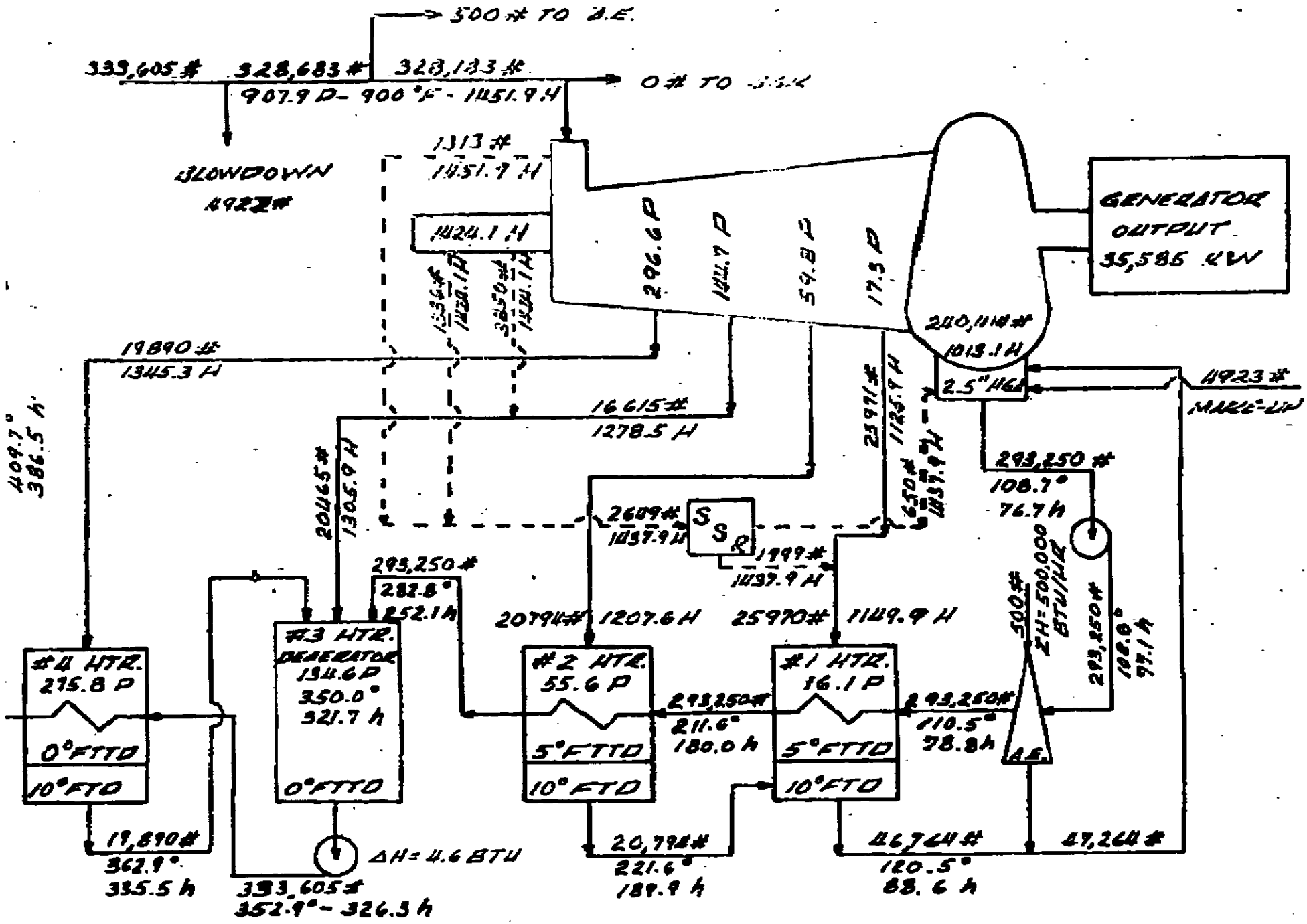
BFP MOTORS

MANF	WESTINGHOUSE
MODEL	WSDP
4A SERIAL #	2S-70
4B SERIAL #	1S-70
FRAME	5810-H
STYLE	69F44949
VOLTS	2300 VAC



HEAT RATE = $\frac{246224(1453.1) - 256416(851.4)}{27596} = 9776$ BTU/KW-HR.

25000 KW. TURBINE GENERATOR UNIT, 29412 KVA-0.85 PF-30 °HZ. 650 PSIG-900°FTT. 2.5 IN HgABS 27596 K.W. LOAD HEAT BALANCE	WESTINGHOUSE ELECTRIC CORP. LESTER, PENNA.


500 # TO D.E.
333,605 #
328,683 #
907.9 D - 900 °F - 1151.9 H
323,133 #
0 # TO
BLOWDOWN
4922 #
1313 #
1151.9 H
1124.1 H
GENERATOR
OUTPUT
35,585 KW
296.6 P
142.7 P
59.8 P
17.3 P
210,118 #
1013.1 H
2.5" HG
11923 #
MAKE-UP
19890 #
1345.3 H
16615 #
1278.5 H
409.7°
386.5 h
20465 #
1305.9 H
2609 #
1137.9 H
1999 #
1137.9 H
293,250 #
108.7°
76.7 h
293,250 #
282.8°
252.1 h
#4 HTR.
275.8 P
0°FTTD
10°FTD
#3 HTR.
DEAERATOR
134.6 P
350.0°
321.7 h
0°FTTD
#2 HTR.
55.6 P
5°FTTD
10°FTD
#1 HTR.
16.1 P
5°FTTD
10°FTD
20794 #
1207.6 H
25970 #
1149.9 H
293,250 #
211.6°
180.0 h
293,250 #
110.5°
78.8 h
500 #
ΔH = 500,000 BTU/HR
A.E.
293,250 #
106.9°
97.1 h
19,890 #
362.9°
335.5 h
393,605 #
352.9° - 326.3 h
ΔH = 4.6 BTU
20,794 #
221.6°
189.9 h
46,744 #
120.5°
88.6 h
47,260 #

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

OCT 22 1999

RECEIVED
OCT 25 1999
BUREAU OF AIR REGULATION

4 APT-ARB

Mr. A. A. Linero, P.E.
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: Preliminary Determination and Draft Permit for Lake Worth Generation, LLC (PSD-FL-266) located in Palm Beach County, Florida

Dear Mr. Linero:

Thank you for sending the preliminary determination and draft permit dated September 20, 1999, for the above referenced facility. The preliminary determination is for the proposed construction and operation of one combined cycle combustion turbine (CT) with a nominal generating capacity of 186 MW to be located on leased property at the Tom G. Smith power plant in Lake Worth, FL. The combustion turbine proposed for the facility is a General Electric (GE), frame 7FA unit. The CT will primarily combust pipeline quality natural gas with No. 2 fuel oil combusted as backup fuel. As proposed, the CT will be allowed to fire natural gas up to 8,760 hours per year, fire No. 2 fuel oil a maximum of 650 hours per year and fire natural gas in power augmentation and/or duct firing mode a maximum of 2,000 hours per year. Total emissions from the proposed project are above the thresholds requiring Prevention of Significant Deterioration (PSD) review for nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter (PM/PM_{10}) and sulfuric acid mist (SAM).

Based on our review of the preliminary determination and draft permit, we have the following comments:

1. The applicant proposed a best available control technology (BACT) NO_x emission limit of 9 ppmvd (15% oxygen) for natural gas firing to be achieved by use of dry low-NO_x combustion. The proposed BACT for NO_x emissions, when firing No. 2 fuel oil, is 42 ppmvd using water injection. In Appendix C of the draft permit, the NO_x BACT determination is discussed in detail. The applicant preformed a cost analysis which considered using selective catalytic reduction (SCR) to control NO_x emissions from the CT. The applicant's cost analysis calculated the cost effectiveness of SCR to be $8,970/ton removed of NO_x. The National Park Service disagreed with some of the assumptions in the applicant's cost analysis and, using the *OAQPS Control Cost Manual*, calculated a cost effectiveness for SCR to be approximately $4,000/ton of NO_x removed. The Florida Department of Environmental

Protection (FDEP) agreed in part with the National Park Service and calculated the cost effectiveness of SCR to be $6,090/ton removed of NO_x.

Additionally, the City of Lake Worth and the applicant have expressed concern regarding the risks of transporting and storing aqueous ammonia, which is required for SCR. FDEP believes consideration should be given to the potential environmental impacts of ammonia, especially since the plant is located near a high school and I-95. Consequently, FDEP rejected SCR as BACT based on a combination of energy, environmental and economic impacts.

Region 4 has evaluated the SCR cost assessments prepared by the applicant, FDEP, and the National Park Service. We have also given serious consideration to the legitimate concerns about the accidental release risks and potential environmental impacts of ammonia handling. Our conclusion following this review is that use of SCR combined with a DLN combustor should be considered BACT for NO_x emissions when the proposed facility is operated in combined cycle mode firing natural gas. The basis for our conclusion is as follows:

- For the majority of recent combined cycle combustion turbine facilities of which we are aware, BACT for natural gas firing has been add-on control (SCR in almost all cases) with a DLN combustor.

- Nothing in our review of the Lake Worth Generating facility information (including FDEP's cost evaluation) leads us to conclude that the proposed facility is in some sense unique compared to other recent similar facilities such that use of SCR would be cost prohibitive for Lake Worth Generation even though not cost prohibitive for other facilities.

