THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



In the Matter of an Application for Permit by:

OGC CASE NO. 98-2966

Florida Power Corporation, Tiger Bay Cogeneration Facility DRAFT Permit No.: 1050223-002-AV Polk County, Florida

NOTICE OF WITHDRAWAL OF REQUEST FOR EXTENSION OF TIME

The Florida Power Corporation (FPC), by and through undersigned counsel, hereby withdraws its Request for Extension of Time to file a petition for formal administrative proceedings in accordance with Chapter 120, Florida Statutes. FPC filed its last Request for Extension of Time on May 27, 1999, in response to the "Intent to Issue Title V Air Operation Permit" (Permit No. 1050223-002-AV) for the Tiger Bay Cogeneration Facility located in Polk County, Florida, to negotiate certain changes in the draft Title V air operation permit with the Department of Environmental Protection (Department). Based on the FPC comment letter dated January 21, 1999, and subsequent discussions with Department representatives, FPC and the Department have come to an agreement on the issues involving the above-referenced draft Title V permit. The agreement between FPC and the Department is contained in the preliminary proposed Title V permit and two items of correspondence from the Department dated June 10, 1999, June 7, 1999, and June 21, 1999, respectively, copies of which are attached to this Notice.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing has been furnished to the following by

U.S. Mail on this 22 day of June, 1999:

Scott Sheplak Bureau of Air Regulation Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2600

Jonathan Holtom Bureau of Air Regulation Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2600

Doug Beason Office of General Counsel Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2600

6/23/99 cc-Jonathan Hollom

Therefore, FPC hereby withdraws its Request for Extension, conditioned upon the Department's issuance of the Final Permit in accordance with the Department's agreement with FPC.

Respectfully submitted this 22 day of June, 1999.

HOPPING GREEN SAMS & SMITH, P.A.

liming

Robert A. Manning

Fla. Bar No. 0035173

123 South Calhoun Street

Post Office Box 6526

Tallahassee, FL 32314

(904) 222-7500

Attorneys for Florida Power Corporation

RECEIVED

INTEROFFICE MEMORANDUM

Date: 07-Jun-1999 05:05pm From: J-Michael.Kennedy

J-Michael.Kennedy@fpc.com

Dept: Tel No: .IIIN 23 1999

BUREAU OF AIR REGULATION

To: HOLTOM J

(HOLTOM J@A1)

Subject: Manning Comments

Jonathan,

Robert had a few comments. See what you think.

Regarding the response letter to the FPC comments, Comment #13:

Did you also disagree with the second part of the comment regarding the inclusion of the excess emissions provisions of Part 60 (60.8(c), 60.11(c), and 60.43c(d))? Should these provisions be included in the excess emissions portion of the permit?

The version of the proposed permit determination e-mailed to you did not contain the lastest version of our response to comment 13. I have corrected the PPD and verified the appropriate changes in the permit.

Comment #18: No problem applying 60.335(a) to oil, but is it your position that it also applies to gas (no FBN in gas)?

No change was made because this condition applies to all fuels.

Regarding the draft permit:

Robert says that the unit is not referred to as an acid rain unit in the permit. I need to look to confirm, but it did become an acid rain unit when FPC purchased it in 1997.

Refer to Subsection A. Facility Description, 1st paragraph, last sentence.

Condition A.35: As written, the custom fuel monitoring schedule would begin anew when this permit becomes effective. Can we state that the schedule was effective on (whatever the date was)?

Added the following citation following specific condition A.35.: [Approved and effective December 6, 1994.]

Condition A.45: typo in first line - change t2 to "to".

Correction made.

Condition A.55: Should we remove the reference to the construction/PSD permit, since this provision was removed from that permit?

Reference was removed. This is still an NSPS requirement that applies if testing is not performed at 95-100% of capacity.

Condition A.58(a)2: Remove "either" from first line.

Correction made.

Condition A.60: Per permitting note in Condition A.4, the heat input capacity is not a limit. Should we reword this or delete?

This condition should stay as a means of requiring a compliance demonstration during testing.

Condition B.5: Not a big deal, but Robert thinks it would be cleanest if this condition referred the reader to Condition B.10 (to clarify what the applicable compliance methods are).