- Use of SCR technology with combustion turbines is now widespread. While safety is certainly a concern with any process involving ammonia, the accumulated operating history of SCR systems should allow for the design and use of a SCR system at the Lake Worth Generation facility that is protective of the surrounding community. Further, careful operation and monitoring of the SCR system will help minimize any adverse environmental impacts from ammonia slip.

2. In Section III, condition 16 of the draft permit (standard operation), the emission rates for CO and NO_x are set as 9 ppmvd on a 24-hour rolling average as measured by CEMS. The averaging period for these emission limits should be much shorter, consistent with the 3-hour rolling averages proposed for fuel oil combustion in condition 17 (standard operation).

3. The proposed BACT limit for particulate matter (PM_{10}), found in conditions 16, 17, and 18 of the draft permit, is 10% opacity for visible emissions. This visible emissions opacity limit is proposed as a surrogate for a BACT particulate matter emissions rate limit. It is acceptable to use the 10% opacity limit as a surrogate for monitoring and recordkeeping; however, the permit conditions should also list the corresponding emission rate for particulate matter (i.e., 9 lb/hour for natural gas, 17 lb/hour for fuel oil).

4. As indicated in condition 22 and 23 of the draft permit, FDEP is proposing to allow excess emissions due to startup, shutdown or malfunction for up to 4 hours in any 24-hour period. It is the Environmental Protection Agency's (EPA's) policy that BACT applies during all normal operations and that automatic exemptions should not be granted for excess emissions. Startup and shutdown of process equipment are part of the normal operation of a source and should be accounted for in the planning, design, and implementation of operating procedures for the process and control equipment. Accordingly, it is reasonable to expect that careful and prudent planning and design will eliminate violations of emission limitations during such periods.

5. The new CT, which will fire No. 2 fuel oil as backup fuel, has the potential to increase the throughput of the existing fuel oil storage tank. Any increase in VOC emissions from the additional use of the tank should be taken into account when calculating the potential to emit (PTE) for VOC emissions. We realize the VOC emissions increase will be small and do not expect it to cause any applicability changes; however, as a matter of completeness, this increase in emissions should be included in all PTE calculations.

6. In condition 19 (alternate operations), the 9.4 ppmvd emission limit for NO_x is followed by a 33.8 lb/hour emission rate. This emission rate seems to be inconsistent with the other NO_x emission rates listed in the draft permit. For instance, in condition 16, the NO_x 9.0 ppmvd emission limit is associated with a 66.2 lb/hour emission rate.

7. FDEP has determined that the proposed Lake Worth Generation facility can be considered as a separate source for PSD permitting purposes rather than as part of the existing Tom G. Smith power plant. Two facilities should be aggregated for PSD purposes if they have the same major group SIC code (or one facility is a supporting facility for the other), are contiguous or adjacent, and are under common ownership or control. Clearly, the Lake Worth Generation facility is in the same industrial grouping as the existing Tom G. Smith power plant and is contiguous with the existing plant. EPA believes that a reasonable case could be made that the two facilities are also under common control, even though not commonly owned. Nevertheless, since treatment of the two facilities as separate sources does not result in PSD avoidance for initial installation of the proposed new facility (Lake Worth Generation), we have elected not to perform a detailed evaluation at this time to assess whether the two facilities should be aggregated as one source. Depending on the nature of future modifications at either the Lake Worth Generation facility or the Tom G. Smith power plant, however, the issue of source aggregation may have to be reassessed.

In conclusion, we request that the final permit not be issued until EPA, FDEP, and the permit applicant reach consensus on the BACT determination for NO_x emissions. If a final permit is issued with the same conditions as in the draft permit, EPA may object when a Title V (Part 70) operating permit is proposed for the facility.

Thank you for the opportunity to comment on the Lake Worth Generation preliminary determination and draft permit. If you have any questions regarding these comments, please direct them to either Katy Forney at (404) 562-9130 or Jim Little at (404) 562-9118.

Sincerely,

Douglas Neeley

R. Douglas Neeley
Chief
Air and Radiation Technology Branch
Air, Pesticides and Toxics
Management Division

CC: J. Koerner, BAR
K. Kosky, Golder & Assoc.
J. Stanley, Palm Bch.
J. Goldman, SED
NPS

Golder Associates Inc.

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

October 20, 1999

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RECEIVED
OCT 25 1999
BUREAU OF AIR REGULATION

Mr. C. H. Fancy, P.E., Chief
Bureau of Air Regulation
New Source Review Section
Florida Department of Environmental Protection
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Attention: Jeffery F. Koerner, P.E.

RE: DEP FILE NO. 099-0568-001-AC / PSD-FL-266
LAKE WORTH GENERATION, L.L.C. COMBINED CYCLE PROJECT
COMMENTS TO DRAFT PERMIT (SEPTEMBER 20, 1999)

Dear Jeff:

This correspondence is submitted on behalf of Lake Worth Generation, L.L.C. (LWG) to provide what we feel are minor comments to the Draft PSD Permit (September 20, 1999). Attached is a version of the permit that includes suggested changes. Below is a discussion of our request.

Facility Description: Some clarifications have been suggested that more accurately reflect the project, especially with applicability of the Florida Power Siting Act. The applicability is specific for existing electric generating plants (i.e., plants in existence prior to October 1, 1973) and relates to an increase in "steam generating capacity". The 74 MW happens to be the nominal rating of existing Units S-1 through S-4 according to name plate specifications. Units S-3 and S-4 will be repowered as to not increase the existing capacity of Unit S-1 through S-4 which is 780,000 lb/hr and a nominal 74 MW generating capacity. The PPSA applicability criteria related to a new unit of less than 75 MW, does not apply to the LWG project. The word "nominal" has been used to describe capacity ratings to reflect this fact. LWG will lease much of the ancillary equipment associated with the existing Unit S-4, but will own the repowered steam turbine/electric generator.

Regulatory Classification: As noted in our comments on Facility Description, the PPSA applicability is related to the existing steam generating capacity of the existing units and based on keeping the steam generating capacity of the repowered plant less than the existing Units S-1 through S-4. This is similar to the FPL Fort Myers Repowering Project where a nominal 550 MW of existing steam generating capacity is being developed as a combined cycle unit. This facility was not required to undergo PPSA review, since the steam generating capacity will not increase.

Emission Unit Description: Clarifications were suggested concerning the PPSA as noted above. Comments are suggested on deleting the steam amount and conditions as a permit condition [see comments on Condition 3(b)] below. As a general description of the emission unit, the nominal design steam amount and conditions are inappropriate. If a condition is required related to the PPSA applicability, it should be 780,000 lb/hr.

Condition 3(b): The steam amount and conditions are appropriate as a description of the Heat Recovery Steam Generator (HRSG), but as a separate limit it appears redundant to heat input limits for the combustion turbine and duct burners. In addition, we are unaware of other combined cycle projects having steam production limits. We request that this requirement be deleted.

Condition 5: It is suggested that the amount of fuel be regulated on a million Btu per year (mmBtu/year) basis rather than a gallons per year and million cubic feet per year basis for distillate oil and natural gas, respectively. This is also consistent with Condition 3.(a)(2) and 3.(b), which give limits in heat input mmBtu, and the hours of operation. Using mmBtu/year is also more accurate and reflects requirements for monitoring in Condition 36.

Condition 8: We request that this condition reflect that the design for oil firing be 275 °F and that information during compliance tests be provided to confirm that design. Requiring a continuous temperature monitor for a backup fuel appears unwarranted given the limited use of oil (less than 8 percent of the time) and the conservative nature of the impact analyses. The latter reflects the difference between the initially assumed 220 °F and the design of 275 °F. Even at the very conservative stack temperature of 220 °F, the maximum 24-hour SO_2 impacts on oil assuming 8,760 hours per year operation was at 5 ug/m^3, the significant impact level. This occurred for only one day out of the 5-year database. At the higher design temperature the impacts are clearly less than the significant impact level. Taken together the low oil use and impact analysis suggests that the project's impacts will fully comply with the ambient air quality standards for SO_2.

Condition 12: We have suggested a change to this condition that includes the wording "manufacturers specifications" regarding the amount of water injection to control NO_x. LWG will have to comply with General Electric's (GE) specifications on the amount of water that can be used. Indeed, GE will incorporate the water usage algorithms in the control system.

Condition 14: We request that if SCR were ever installed that ammonia monitoring be performed on an annual, rather than quarterly, basis.

Condition 18: The wording in this condition dealing with the operation Unit S-3 was revised for clarification.

Condition 19: The pounds per hour limit for NO_x appeared to be a typo. The limit should reflect 9.4 ppmvd at 15 percent oxygen, which is 74.7 pounds per hour (based on 66.2 lb/hr at 9 ppmvd for the CT and 8.45 lb/hr for duct burner).

Condition 20: To clarify the wording in the condition, the term "individually" was added regarding determining maximum operating rates for power augmentation and duct firing. Indeed, these can be operated separately.

Condition 32: We have added the wording "whichever is more stringent" after the citations of the 40 CFR 60 and 40 CFR 75 to clarify any differences in the requirements.

Condition 35: The word "written" was deleted. This information will be recorded in the facilities digital control system and be available as reports. Also, the reference to highest steam production rate was deleted based on comments above for Condition 3(b).

Condition 36: The word "written" was deleted. This information will be recorded in the facilities digital control system and be available as reports

Please feel free to call if you have questions. Your expeditious review of these comments is appreciated.

Sincerely,

GOLDER ASSOCIATES INC.

Kennard F. Kosky, P.E.
Principal

KFK/jkk

Enclosures

cc: Paul Doherty, LWG
Brian Chatlosh, LWG
Leonard Shaperio, Energy Resources Group, Inc.
Joseph A. McGlothin, McWirter, Reeves, McGlothlin, Davidson, Rief and Bakas, P.A.
A.A. Linero, FDEP Tallahassee

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CC: J. Kaerner, BAR
Palm BCH
SED
NPS
EPA

(09/13/99)

DRAFT PERMIT

PERMITTEE

Lake Worth Generation, L.L.C.
245 Winter Street, Suite 300
Waltham, MA 02451

Authorized Representative:
Brian Chatlosh, Manager

ARMS ID No.	099-0568
PSD Permit No.	PSD-FL-266
ARMS Permit No.	099-0568-001-AC
Permit Expires:	(Draft)
SIC No.	4911

PROJECT AND LOCATION

This permit authorizes Lake Worth Generation, L.L.C. to construct a gas-fired combustion turbine with electrical generator set and associated equipment in accordance with the application and conditions of this permit. The new electrical generating power plant will be located within the boundaries of the existing Tom G. Smith Power Plant (owned and operated by the City of Lake Worth) at 117 College Street in Lake Worth, Florida 33461. The UTM Coordinates are Zone 17, 592.8 km E, 43.7 km N.

STATEMENT OF BASIS

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

APPENDICES

The attached appendices are a part of this permit:

Appendix A: Terminology
Appendix B: Construction Permit General Conditions
Appendix C: Department's BACT Determination
Appendix D: NSPS General Provisions
Appendix E: NSPS Subpart Db (HRSG Duct Burner)
Appendix F: NSPS Subpart GG (Gas Turbine)
Appendix G: Summary Report - Gaseous Excess Emission & Monitoring System Performance

(DRAFT)

Howard L. Rhodes, Director
Division of Air Resources
Management

FACILITY DESCRIPTION

This permit authorizes Lake Worth Generation (LWG) to install a new combustion gas turbine and heat recovery steam generator. The permittee will lease property from within the boundaries of the existing Tom G. Smith Power Plant, owned and operated by the City of Lake Worth. Employees of the existing power plant will operate and maintain the new unit under the control of LWG. The combustion turbine is capable of simple cycle operation, but will operate primarily in combined cycle mode to deliver steam to ~~existing~~ steam electrical generator units S-3 and S-4 at the Tom G. Smith Power Plant. Steam turbine electric generator for unit S-4 will be ~~leased~~ owned by LWG from the City of Lake Worth to produce electricity for LWG. Steam delivered to steam turbine electric generator for unit S-3 will be purchased by the City of Lake Worth from LWG to produce electrical power for the Tom G. Smith Power Plant. The existing power plant will purchase this steam as a high priority when available. This new facility consists of the following emissions units.

ARMS No.	EMISSIONS UNIT DESCRIPTION
001	The **combustion turbine** is a General Electric Model Frame 7FA primarily fired with natural gas. It has a direct electrical generating capacity of 186 MW per hour in simple cycle mode.
002	The **heat recovery steam generator** (HRSG) converts waste heat from the combustion turbine into steam during the combined cycle mode, producing ~~up to~~ an nominal ~~additional~~ 74 MW per hour of electricity from steam turbine electric generators for units S-3 and S-4 ~~existing steam turbines~~. Supplemental low-NOx duct burners may be fired with natural gas to provide an additional heat input.

REGULATORY CLASSIFICATION

The facility is a major PSD source because potential nitrogen oxide emissions are greater than 250 tons per year. As such, emissions of CO, NOx, PM/PM_{10}, SAM and SO_2 are subject to a determination of the Best Available Control Technology (BACT) in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

This facility is not believed to be a major source of hazardous air pollutants (Title III).

This facility is subject to the applicable Acid Rain provisions of Title IV of the Clean Air Act.

This facility is a Title V major source of air pollution because emissions of nitrogen oxides (NOx) and carbon monoxide (CO) exceed 100 tons per year.

Emissions units included in this project are subject to regulation under the New Source Performance Standards, 40 CFR 60, Subpart GG (NSPS for Stationary Gas Turbines) and Subpart Db (NSPS for Industrial-Commercial-Institutional Steam Generating Units).

This project is not subject to Rule 62-17, F.A.C. (Power Plant Siting) because steam-generated power will remain at ~~74 MW~~ or less than ~~at~~ the existing steam generating capacity of units S-1 through S-4 at the City of Lake Worth Tom G. Smith Plant.

PERMIT SCHEDULE

03/15/99	Received PSD air construction permit application.
05/24/99	Received last item of additional information making application complete.

07/09/99	Distributed initial Intent to Issue Draft PSD Permit package.
(DRAFT)	Distributed revised Intent to Issue Draft PSD Permit package.
(DRAFT)	Public Notice of Intent to Issue Permit published in (DRAFT) issue of (DRAFT).

RELEVANT DOCUMENTS

The documents listed below are the basis of the permit and are on file with the Department. They specifically relate to this permitting action.

- Permit application received 3/15/99 and associated correspondence.
- National Park Service's comments dated 04/16/99 and 06/21/99.
- Department's initial Intent to Issue Draft Permit package dated 07/09/99.
- Letter dated 7/23/99 from the City of Lake Worth requesting consideration of retiring the boilers coupled with steam-electrical generating units S-1, S-2 and S-4 and limiting operation of the boiler coupled with steam unit S-3 to only those periods when steam is not available from LWG.
- Written request received 8/9/99 from the applicant to modify the initial Intent to Issue Draft Permit package.
- Letter received 8/19/99 from the City of Lake Worth requesting consideration of the repowering nature of this project along with the site-specific conditions related to an ammonia release in the vicinity of this plant.
- Final written comments received 8/20/99 from the Palm Beach County Local Air Program regarding the initial Intent to Issue Draft Permit package.
- Department's revised Intent to Issue and Public Notice Package dated (DRAFT).
- Department's Final Determination and Best Available Control Technology Determination issued concurrently with this Final Permit dated (DRAFT)

The following specific conditions apply to all emissions units at this facility addressed by this permit.

ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, phone number 850/488-0114.

2. Compliance Authorities: All documents related to reports, tests, minor modifications and notifications shall be submitted to the Air Pollution Control Section of the Palm Beach County Health Department at P.O. Box 29 (901 Evernia Street), West Palm Beach, Florida 33402-0029, phone number 561/355-3136 and fax number 561/355-2442. Copies of these items shall also be submitted to the Air Program of the Department's Southeast District Office at P.O. Box 15425 (400 North Congress Avenue), West Palm Beach, Florida, 33416-5425, phone number 561/681-6600, and fax number 561/681-6790.

3. Forms and Application Procedures: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]

4. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code. *Appendix A* lists abbreviations and methods for citing regulations used throughout this permit.

5. General Conditions: The owner and operator is subject to, and shall operate under, the attached General Conditions G.1 through G.15 listed in *Appendix B* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]

6. Applicable Regulations: Unless otherwise indicated in this permit, the construction and operation of the subject emission units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297; and the applicable requirements of the Code of Federal Regulations Title 40, Parts 52, 60, 72, 73, and 75. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]

7. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit must be obtained prior to the beginning of construction or modification. [Chapters 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

8. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

9. Expiration: Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department

may extend the 18-month period upon a satisfactory showing that an extension is justified. [40 CFR 52.21(r)(2)]

10. BACT Determination: In conjunction with extension of the 18 month periods to commence or continue construction, or extension of the permit expiration date, the permittee may be required to demonstrate the adequacy of any previous determination of best available control technology for the source. [Rule 62-212.400(6)(b), F.A.C. and 40 CFR 52.166(j)(4)]

11. Permit Extension: For good cause, the permittee may request that this PSD permit be extended. Such a request shall be submitted at least sixty (60) days before the expiration of this permit to the Bureau of Air Regulation. [Rule 62-4.080, F.A.C.]

12. Application for Title IV Permit: At least 24 months before the date on which the new unit begins serving an electrical generator (greater than 25 MW), the permittee shall submit an application for a Title IV Acid Rain Permit to the U.S. Environmental Protection Agency Region IV office in Atlanta, Georgia and a copy to the Department's Bureau of Air Regulation in Tallahassee. [40 CFR 72]

13. Application for Title V Permit: At least ninety (90) days before expiration of this construction permit, but no later than 180 days after commencing operation, the permittee shall submit an application for a Title V major source operating permit to the Department's Bureau of Air Regulation with copies to the Compliance Authorities. [Chapter 62-213, F.A.C.]

EMISSION STANDARDS

14. Unconfined Emissions of Particulate Matter: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

15. General Pollutant Emission Limiting Standards: No person shall cause, suffer, allow or permit the discharge of air pollutants that cause or contribute to an objectionable odor. An objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(203), F.A.C.]

OPERATIONAL REQUIREMENTS

16. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall notify the Compliance Authorities within one (1) working day. The notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. [Rule 62-4.130, F.A.C.]