Cross-reference added.

That's finally it. I'll be out tomorrow, but back in Wed. afternoon. Thanks for working with us on this, and I'll talk to you later.

Mike

From:

<J-Michael.Kennedy@fpc.com>

To:

HGSSMAIL.HGSS(RobertM)

Date:

6/21/99 2:10PM

Subject:

Changed language to Tiger Bay Proposed Permit

RECEIVED

JUN 23 1999

BUREAU OF AIR REGULATION

Robert,

Attached is the changed language in the Tiger Bay permit reflecting the change in the acid rain affected unit. I think you have all the other correspondence. Let me know if you need anything else to withdraw the request for extension of time. Thanks.

Mike

Forward Header

Subject: Changed language to Tiger Bay Proposed Permit

Author: Jonathan.Holtom (Jonathan.Holtom@dep.state.fl.us) at internet

Date: 6/21/99 2:11 PM

Mike.

As requested. Let me know if you need anything else. Jonathan.

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of a single combustion turbine (CT) that exhausts through a heat recovery steam generator (HRSG). The facility is permitted to combust natural gas as the primary fuel and distillate fuel oil as back-up fuel. However, the fuel oil capability has yet to be installed. The facility also operates a zero liquid discharge (ZLD) system which provides treatment of process wastewater and exhausts through a baghouse for the control of particulate matter. The total combined capacity of the facility is 269.5 megawatts. A nominal 184 megawatts are provided by the combustion turbine. In addition a nominal 85.5 megawatts are provided by a steam generator. This facility is regulated under Acid Rain Phase II.

TO:

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of a single combustion turbine (CT) that exhausts through a heat recovery steam generator (HRSG). The facility is permitted to combust natural gas as the primary fuel and distillate fuel oil as back-up fuel. However, the fuel oil capability has yet to be installed. The facility also operates a zero liquid discharge (ZLD) system which provides treatment of process wastewater and exhausts through a baghouse for the control of particulate matter. The total combined capacity of the facility is 269.5 megawatts. A nominal 184 megawatts are provided by the combustion turbine. In addition a nominal 85.5 megawatts are provided by a steam generator. Emissions unit -001 is regulated under Acid Rain Phase II.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

RECEIVED

MAY 13 1999

FLORIDA POWER CORPORATION (TIGER BAY COGENERATION),

BUREAU OF AIR REGULATION

Petitioner,

vs.

OGC CASE NO. 98-2966

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondent.

ORDER GRANTING REQUEST FOR EXTENSION OF TIME TO FILE PETITION FOR HEARING

This cause has come before the Florida Department of Environmental Protection (Department) on receipt of a request made by Petitioner, Florida Power Corporation (Tiger Bay Cogeneration), to grant an extension of time to file a petition for an administrative hearing on Application No. 1050223-002-AV. See Exhibit 1.

Respondent, State of Florida Department of Environmental Protection, has no objection to it. Therefore,

IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until June 1, 1999, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this 10th day of May, 1999, in Tallahassee, Florida.

> STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

deneral Counsel

Douglas Building, MS #35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314

CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to:

W. Jeffrey Pardue, C.E.P. Director, Environmental Services Department Florida Power Corporation Post Office Box 14042 St. Petersburg, FL 33733-4042

on this 12 day of May, 1999.

5/13/99 cc-Poss Pollock

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

W. DOUGLAS B Assistant-General Counsel Florida Bar No. 379239

Mail Station 35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314



April 30, 1999

Ms. Kathy Carter
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000

Re: Florida Power Corporation, Tiger Bay Cogeneration Facility

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air

Operation Permit

Draft Permit No. 1050223-002-AV

Dear Ms. Carter:

On October 30, 1998, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit. A review of the permit conditions has revealed that several issues need to be resolved. Accordingly, FPC requests an enlargement of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including June 1, 1999, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial.

If you should have any questions, please contact Scott Osbourn at (727) 826-4258, or Robert Manning at Hopping Green Sams & Smith, P.A. at (850) 222-7500.

Sincerely,

Robert A. Manning, Esq.

Hopping Green Sams & Smith

cc: Scott Sheplak, DEP

Doug Beason, DEP OGC

115215.1

RECEIVED

AIR REGULATION

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

FLORIDA POWER CORPORATION (TIGER BAY COGENERATION),

Petitioner,

vs.

OGC CASE NO. 98-2966

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Respondent, State of Florida Department of Environmental Protection, has no objection to it. Therefore,

IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until July 1, 1999, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this May of June, 1999, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

F. PERRY ODOM General Counsel

Douglas Building, MS #35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314

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I CERTIFY that a true copy of the foregoing was mailed to:

W. Jeffrey Pardue, C.E.P. Director, Environmental Services Department Florida Power Corporation Post Office Box 14042 St. Petersburg, FL 33733-4042

on this day of June, 1999.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

W. DOUGKAS BEASON
Assistant General Counsel
Florida Bar No. 379239

Mail Station 35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314



May 27, 1999

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE: Florida Power Corporation, Tiger Bay Cogeneration Facility

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

Draft Permit No. 1050223-002-AV

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If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Doug Beason, DEP OGC



April 30, 1999

RECEIVED

MAY U.3 1999

BUREAU OF AIR REGULATION

Ms. Kathy Carter
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000

Re:

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If you should have any questions, please contact Scott Osbourn at (727) 826-4258, or Robert Manning at Hopping Green Sams & Smith, P.A. at (850) 222-7500.

Sincerely,

Robert A. Manning, Esq.

Hopping Green Sams & Smith

cc: Scott Sheplak, DEP

Doug Beason, DEP OGC

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RECEIVED

APR 2 1 1999

BUREAU OF AIR REGULATION

April 20, 1999

Mr. Jonathan Holtom Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, Florida 32399-2400

Dear Mr. Holtom:

Re: Tiger Bay Title V Information

As we discussed, I have enclosed the additional information requested for the processing of the Tiger Bay Title V permit. Included are the startup/shutdown procedure, the custom fuel monitoring schedule documentation, and information regarding emissions from the auxiliary steam boiler.

Please contact me at (727) 826-4334 if you have any questions.

4/01/99 cc: Jonathan Hollom

Sincerely,

J. Michael Kennedy, Q.E.P. $^{\prime}$

Manager, Air Programs

PLANT STARTUP/SHUTDOWN PROCEDURE TIGER BAY COGEN

(COLD) soft start PRE-START CHECKLIST

- 1. Run a scan and alarm check status VIA the DCS / check active clearance log for tags.
- 2. A. Put cooling water systems in service, 1 (one) aux. pump and 2 (two) main cooling water pumps. Insure all are in auto and standby status.
 - B. Put all cooling tower fans in auto (MF-001A,B,C & D).
 - C. Insure instrument air compressor is in service.
 - D. BFW pumps aux. lube oil pumps are in service (MP-001A & B).
 - E. Both hotwell pumps are in service.
 - F. LIC-03900 in manual & closed (polished water valve).
 - G. Align condensate return system and put 1 (one) return pump in service.
 - H. Insure 1 (one) service water pump is in service (MP-007A & B).
 - I. Insure GTG Fire Protection system is in service.
 - J. Verify electrical system lineup SOP section 7.
 - K. Verify raw water system lined up SOP section 10 & 12.
- 3401 L. "A" of is ok, refer to section 10.
- 3204 M. ("C" Inst. Air) section 12.
- N. Service water section 12.

3304

- O. Verify fire system lineup, section 14.
- P. Verify condensate system lineup SOP section 9.

- Q. Verify BFW system lineup SOP section 9.
 - R. Verify chemical feed lineup SOP section 8.
 - S. Verify recycle sump and waste water system lined up SOP section 12.
- 3100 3. Adjust HP drum level to –18 inches.
- 3101 4. Adjust LP drum level to –14 inches.
- 3303 5. Adjust HOTWELL level to 75%.
 - 6. Align boiler feedwater valving. Verify lineup.
 - 7. Align boiler steam valving. Verify HRSG lineup SOP section 4.