17. Circumvention: No person shall circumvent any air pollution control device or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

18. Operating Rate During Testing. Unless otherwise specified in this permit, testing of emissions shall be conducted with the emissions unit operating at permitted capacity (90 to 100 percent of the maximum operation rate allowed by the permit). If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]

19. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

20. Calculation of Emission Rate: The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

21. Test Procedures shall meet all applicable requirements of Rule 62-297.310(4), F.A.C.

22. Determination of Process Variables: The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards. Equipment or instruments used to directly, or indirectly, determine process variables shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. Examples of such devices include belt scales, weight hoppers, flow meters, and tank scales. [Rule 62-297.310(5), F.A.C.]

23. Required Stack Sampling Facilities: All emissions units requiring stack testing shall be designed to accommodate testing and sampling facilities. Sampling facilities shall conform to the requirements of Rule 62-297.310(6), F.A.C. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

24. Test Notification: The owner or operator shall notify the Compliance Authorities at least 30 days prior to the scheduled initial NSPS tests and at least 15 days prior to all other scheduled compliance tests. Notification shall include the date, time, and place of each such test, and the test

contact person who will be responsible for coordinating and conducting the test. [Rule 62-297.310(7)(a)9., F.A.C. and 40 CFR 60.8]

25. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the facility to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions units and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

26. Records Retention: All measurements, records, and other data required by this permit shall be recorded in a permanent form and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to the Department's representatives upon request. [Rule 62-213.440, F.A.C.]

27. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical, but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.]

28. Excess Emissions Reporting: If excess emissions occur, the owner or operator shall notify the Compliance Authorities within one (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. Within thirty (30) days following each calendar quarter, the owner or operator shall submit a report summarizing any incident of the excess emissions or stating that no excess emissions occurred during the given calendar quarter. The summary of each incident shall include the amount, the duration, the cause, and the action taken to minimize and correct the excess emissions. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. Periods of startup, shutdown, and malfunction shall be monitored, recorded, and reported as excess emissions when monitored emission levels exceed any permitted standards. This report shall follow the general format specified in *Appendix G* of this permit. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7]

29. Annual Operating Report (AOR): The Annual Operating Report for Air Pollutant Emitting Facility shall be completed each year and shall be submitted to the Compliance Authorities by March 1 of the following year. [Rule 62-210.370(3), F.A.C.]

The specific conditions of this section address the following emissions units.

ARMS NO.	EMISSIONS UNIT DESCRIPTION
001	The **combustion turbine** with electrical generator set consists of a Model PG7241(FA) manufactured by General Electric capable of operating alone in simple cycle mode or in combination with Emissions Unit No. 002 (HRSG) in combined cycle mode. When firing natural gas as the primary fuel, the combustion turbine design incorporates dry low-NOx (DLN) combustion technology to reduce thermal NOx formation by premixing fuel and air prior to combustion and staging combustion to decrease the flame temperature. A water injection system will be used to reduce the flame temperature to control NOx emissions when firing low sulfur distillate oil as a backup fuel. The General Electric Speedtronic™ Gas Turbine Control System will monitor and control the gas turbine combustion process and operating parameters, including: fuel distribution, fuel staging, turbine speed, load conditions, combustion temperature, water injection, and fully automated start-up, shutdown, and cool-down. An absorption or evaporative cooling system will cool the turbine inlet air producing a greater mass air flow rate with a corresponding increase in power production. Continuous monitors will record the emissions of carbon monoxide and nitrogen oxides as well as the control water-to-fuel ratio during oil firing. In simple cycle operation, the gas turbine directly generates a maximum of 186 MW per hour of electrical power. The simple cycle bypass stack is 22 feet in diameter and 98 feet tall. When firing natural gas, exhaust gases exit the bypass stack at a temperature of 1110°F with a velocity of 118 feet per second and a volumetric flow rate of 2,681,000 actual cubic feet per minute. When firing low sulfur distillate oil, exhaust gases exit the bypass stack at a temperature of 1080°F with a velocity of 121 feet per second and a volumetric flow rate of 2,763,000 actual cubic feet per minute. The exhaust gas parameters are approximate considering base load operation and a turbine inlet air temperature of 45°F.
002	The **heat recovery steam generator** (HRSG) converts waste heat from the combustion turbine into steam during the combined cycle mode of operation. The steam generated from the HRSG will not exceed the existing steam generating capacity of units S-1 through S-4 at the City of Lake Worth Tom G. Smith Power Plant. Steam is used to power steam-electrical generator unit S-4, ~~which is leased from the City of Lake Worth,~~ to produce ~~up to~~ an nominal additional 47.54 MW per hour of electricity for LWG. ~~Additional~~ sSteam will also ~~may~~ be sold to the existing Tom G. Smith Power Plant to power existing steam-electrical generator unit S-3 to produce ~~up to~~ a nominal 26.5 MW per hour of electricity for the City of Lake Worth. Supplemental low-NOx duct burners may be fired with natural gas to provide an additional heat input of 175 mmBTU per hour. The duct burners may be fired only when the combustion turbine is firing natural gas. The maximum continuous nominal design steam rate of the HRSG is 720,000 pounds per hour at 900° F and 865 psig. During combined cycle operation, exhaust gases exit a separate stack that is 18 feet in diameter and 150 feet tall. When firing natural gas, exhaust gases leave the HRSG stack at a temperature of 220°F with a velocity of 74 feet per second and a volumetric flow rate of 1,129,000 actual cubic feet per minute. When firing low sulfur distillate oil, exhaust gases leave the HRSG stack at a temperature of 275°F with a velocity of 80 feet per second and a volumetric flow rate of 1,217,000 actual cubic feet per minute. The exhaust gas parameters

	are approximate considering base load operation and a turbine inlet air temperature of 45°F.

APPLICABLE STANDARDS AND REGULATIONS

1. BACT Determinations: This project is subject to Best Available Control Technology (BACT) determinations for carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM_{10}), sulfur dioxide (SO_2), and sulfuric acid mist (SAM) in accordance with Rule 62-212.400, F.A.C.

2. NSPS General Provisions

   (a) **NSPS General Provisions**: The combustion turbine (EU-001) and duct burner (EU-002) shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions including:

   - 40 CFR 60.7, Notification and Record Keeping
   - 40 CFR 60.8, Performance Tests
   - 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
   - 40 CFR 60.12, Circumvention
   - 40 CFR 60.13, Monitoring Requirements
   - 40 CFR 60.19, General Notification and Reporting Requirements

   (b) **Combustion Turbine (EU-001)**: The combustion turbine-electrical generator shall comply with all applicable provisions of 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(7)(b), F.A.C. The Subpart GG requirement to correct test data to ISO conditions applies, however, such correction is not used for compliance determinations with the BACT standards. *Appendix F* of this permit identifies the applicable requirements.

   (c) **HRSG Duct Burner (EU-002)**: The heat recovery steam generator (HRSG) may include duct firing with natural gas. The duct burner shall comply with all applicable provisions of 40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, adopted by reference in Rule 62-204.800(7), F.A.C. *Appendix E* of this permit identifies the applicable requirements.

PERFORMANCE RESTRICTIONS

3. Permitted Capacities

   (a) **Combustion Turbine**: The combustion turbine may be operated in simple cycle or combined cycle modes. In simple cycle mode, the unit is capable of generating up to a maximum of 176/186 MW per hour for gas/oil firing. Based on the higher heating value (HHV) of each fuel, an inlet air temperature of 45°F, a relative humidity of 70%, and 100% base load, the capacity of this unit shall be defined as the following maximum heat input rates.

   (1) *Gas Firing*: During standard operation, the heat input from firing natural gas shall not exceed 1817 mmBTU per hour. During power augmentation, the heat input from firing natural gas shall not exceed 2043 mmBTU per hour.

   (2) *Oil Firing*: The heat input from firing low sulfur distillate oil shall not exceed 1965 mmBTU per hour.

   These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's performance curves, corrected for site conditions or equations for correction to other ambient conditions, shall be provided to the

Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. The performance curves shall include operation for DLN for gas firing as well as steam injection for oil firing.

(b) **HRSG Duct Burner**: ~~In combined cycle mode, the heat recovery steam generator (HRSG) shall not produce more than 720,000 pounds of steam per hour at 900° F and 865 psig.~~ The HRSG may incorporate a natural gas-fired duct burner with a maximum heat input rate not to exceed 175 mmBTU per hour, based on the HHV of natural gas. The duct burner shall not be fired when the combustion turbine is firing low sulfur distillate oil.

As a basis for demonstrating compliance with the permitted maximum capacities, the permittee shall install, operate, calibrate, and maintain fuel metering systems to monitor the flow of natural gas and distillate oil to each emissions unit. At a minimum, compliance shall be demonstrated by keeping the records specified in the Daily Operations Log and the Monthly Operations Summary as required by this permit. [Design, and Rule 62-210.200, F.A.C. (Definitions - PTE)]

4. Allowable Fuels: The combustion turbine and HRSG duct burner shall be fired by pipeline-quality natural gas containing no more than 1 grain of sulfur per 100 standard cubic feet of gas. As a backup fuel, the combustion turbine may be fired with No. 2 (or a superior grade) distillate oil containing no more than 0.05% sulfur by weight. Compliance with limits on fuel sulfur content shall be demonstrated by complying with the requirements of the Alternate Monitoring Plan and Fuel Records of this permit. [Application, Rule 62-210.200, F.A.C. (Definition - PTE)]

5. Fuel Consumption Limits

(a) **Combustion Turbine**: No more than 1,277,250 mmBtu/year ~~9,390,000 gallons~~ of low sulfur distillate oil shall be fired in the combustion turbine in any consecutive 12 month period (based on 650 hours per year at maximum firing capacity and HHV). [Applicant Request, Rule 62-210.200, F.A.C. (Definition - PTE)]

(b) **HRSG Duct Burner**: No more than 350,000 mmBtu/year ~~342.0 million cubic feet~~ of natural gas shall be fired in the HRSG duct burner in any consecutive 12 month period (based on the limit of 2000 hours per year at maximum firing capacity and HHV). [Applicant Request, Rule 62-210.200, F.A.C. (Definition - PTE)]

6. Operating Procedures: The Best Available Control Technology (BACT) determinations established by this permit rely on "good operating practices" to minimize emissions. Therefore, all operators and supervisors shall be properly trained to operate and maintain the emissions units and pollution control devices in accordance with the guidelines and procedures established by each manufacturer. The training shall include good operating practices as well as methods of minimizing excess emissions. [Applicant Request; Rule 62-4.070(3); Rule 62-212.400, F.A.C.]