HP STEAM DISTRIBUTION

- 3300 8. A. Hp vent PIC-03301 in manual at 100% open with set point of 1450.
 - B. MV-03309 open (HP block valve to condenser).
 - C. MV-03349 open (warm up valve for MV-03309).
 - D. PIC-03306 in manual closed with set point of 1470 psig (HP dump to condenser).
 - E. TIC-03352 in auto with set point of 390°F (HP & STG admission steam).
 - F. Trip to vent selected.
- 3301 9. A. LP vent PIC-03401 in manual at 100% open with set point at 228.
 - B. MV-03409 open (LP block valve to condenser).
 - C. MV-03449 open (warm up valve for MV-03409).
 - D. PIC-03406 in manual closed with set point of 218 psig (LP dump to condenser).

- E. TIC-03452 in auto with set point of 300°F (LP & STG admission steam).
- F. Trip to vent selected.
- G. SC-03609 closed (Hogger valve).
- 3100 10. A. MV-01162 in auto (attemperator block valve).
 - B. TIC-01161 in auto with set point of 1001°F (HP attemp. to throttle steam).
 - C. LC-01025A in manual with level at -18.

LP BOILER

3101 11. A. LC-01035A or B in manual with level at -14.

STEAM SALES

- 3103 12. A. PIC-01440 in manual & closed with set point of 40 psig (sales pressure control).
 - B. FIC-01435 in manual & closed (sales to host, USAC).
 - C. TIC-01430 in auto with set point of 317°F (sales attemp. to USAC).
- D. MV-01429 open (down stream to USAC).

GTG PRE-START

- 13. A. Verify GTG on turning gear 24 hours.
 - B. Verify GTG H₂ in service for minimum of 3 hours.
 - C. Verify fuel gas properly aligned section 11.
 - D. All red tags cleared.

STG PRESTART

- 14. A. STG auxiliaries in service (lube oil, hydraulic pumps, vapor extractor & demister).
 - B. STG on turning gear for 24 hours & MOV drains open in auto.
 - C. The steam exhaust drain (MOV) & steam seal header drain (MOV) in manual and open.

D. All red tags are cleared.

JUST BEFORE START-UP

- 15. A. Verify switchyard lineup.
 - B. Close ATB-003 and insure that the GTG synch switch is in auto.
 - C. Reset all alarms on the IOS & EX2000 systems. (NOTE) 2 (two) depresses are required to reset either of these systems.
 - D. Inspect the trip devices in the BAC, notify operations supervisor if these devices are tripped. (41AC# & 41AC#2)
 - E. Verify there are no tripped protective relays on GTG (PEECC).
 - F. Verify there are no tripped protective relays on STG (DPU ROOM).
 - G. Verify there are no tripped protective relays on PRP-003 (synch panel in control room).

DURING START-UP

- 1. With soft start selected the following start conditions will be in place:
 - A. Instead of immediate opening, the IGVs will open slowly at FSNL. Approx. ½ hour to open.
 - B. Upon synchronization to grid unit will remain at min load (10 mw) for 1 hour before load can be raised.
 - C. The load ramp rate after the warmup is limited to 1 mw/min.
- 2. Our current Air Permit requires that pre-mix mode be reached in 2 hours.
 - A. Review the NOx logs after 90 minutes and determine whether an exceedance may occur.
 - B. Notify the Environmental Services Department (ESD)of potential exceedance.
 - C. If exceedance occurs, provide ESD a full report ASAP.

(COLD) PLANT STARTUP

- 1. Reset the diagnostic alarms via the Mark V (pg.3).
- 2. Reset the Mark V alarm display.
- 3. Initiate a GTG master reset via the Mark V. Check the start check logic display and verify a ready to start. If not ready to start see start check logic alarms on attachment I.
- 4. Initiate a GTG start (on the GTG main display/master select put unit in auto then select start/execute command. If sync hold required place sync switch in manual.
 - A. Insure bridge blower is on in PEECC (outside operator).
 - B. The unit will start a purge cycle which will take approximately 16 minutes, at 800 rpms. After the purge cycle the unit will back down to about 500 rpms, then unit will fire, then go to full speed no load (for 30 minutes then unit will go to 10MW's for 1 hour) (soft start auto after 50 hours).
- 5. When water is needed, start 1 (one) BFW pump (MP-002A/B) and put them both in auto. (Insure that LC01025 & LC1035 are in manual and closed or BFW pump will shut down on low discharge pressure). Control these valves in manual until the drums are lined out. Have outside operator start chemical pumps and verify correct pump rates.
- 3203 6. When 25# has been reached on the HP & LP drums, close the superheater drains (drains can be closed as soon as there is no water coming out).
 - 8. Put fuel gas heater in service by putting LIC02981 in auto with a set point at 19" and putting TIC02980 in auto with set point of 130°F.
 - 9. At this time keep a close eye on drum levels if the HP drum level is getting close to a positive 9 or 10 you need to open your HP cascading blowdown to about 100% to the LP drum in order to bring level down. If LP reaches a positive 6 or 7 open LP blowdown (opening the HP blowdown may help

increase the temperature and pressure on LP in order to start steam seals, gland exhauster and Hogger for pulling a vacuum sooner).

- 10. When the LP drum pressure and temperature reaches 100psig & 300°F put your steam sales (3 to 4 psig), gland exhauster (6 to 8"), main steam to Hogger and Hogger ejector (knife valve).
- When the knife valve is open put the air evacuation and Hogger in service by opening SV03609 on LP steam dist.
 - 11. Once vacuum is obtained on the condenser, close the knife valve, shut the Hogger off by closing SV03609 from DCS. At this time you can start dumping steam to the condenser via PIC03306 & PIC03406, open valves slowly. Once these systems are stable put in auto.

STG START-UP

- 1. Initiate a reset of the STG static voltage regulator (in DPU room).
- 2. Initiate a STG reset via the Mark V.

3300

- A. Enable STG trip.
- B. Select Trip to bypass.
- 3. On STG Mark V control screen enter the following:
 - A. Load control set point 18% (after transfer, increase to desired set point).
 - B. Load ramp set point 10%.
 - C. Select IPC out.
 - D. IPC set point at 1450psi.
 - E. Admission control set point 190psi.
 - F. Flow control set point at 20%.
- 4. On STG Mark V startup screen enter the following:
 - A. Select 3600 rpm.
 - B. Select ramp rate (slow-med-fast).
 - C. Select manual or auto.
 - D. If manual is selected and you don't want any holds on select holds off. If in auto with hold on you are waiting for even temperature throughout turbine, or lube oil temp to reach 110°F.
 - E. In auto select begin start.

SYNCH

- 1. Bring STG to full speed/no load (monitor STG exhaust hood temp. Adjust as needed use bypass as necessary. 135° alarm).
- 2. Put synch switch in auto in DPU room. After LB002 is closed put synch switch back in off position. Make sure STG has transferred from full to partial arc, then increase load on GTG to 40 MWs and increase load on STG to 20 MWs as soon as possible.

LOADING

- 1. Before loading make sure set points are set as in step 3 on previous page.
- 2. When all systems are lined out, start increasing load on GTG by 10 MWs at a time until 80 MWs has been reached, then go to 110 MWs so transfer from Piloted Premix mode to PREMIX STEADY STATE has been achieved, then continue at 10 MWs until Base load has been achieved.
- 3. Start increasing flow set point by 10% until set point reaches 128% (can be done as you increase the GTG to Base load).
- 4. Increase the set point on your HP & LP vents to 1490 on HP and 225 on LP.
- 5. After both GTG & STG are line out raising set points on HP & LP boiler to 0.0 slowly.
- 6. After units are at Base load, put inlet bleed heat in service via the Mark V.
- 7. All systems should be running normally at this time. Have outside operator do final walk around and make sure everything outside is normal.

STG TRIP

- 1. Check alarms, if reset is possible ensure vacuum is maintained on condenser.
- 2. Stabilize both HP & LP vents to atmosphere by diverting steam to condenser.
- 3. Insure BFW pump is running, if not restart it by:
 - A. Placing PIC-03306 & PIC-3406 HP & LP level control valves in manual and close them.
 - B. Insure Hotwell pumps are running.
 - C. Insure Hotwell level is adequate.
 - D. Start BFW pump.
 - E. Reduce HP & LP level set points to −10 and put them in auto.
- 4. Put LIC-03306 and LIC-03406 HP & LP level control valves stabilized by placing them in manual and opening them to 25%.
- 35015. If necessary stabilize Hotwell level by diverting water to polished water tank using LIC-3900 on polished water screen.
 - 6. Reduce load on GTG (lower load to 100MWs).
 - 7. Reset STG, if you intend to reload unit following the STG start up procedure.