7. Hours of Operation: When firing natural gas, hours of combustion turbine operation are not restricted (8760 hours per year). When firing low sulfur distillate oil, combustion turbine operation is restricted by the fuel consumption limit specified in this permit, which is equivalent to 650 hours per year of maximum oil firing. Alternate methods of operation (steam injection for power augmentation or duct firing or both) are limited to a total of no more than 2000 hours in any consecutive 12 months. *{For example: 500 hours of only duct firing, 700 hours of only power augmentation, and 800 hours of combined power augmentation with duct firing would total 2000 hours.}* [Applicant Request; Rules 62-210.200 (Definition - PTE) and 62-212.400, F.A.C. (BACT)]

8. HRSG Stack Exit Temperature: The HRSG outlet stack temperature shall be designed to ~~be~~maintained ~~at~~ no less than 275° F when firing low sulfur distillate oil during combined cycle operation. ~~to ensure proper pollutant dispersion.~~ This temperature shall be ~~continuously~~ monitored during the compliance tests when firing oil and provided to the Department. [Design and Rule 62-4.070(3), F.A.C.]

EMISSIONS CONTROLS

9. Automated Control System: In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, tune, operate, and maintain the General Electric Speedtronic™ Gas Turbine Control System. This system shall be designed and operated to monitor and control the gas turbine combustion process and operating parameters including, but not limited to: fuel distribution and staging, turbine speed, load conditions, combustion temperatures, water injection, and fully automated startup, shutdown, and cool-down. [Design; Rule 62-4.070(3); Rule 62-212.400, F.A.C. (BACT)]

10. Combustion Controls: The owner and operators shall employ "good operating practices" in accordance with the manufacturer's recommended operating procedures to control CO, NOx, and VOC emissions. Prior to the required initial emissions performance testing, the combustion turbine, dry low-NOx (DLN) combustors, and Speedtronic™ control system shall be tuned to optimize the reduction of CO, NOx, and VOC emissions. Thereafter, these systems shall be maintained and tuned, as necessary, to minimize pollutant emissions. [Design, Rules 62-4.070 and 62-212.400, F.A.C.]

11. DLN Combustion Technology: To control NOx emissions when firing natural gas, the permittee shall install, tune, operate and maintain dry low-NOx (DLN) combustors on the combustion turbine. [Design, Rule 62-212.400, F.A.C.]

12. Water Injection: To control NOx emissions when firing low sulfur distillate oil, the permittee shall install, calibrate and operate an automated water injection system. This system shall be maintained and adjusted to provide the minimum NOx emissions according to the manufacturer specifications ~~possible~~ by water injection. [Design, Rules 62-4.070 and 62-212.400, F.A.C.]

13. Low-NOx HRSG Duct Burner: To control NOx emissions during duct firing, the permittee shall install, tune, operate and maintain low-NOx burners in the HRSG duct burner arrangement. [Design; Rules 62-4.070 and 62-212.400, F.A.C. (BACT)]

14. Optional Controls: The permittee may elect to design the heat recovery steam generator to accommodate the installation of aqueous ammonia injection with a selective catalytic reduction (SCR) system to control NOx emissions and/or an oxidation catalyst (OC) system to control CO emissions. The SCR and OC systems shall be designed and operated to comply with the more stringent emissions standards specified in this permit. The SCR system shall use aqueous ammonia injection with an ammonia slip of no more than 9 ppm. Ammonia slip shall be monitored during annual compliance tests ~~at least once during each calendar quarter~~. [Rules 62-212.409 and 62-4.070, F.A.C.]

15. Inlet Air Cooling System: The permittee may install an absorption or evaporative cooling system to cool the turbine inlet air. In no case shall ammonia be used in this system. [Application and Rule 62-4.070, F.A.C.]

EMISSIONS STANDARDS FOR STANDARD OPERATION

16. Standard Operation: This permit authorizes operation of the combustion turbine in either simple or combined cycle modes when firing natural gas as the primary fuel. Emissions from these units shall not exceed following standards when firing natural gas with no power augmentation and no duct firing. [Rules 62-212.400 (BACT) and 62-4.070(3), F.A.C.]

Natural Gas Firing, Standard Operation

Pollutant	Operation/Controls[6]	Emission Standard
EU-001/002:	*Combustion Turbine With No Power Augmentation And No HRSG Duct Firing*	
CO[1]	SS / CC / DLN	9.0 ppmvd corrected to 15% O2 based on a 24-hour rolling average 9.0 ppmvd corrected to 15% O2 based on a 3-hour test average 32.4 pounds per hour based on a 3-hour test average
NOx[2]	SS / CC / DLN	9.0 ppmvd corrected to 15% O2 based on a 24-hour rolling average 9.0 ppmvd corrected to 15% O2 based on a 3-hour test average 66.2 pounds per hour based on a 3-hour test average
PM/PM10[3]	SS / CC / CF/ CD	Visible emissions shall not exceed 10% opacity
SAM/SO2[4]	SS / CC / CF	1 grain per 100 SCF of gas (fuel specification requirement)
VOC[5]	SS / CC / CD	1.4 ppmvw (as methane) based on a 3-hour test average 3.2 pounds per hour (as methane) based on a 3-hour test average

[1] Compliance with the rolling 24-hour CO standard shall be demonstrated by data collected from the certified continuous emissions monitoring system (CEMS) required by this permit. The CEMS shall calculate and record emissions for each 1-hour block of operation and maintain a rolling 24-hour average. Compliance with the 3-hour test averages shall be determined by EPA Method 10.

[2] Compliance with the rolling 24-hour NOx standard shall be demonstrated by data collected from the certified continuous emissions monitoring system (CEMS) required by this permit. The CEMS shall calculate and record emissions for each 1-hour block of operation and maintain a rolling 24-hour average. Compliance with the 3-hour test averages shall be determined by EPA Method 7E and/or 20.

[3] Compliance with the visible emissions standard shall be determined by EPA Method 9. This standard applies to both the gas turbine stack and the HRSG stack. (Estimated PM < 0.002 grains/dscf)

[4] Compliance with the SAM/SO2 standard shall be demonstrated by firing pipeline-quality natural gas and the record keeping and reporting requirements of this permit.

[5] Compliance with the VOC standard shall be determined by EPA Methods 18, 25, and/or 25A. The VOC standard is a synthetic minor limit and not a BACT limit.

[6] SS means simple cycle operation. CC means combined cycle operation. DLN means dry low-NOX controls. HRSG means heat recovery steam generator. CF means clean fuels. CD means combustion design.

EMISSIONS STANDARDS FOR BACKUP FUEL FIRING

17. Backup Fuel Firing: This permit authorizes operation of the combustion turbine in either simple or combined cycle modes when firing a limited amount of low sulfur distillate oil as a backup fuel. Emissions from these units shall not exceed the following standards when firing low sulfur distillate oil as a backup fuel with no power augmentation and no duct firing. [Rules 62-212.400 (BACT) and 62-4.070(3), F.A.C.]

Distillate Oil Firing, Backup Fuel (fuel consumption limit equivalent 650 hours per year)

Pollutant	Operation/Controls[6]	Emission Standard
EU-001/002: Combustion Turbine With No Power Augmentation And No HRSG Duct Firing		
CO[1]	SS / CC / CD	20.0 ppmvd corrected to 15% O2 based on a 3-hour rolling average 73.4 pounds per hour based on a 3-hour test average
NOx[2]	SS / CC / WI	42.0 ppmvd corrected to 15% O2 based on a 3-hour rolling average 362.4 pounds per hour based on a 3-hour test average
PM/PM10[3]	SS / CC / CF / CD	Visible emissions shall not exceed 10% opacity
SAM/SO2[4]	SS / CC / CF / CD	0.05% fuel sulfur by weight (fuel specification requirement)
VOC[5]	SS / CC / CD	3.5 ppmvw (as methane) based on a 3-hour test average 8.3 pounds per hour (as methane) based on a 3-hour test average

[1] Compliance with the 3-hour rolling CO standard shall be demonstrated by data collected from the certified continuous emissions monitoring system (CEMS) required by this permit. The CEMS shall calculate and record emissions for each 1-hour block of operation and maintain a rolling 3-hour average. Compliance with the 3-hour test average shall be determined by EPA Method 10 and results reported in units of ppmvd @ 15% O2 and pounds per hour.

[2] Compliance with the 3-hour rolling NOx standard shall be demonstrated by data collected from the certified continuous emissions monitoring system (CEMS) required by this permit. The CEMS shall calculate and record emissions for each 1-hour block of operation and maintain a rolling 3-hour average. Compliance with the 3-hour test average shall also be determined by EPA Method 7E and/or 20 and results reported in units of ppmvd @ 15% O2 and pounds per hour.

[3] Compliance with the visible emissions standard shall be determined by EPA Method 9. This standard applies to both the gas turbine stack and the HRSG stack. (Estimated PM < 0.002 grains/dscf)

[4] Compliance with the SAM/SO2 standard shall be demonstrated by low sulfur distillate oil containing no more than 0.05% sulfur by weight and the record keeping and reporting requirements of this permit.

[5] Compliance with the VOC standard shall be determined by EPA Methods 18, 25, and or 25A. The VOC standard is a synthetic minor limit and not a BACT limit.

[6] SS means simple cycle operation. CC means combined cycle operation. DLN means dry low-NOX controls. HRSG means heat recovery steam generator. CF means clean fuels. CD means combustion design. WI means water injection.

EMISSIONS STANDARDS FOR ALTERNATE METHODS OF OPERATION

18. Contingency: Approval of the alternate methods of operation is contingent upon the City of Lake Worth obtaining a final Title V permit for the Tom G. Smith Power Plant that contains the following specific conditions.

- Operation of steam-electrical generator units S-1 and S-2 is prohibited.

- Operation of each combustion source coupled with steam-electrical generator units S-1, S-2, and S-4 is prohibited.

- ~~The combustion source coupled with steam electrical generator~~ Unit S-3 shall only be fired when steam is not available for purchase from the Lake Worth Generation Plant. Operation ~~This~~ may include periods of startup, shutdown and malfunction of the combustion turbine or heat recovery steam generator at the Lake Worth Generation Plant.

Prior to the City of Lake Worth obtaining the final Title V permit containing these conditions, operation in any of the alternate methods of operation is prohibited. [Applicant Request and Rule 62-4.070(3), F.A.C.]

19. Alternate Methods of Operation: Once specific condition #18 of this permit has been satisfied, the following limited alternate methods of operation are authorized when firing natural gas in the combined cycle mode: steam injection for power augmentation *or* firing the supplemental HRSG duct burner *or* both. The specific conditions of this permit effectively limit the alternate methods of operation to a total of 2000 hours per year. Emissions from these units shall not exceed the following standards during these alternate methods of operation. [Rules 62-212.400 (BACT) and 62-4.070(3), F.A.C.]

Natural Gas Firing, Combined Cycle Operation, Alternate Methods of Operation

Pollutant	Operation/Controls[6]	Emission Standard
EU-001/002: Combustion Turbine With Power Augmentation Or HRSG Duct Firing Or Both		
CO[1]	CC / DLN PA or DF or Both	15.0 ppmvd corrected to 15% O2 based on a 24-hour rolling average (24-hour average is equivalent to 54.0 pounds per hour) 20.0 ppmvd corrected to 15% O2 based on a 3-hour rolling average 72.0 pounds per hour based on a 3-hour test average
NOx[2]	CC / DLN PA or DF or Both	9.4 ppmvd corrected to 15% O2 based on a 24-hour rolling average (24-hour average is equivalent to 74.7~~33.8~~ pounds per hour) 12.0 ppmvd corrected to 15% O2 based on a 3-hour rolling average 88.0 pounds per hour based on a 3-hour test average
PM/PM10[3]	CC / CF / CD	Visible emissions shall not exceed 10% opacity
SAM/SO2[4]	CC / CF / CD	1 grain per 100 SCF of gas (fuel specification requirement)
VOC[5]	CC / CD	1.7 ppmvw (as methane) based on a 3-hour test average 3.8 pounds per hour (as methane) based on a 3-hour test average
EU-002: Emissions From Duct Burner Only, Gas Firing		
NOx[7]	CC / DLN / DF	0.08 pounds per mmBTU of heat input from duct firing only

[1] Compliance with the 3-hour and 24-hour rolling CO standards shall be demonstrated by data collected from the certified continuous emissions monitoring system (CEMS) required by this permit. The CEMS shall calculate and record emissions for each 1-hour block of operation and maintain rolling 3-hour and 24-hour averages. Compliance with the 3-hour test average shall be determined by EPA Method 10 and results reported in units of ppmvd @ 15% O2 and pounds per hour.

[2] Compliance with the 3-hour and 24-hour rolling NOx standards shall be demonstrated by data collected from the certified continuous emissions monitoring system (CEMS) required by this permit. The CEMS shall calculate and record emissions for each 1-hour block of operation and maintain rolling 3-hour and 24-hour averages. Compliance with the 3-hour test average shall be determined by EPA Method 7E and/or 20 and results reported in units of ppmvd @ 15% O2 and pounds per hour.

[3] Compliance with the visible emissions standard shall be determined by EPA Method 9. This standard applies to both the gas turbine stack and the HRSG stack. (Estimated PM < 0.002 grains/dscf)

[4] Compliance with the SAM/SO2 standard shall be demonstrated by firing pipeline quality natural gas and the record keeping and reporting requirements of this permit.

[5] Compliance with the VOC standard shall be determined by EPA Methods 18, 25, and or 25A. The VOC standard is a synthetic minor limit and not a BACT limit.

[6] SS means simple cycle operation. CC means combined cycle operation. DLN means dry low-NOX controls. HRSG means heat recovery steam generator. CF means clean fuels. CD means combustion design. PA means power augmentation. DF means HRSG duct firing.

[7] Compliance with the duct burner NOx standard is determined by EPA Method 7E and/or20 at the HRSG inlet and outlet simultaneously.

20. Maximum Operating Rates: The maximum steam injection rate for power augmentation (pounds per hour) and HRSG duct firing (mmBTU per hour) shall be established individually in the operation permit for these units. The maximum hourly rates shall be specified as the average rates of operation during the initial CO and NOx emissions performance tests that showed compliance with the corresponding 3-hour averages (mass emissions rates and pollutant concentrations). The maximum steam injection rate shall be specified as pounds of steam per hour and HRSG duct firing rate shall be specified as mmBTU per hour. Higher operating rates may be permitted by conducting additional performance tests demonstrating compliance with the CO and NOx standards and revising the operation permit. [Rule 62-4.070(3), F.A.C.]

EMISSIONS STANDARDS FOR OPTIONAL CONTROLS

21. Optional Controls: Emissions from these units shall not exceed the following standards if the permittee elects to install the optional controls authorized in specific condition #14 of this permit. [Rule 62-212.400, F.A.C. (BACT)]

Optional Controls, Natural Gas and Low Sulfur Distillate Oil Firing

Pollutant	Operation/Controls[6]	Emission Standard
EU-001/002: Combustion Turbine With Selective Catalytic Reduction and/or Oxidation Catalyst		
CO[1]	SS/CC/CD/OC, Gas	3.5 ppmvd corrected to 15% O2 based on a 3-hour rolling average 12.6 pounds per hour based on a 3-hour test average
	SS/CC/CD/OC, Oil	5.9 ppmvd corrected to 15% O2 based on a 3-hour rolling average 21.5 pounds per hour based on a 3-hour test average
NOx[2]	SS/CC/CD/SCR, Gas	3.5 ppmvd corrected to 15% O2 based on a 3-hour rolling average 25.8 pounds per hour based on a 3-hour test average
	SS/CC/CD/SCR/WI Oil	16.4 ppmvd corrected to 15% O2 based on a 3-hour rolling average 141.3 pounds per hour based on a 3-hour test average
PM/PM10[3]	SS/CC/CF/CD Gas or Oil	Visible emissions shall not exceed 10% opacity

SAM/SO2[4]	SS/CC/CF/CD, Gas	1 grain per 100 SCF of gas (fuel specification requirement)
	SS/CC/CF/CD, Oil	0.05% fuel sulfur by weight (fuel specification requirement)
VOC[5]	SS/CC/CD, Gas	1.7 ppmvw (as methane) based on a 3-hour test average
		3.8 pounds per hour (as methane) based on a 3-hour test average
	SS/CC/CD, Oil	3.5 ppmvw (as methane) based on a 3-hour test average
		8.3 pounds per hour (as methane) based on a 3-hour test average
EU-002: Emissions From Duct Burner Only, Gas Firing		
NOx[6]	CC / DLN / DF	0.08 pounds per mmBTU of heat input from duct firing only

1 Compliance with the 3-hour rolling CO standard shall be demonstrated by data collected from the certified continuous emissions monitoring system (CEMS) required by this permit. The CEMS shall calculate and record emissions for each 1-hour block of operation and maintain a rolling 3-hour average. Compliance with the 3-hour test average shall be determined by EPA Method 10 and results reported in units of ppmvd @ 15% O2 and pounds per hour.

2 Compliance with the 3-hour rolling NOx standard shall be demonstrated by data collected from the certified continuous emissions monitoring system (CEMS) required by this permit. The CEMS shall calculate and record emissions for each 1-hour block of operation and maintain a rolling 24-hour average. Compliance with the 3-hour test average shall be determined by EPA Method 7E and/or 20 and results reported in units of ppmvd @ 15% O2 and pounds per hour.

3 Compliance with the visible emissions standard shall be determined by EPA Method 9. This standard applies to both the gas turbine stack and the HRSG stack. (Estimated < 0.002 grains/dscf)

4 Compliance with the SAM/SO2 standard shall be demonstrated by firing pipeline quality natural gas and the record keeping and reporting requirements of this permit.

5 Compliance with the VOC standard shall be determined by EPA Methods 18, 25, and or 25A. The VOC standard is a synthetic minor limit and not a BACT limit.

6 SS means simple cycle operation. CC means combined cycle operation. DLN means dry low-NOX controls. HRSG means heat recovery steam generator. CF means clean fuels. CD means combustion design. WI means water injection.

EXCESS EMISSIONS

22. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited. These emissions shall be included in the calculation of the 24-hour NOx averages for compliance determinations. Excess emissions resulting from the operation of the duct burner shall be prohibited. [Rule 62-210.700, F.A.C.]

23. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown, or malfunction of the combustion turbine shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall not exceed two hours in any 24-hour period except for the following modes of startup.

(a) **Warm Startup**: During a warm start-up to combined cycle operation, up to three hours of excess emissions are allowed in a 24-hour period. Warm start-up is defined as a startup to combined cycle operation following a steam turbine shutdown lasting 8 hours or more, but less than 48 hours.

(b) **Cold Startup**: During a cold startup to combined cycle operation, up to four hours of excess emissions are allowed in a 24-hour period. "Cold startup" is defined as startup to combined cycle operation following a steam turbine shutdown lasting 48 hours or more.

(c) **Low Load Operation**: Excluding startup and shutdown, operation below 50% base load is prohibited.

If excess emissions occur due to malfunction, the owner or operator shall notify the Compliance Authorities within one (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. [Applicant Request, Vendor Combined Cycle Startup Curves Data and Rule 62-210.700, F.A.C.]

COMPLIANCE MONITORING AND RECORD KEEPING REQUIREMENTS

24. Sampling Facilities: The permittee shall design the stacks for the combustion turbine and heat recovery steam generator to accommodate adequate testing and sampling locations for compliance with the applicable emission limits and testing modes. This includes proper sampling ports before and after the duct burner. [Rules 62-4.070 and 62-204.800, F.A.C., and 40 CFR 60.40a(b)]

25. Combustion Turbine Testing Capacity: Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 95-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. However, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 105 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Procedures for these tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapters 62-204 and 62-297, F.A.C. [Rule 62-297.310(2), F.A.C.]

26. Performance Test Methods: Compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A (1997 version), and adopted by reference in Chapter 62-204.800, F.A.C.

(a) **EPA Method 7E**, "Determination of Nitrogen Oxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)".

(b) **EPA Method 9**, "Visual Determination of the Opacity of Emissions from Stationary Sources".

(c) **EPA Method 10**, "Determination of Carbon Monoxide Emissions from Stationary Sources". All CO tests shall be conducted concurrently with NOx tests.

(d) **EPA Method 20**, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines."

(e) **EPA Methods 18, 25 and/or 25A**, "Determination of Volatile Organic Concentrations."

No other test methods may be used for compliance testing unless prior DEP approval is received in writing from the DEP Emissions Monitoring Section Administrator in accordance with an alternate sampling procedure pursuant to 62-297.620, F.A.C.

27. Initial Tests Required: Initial compliance with the allowable emission standards specified in this permit shall be determined within 60 days after achieving the maximum production rate, but not later than 180 days after initial operation of the emissions units. Initial tests for emissions from the combustion turbine shall be conducted for carbon monoxide, nitrogen oxides, volatile organic compounds, and visible emissions separately for each fuel type and alternate method of operation. In addition, NOx emissions of the inlet to, and the outlet from, the duct burner shall be tested. Initial performance test data shall also be converted into the units of the corresponding NSPS Subparts Db and GG emissions standards to demonstrate compliance (see Appendix E and F). [Rule 62-297.310(7)(a)1., F.A.C.]

28. Annual Performance Tests: Annual performance tests for carbon monoxide, nitrogen oxides and visible emissions from the combustion turbine shall be conducted separately for each applicable mode of operation. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th). When conducted at permitted capacity, the annual NOx continuous monitor RATA required pursuant to 40 CFR 75 may be substituted for the annual compliance stack test. Similarly, the CO continuous monitor RATA pursuant to 40 CFR 60, Appendix B may be substituted for the annual compliance stack test. [Rule 62-297.310(7)(a)4., F.A.C.]

29. Tests Prior to Permit Renewal: During the federal fiscal year (October 1st to September 30th) prior to renewing the air operation permit, the permittee shall also conduct performance tests for volatile organic compounds for each alternate mode of operation. [Rule 62-297.310(7)(a)3., F.A.C.]

30. Tests After Substantial Modifications: All performance tests required for initial startup shall be conducted after any substantial modification and appropriate shake down period of air pollution control equipment including the replacement of dry low-NOx combustors, installation of SCR or installation of an oxidation catalyst. Shake down periods shall not exceed 100 days after re-starting the combustion turbine. [Rule 62-297.310(7)(a)4., F.A.C.]

31. Testing Modes of Operation: The permittee shall conduct all required tests for each mode of operation defined below.

    (a) **Standard Operation**: Separate tests shall be conducted when firing the combustion turbine with natural gas as well as low sulfur distillate oil.

    (b) **Alternate Modes of Operation**: Separate tests shall be conducted when firing the combustion turbine with natural gas and implementing any of the following alternate modes of operation: firing of the HRSG duct burner, power augmentation with steam injection, or both. Hourly rates for HRSG duct firing (mmBTU) and steam injection for power augmentation (pounds of steam) shall be restricted to the rates that demonstrated compliance during the test for each alternate mode of operation. Note: Alternate modes of operation are not allowed when firing low sulfur oil.

    [Rule 62-4.070(3), F.A.C.]

32. Continuous Monitors: To demonstrate continuous compliance with the BACT emissions limits for CO and NOx, the owner or operator shall install, calibrate, operate, and maintain a continuous emission monitoring systems (CEMS) to measure and record the CO, NOx and oxygen concentrations in the combustion turbine exhaust gas for each stack. Alternatively, a monitor for

carbon dioxide may be used in place of the oxygen monitor, but the system shall be capable of correcting the emissions to 15% oxygen.

Compliance with the 3-hour and 24-hour rolling averages shall be demonstrated by continuous emissions monitoring data. A 3-hour or 24-hour rolling average shall be determined by calculating the arithmetic average of all hourly emission rates for the respective averaging period. Each 1-hour average shall be expressed in units of ppmvd corrected to 15% oxygen and calculated using four valid data points approximately 15 minutes apart. (The minimum requirement is two valid data points at least 15 minutes apart.)

Continuous emission monitoring data required by this permit shall be collected and recorded during all periods of operation including startup, shutdown, and malfunction, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. Although recorded, emissions during periods of startup, shutdown and malfunction are subject to the excess emission conditions specified in this permit.

The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of: Rule 62-297.520, F.A.C., including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications 2, 3 and 4; 40 CFR 60.7(a)(5); 40 CFR 60.13; 40 CFR 60, Appendix F; and 40 CFR Part 75, whichever is more stringent. A monitoring plan shall be provided to the DEP Emissions Monitoring Section Administrator and EPA for review no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62. The plan shall consist of data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location.

When the CEMS reports CO or NOx emissions in excess of the standards allowed by this permit, the permittee shall notify the Compliance Authorities within one (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. [Rules 62-204.800, 62-210.700, 62-4.130, 62-4.160(8), F.A.C and 40 CFR 60.7].

33. Fuel Records

(a) Natural Gas: The permittee shall demonstrate compliance with the fuel sulfur limit for natural gas specified in this permit by maintaining records of the sulfur content of the natural gas being supplied for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D3246-81 or equivalent methods. These methods shall be used to determine the sulfur content of the natural gas fired in accordance with any EPA-approved custom fuel monitoring schedule (see Alternate Monitoring Plan) or natural gas supplier data or the natural gas sulfur content referenced in 40 CFR 75 Appendix D. 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 pursuant to 40 CFR 60.335(e). However, the permittee is responsible for ensuring that the procedures in 40 CFR60.335 or 40 CFR75 are used to determine the fuel sulfur content for compliance with the 40 CFR 60.333 SO_2 standard.

(b) Low Sulfur Distillate Oil: For all bulk shipments of low sulfur distillate oil received at this facility, the permittee shall obtain from the fuel vendor an analysis identifying the sulfur content. Methods for determining the sulfur content of the distillate oil shall be ASTM D129-91, D2622-94, or D4294-90 or equivalent methods. Records shall specify the test method used and shall comply with the requirements of 40 CFR 60.335(d).

[Rules 62-4.070(3) and 62-4.160(15), F.A.C.]

34. Alternate Monitoring Plan: Subject to EPA approval, the following alternate monitoring may be used to demonstrate compliance.

(a) The NOx CEM data may be used in lieu of the monitoring system for water-to-fuel ratio and the reporting of excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG. Subject to EPA approval, the calibration of the water-to-fuel ratio-monitoring device required in 40 CFR 60.335(c)(2) will be replaced by the 40 CFR 75 certification tests of the NOx CEMS.

(b) The NOx CEM data shall be used in lieu of the requirement for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG.

(c) When requested by the Department, the CEMS emission rates for NOx on this unit shall be corrected to ISO conditions to demonstrate compliance with the NOx standard established in 40 CFR 60.332.

(d) A *custom fuel monitoring schedule* pursuant to 40 CFR 75 Appendix D for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2) provided the following conditions are met.

(1) The permittee shall apply for an Acid Rain permit within the deadlines specified in 40 CFR 72.30.

(2) The permittee shall submit a monitoring plan, certified by signature of the Authorized Representative, that commits to using a primary fuel of pipeline supplied natural gas containing no more than 2 grains of sulfur per 100 SCF of gas pursuant to 40 CFR 75.11(d)(2);

(3) Each unit shall be monitored for SO_2 emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.

This custom fuel-monitoring schedule will only be valid when pipeline natural gas is used as a primary fuel. If the primary fuel for these units is changed to a higher sulfur fuel, SO_2 emissions must be accounted for as required pursuant to 40 CFR 75.11(d).

[40 CFR 60, Subpart GG, Applicant Request]

35. Daily Operations Log: Before the end of the following calendar day, the owner or operator shall record the following information in a ~~written~~ log for the previous day of operation: total hours of combustion turbine operation; hours of duct firing; hours of power augmentation; highest hourly rate of steam injection for power augmentation; ~~highest hourly steam production rate from the HRSG in pounds per hour~~; and the average water injection rate during oil firing in pounds per hour. [Rule 62-4.160(15), F.A.C.]

36. Monthly Operations Summary: By the fifth calendar day of each month, the owner or operator shall record the following information in a ~~written~~ log for the previous month of operation: hours of combustion turbine operation for gas/oil firing; hours of duct firing; hours of steam injection for power augmentation; million cubic feet of natural gas fired in the combustion turbine; gallons of low sulfur distillate oil fired in the combustion turbine; and the million cubic feet of natural gas fired in the HRSG duct burner. Totals for the previous month of operation and the previous 12 months of operation shall be recorded. In addition, the owner or operator shall calculate and record the following monthly averages: heat input to the combustion turbine from natural gas in

mmBTU per hour; heat input to the combustion turbine from low sulfur distillate oil in mmBTU per hour; heat input to the duct burner from natural gas in mmBTU per hour [Rule 62-4.160(15), F.A.C.]

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Legal Advertising Invoice

Acct:	760724
Ad #	605934
Description:	Notice: Intent to Issue Air Construction
Size:	30 ¼"
Amount:	$698.78
Published:	September 24, 1999

Advertising Deadlines

Publish Date	Deadline
Monday	Friday 3PM
Tuesday	Friday 3PM
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Thursday	Monday 3PM
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Saturday	Thursday 3PM
Sunday	Thursday 3PM

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THE PALM BEACH POST

Published Daily and Sunday
West Palm Beach, Palm Beach County, Florida

PROOF OF PUBLICATION

STATE OF FLORIDA
COUNTY OF PALM BEACH

Before the undersigned authority personally appeared Tyler Dixon who on oath says that she is **Classified Advertising Manager, Inside Sales** of The Palm Beach Post, a daily and Sunday newspaper published at West Palm Beach in Palm Beach County, Florida; that the attached copy of advertising, being a Notice in the matter of Intent to Issue Air Construction Permit in the --- Court, published in said newspaper in the issues of September 24, 1999.

Affiant further says that the said The Post is a newspaper published at West Palm Beach, in said Palm Beach County, Florida, and that the said newspaper has heretofore been continuously published in said Palm Beach County, Florida, daily and Sunday and has been entered as second class mail matter at the post office in West Palm Beach, in said Palm Beach County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she/he has neither paid nor promised any person, firm or corporation any discount rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

[illegible signature]

Sworn to and subscribed before this 24day of September A.D. 1999.

[illegible signature]

Personally known XX or Produced Identification ____________

Type of Identification Produced ____________

Karen McLinton
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Commission No. CC 591337
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BUREAU OF AIR REGULATION

NO. 605934
PUBLIC NOTICE
OF INTENT TO ISSUE
AIR CONSTRUCTION PERMIT
STATE OF FLORIDA
DEPARTMENT
OF ENVIRONMENTAL
PROTECTION

Revised Draft Permit No. 099-0568-001-AC (PSD-FL-266)
Lake Worth Generation, L.L.C.
186 MW Combined Cycle Gas Turbine Project
Palm Beach County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to Lake Worth Generation, LLC to install a nominal 186 MW dual fuel combustion turbine with supplementary-fired heat recovery steam generator (HRSG). The new electrical generating plant will be located within the boundaries of the existing Tom G. Smith Power Plant (owned by the City of Lake Worth) at 117 College Street in Lake Worth, Palm Beach County, Florida. A Best Available Control Technology (BACT) determination was required for particulate matter (PM/PM_{10}), nitrogen oxides (NOx), carbon monoxide (CO), sulfuric acid mist (SAM), and sulfur dioxide (SO_2) pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21. The applicant's mailing address is Lake Worth Generation, L.L.C., 245 Winter Street, Suite 300, Waltham, MA 02451. The authorized representative is Brian Chatlosh, Manager.

The Draft Permit authorizes construction of a General Electric Model PG7241 FA combustion turbine fired primarily with natural gas and low sulfur distillate oil as a backup fuel. The unit is capable of operating in simple cycle mode with a nominal hourly capacity of 186 MW of direct power generation. The unit may also operate in a combined cycle mode to recover waste heat in the HRSG and produce steam. The steam will be used to effectively re-power existing steam electrical generators S-3 and S-4 at the Tom G. Smith Power Plant to generate up to an additional 74 MW of power. This project will allow the City of Lake Worth to retire the boiler coupled with steam unit S-4 and avoid operation of the boiler coupled with steam unit S-3 as long as steam is available from the new Lake Worth Generation plant. The project includes a simple-cycle bypass stack that is 98-feet tall, a combined-cycle HRSG stack that is 150-feet tall, and an absorption or evaporative turbine inlet air cooling system.

Because potential emissions of NOx are greater than 250 tons per year, this new project is subject to the requirements for the Prevention of Significant Deterioration (PSD) of Air Quality in accordance with Rule 62-212.400, F.A.C. Based on the Draft Permit, the maximum potential emissions in tons per year are summarized in the following table. These totals do not account for any reductions in actual emissions that will be realized by retiring the boiler for steam unit S-4 nor the reduced operation of the boiler for steam unit S-3.

Pollutants	Maximum Potential Emissions	PSD Significant Emission Rate
CO	177	100
NOx	395	40
PM/PM_{10}	42/42	25/15
SO_2/SAM	54/9	40/7
VOC	16	40

The Department has determined that dry low-NOx combustion technology for gas firing and water injection for limited oil firing represents the Best Available Control Technology for this project. In consideration for displacing the operation the higher-emitting boilers at the Tom G. Smith Power Plant, the Draft Permit authorizes restricted steam injection for power augmentation and limited HRSG duct firing to ensure peak energy demands will be met. During these alternate methods of operation, slightly higher CO and NOx emissions are al-

in fourteen days of receipt
that notice, regardless of th
date of publication. A petitio
er shall mail a copy of the p
tition to the applicant at th
address indicated above
the time of filing. The failu
of any person to file a petitic
within the appropriate time p
riod shall constitute a waiv
of that person's right to r
quest an administrative dete
mination (hearing) under se
tions 120.569 and 120.5
F.S., or to intervene in th
proceeding and participate
a party to it. Any subsequer
intervention will be only at th
approval of the presiding off
cer upon the filing of a motio
in compliance with Rule 28
106.205 of the Florida Admir
istrative Code.
A petition that disputes th
material facts on which th
Department's action is base
must contain the following in
formation: (a) The name an
address of each agency a
fected and each agency's fil
or identification number,
known; (b) The name, ad
dress, and telephone numbe
of the petitioner, the name
address, and telephone num
ber of the petitioner's repre
sentative, if any, which sha
be the address for service
purposes during the course o
the proceeding; and an expla
nation of how the petitioner's
substantial interests will be af
fected by the agency determi
nation; (c) A statement of how
and when petitioner received
notice of the agency action or
proposed action; (d) A state
ment of all disputed issues o
material fact. If there are
none, the petition must so in
dicate; (e) A concise state
ment of the ultimate facts al
leged, including the specific
facts the petitioner contends
warrant reversal or modifica
tion of the agency's proposed
action; (f) A statement of the
specific rules or statutes the
petitioner contends require re
versal or modification of the
agency's proposed action;
and (g) A statement of the re
lief sought by the petitioner,
stating precisely the action
petitioner wishes the agency
to take with respect to the
agency's proposed action.

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

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

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dept. of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallhassee, Florida, 32301
Telephone: 850/488-0114

Dept. of Environmental Protection
Southeast District
400 North Congress Avenue
West Palm Beach,
Florida 33401
Telephone: 561/681-6600

Air Pollution Control Section
Palm Beach County
Health Department
901 Evernia Street
West Palm Beach,
Florida 33401
Telephone: 561/355-3070

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Source Review Section, or the

onstrated by continuous emissions monitor. The Draft Permit also allows the applicant the options of installing selective catalytic reduction for NOx control or an oxidation catalyst for CO control. More stringent emission standards will apply if optional control equipment is installed. The use of clean fuels, the inherently low emissions of this unit, and good combustion practices will control emissions of PM/PM_{10}, SAM, SO_2, and VOC.

An air quality impact analysis was conducted. Maximum predicted impacts due to proposed emissions from the project are less than the applicable PSD Class I and Class II significant impact levels. The Department will issue the Final Permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection.

If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition with-

Department's reviewing engineer for this project, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

PUB: The Palm Beach Post
September 24, 1999