PLANT SHUTDOWN

- 1. Notify FPC & USAC that plant will be shutting down.
- 2. Stop steam sales to USAC by putting:
 - A. FIC-01435 in manual and closed.
 - B. PIC-01440 in manual and closed.
 - C. MV-01429 in manual and closed.
- 3. Initiate a controlled shutdown on GTG via the Mark V and monitor the turbine as it sheds load. * Insure air compressor starts in auto, if instrument and service air falls below 100psi start it automatically and notify maintenance.
- 4. Via the STG Mark V unit control select Auto Mode on the STG turning gear interface, enable IPC out, and enter a load set point of 10% and flow set point of 20%.
- 5. Enable GEN MW CONTROL with a set point of (2) on the STG control screen.
- 6. Monitor HP & LP drum levels and keep them close to normal during cool down until drums are depressurized.
- 7. Stop condensate return from USAC.
- 8. When the STG reaches (2) MWs trip the unit by pressing the E-stop. Verify that LB-002 opens on the PRP-003 in the control room.
- 9. Remove HP & LP cascading blowdown from service.
- 10. Verify the GTG goes on turning gear after coastdown.
- 11. At 300 rpm's on the STG break vacuum by securing steam to Hogger and opening the knife valve. Once you reach atmospheric pressure you can remove steams seals and gland exhauster.
- 12. Verify that the STG goes on turning gear after coastdown.
- 3303 13. Close SV-0537 (hood spray bypass) it will open automatically upon trip but requires an operator action to close.

- 14. STG L/O should be adjusted to maintain 90° .
- 15. Shut one (1) main cooling water pump off.



Department of Environmental Protection

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

Virginia B. Wetherell Secretary

December 2, 1994

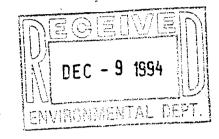
CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Robert S. Chatham Senior Environmental Engineer Destec Energy, Inc. Post Office Box 4411 Houston, Texas 77210-4411

RE: Amendment to Construction Permit
NSPS Custom Fuel Monitoring Schedule
Tiger Bay Limited Partnership
Tiger Bay Cogeneration Facility
AC 53-214903 [PSD-FL-190(A)]

Dear Mr. Chatham:

The Department has reviewed your August 3, 1994 request, with supporting data and additional data submitted on September 9 and 22, 1994, for an NSPS Custom Fuel Monitoring Schedule. The schedule would only apply to a monitoring schedule for sulfur dioxide (SO₂) and nitrogen oxide (NO $_{\mathbf{x}}$) when natural gas is being fired at the subject facility (refer to Attachment No. 1). The facility is required by the permit to comply with Subpart GG of the New Source Performance Standards (NSPS), 40 CFR 60. For sources utilizing pipeline quality natural gas, 40 CFR 60.334(b) and 40 CFR 60.334(b)(2) state that a custom fuel monitoring schedule, if supported by data which demonstrates compliance with NSPS emission limits, may be approved by the Administrator of EPA. This authority has been delegated to EPA's regional offices and a copy of the subject request was jointly submitted to EPA Region IV for a determination. The Department received a letter from EPA on October 12, 1994, stating that a custom fuel monitoring schedule for this facility was acceptable, if it complied with all items of the attachment to the custom fuel monitoring guidance memo issued by EPA Headquarters on August 14, 1987 (Refer to Attachment No. 2). from a minimum of three sampling events for six consecutive months were provided by the permittee, which demonstrated consistent compliance with the allowable sulfur dioxide emissions limits specified under 40 CFR 60.333 and this permit. Therefore, upon issuance of the amended permit, the permittee shall begin monitoring the sulfur content of natural gas as specified in 2.b. of the Custom Fuel Monitoring Schedule for Natural Gas. In accordance with the EPA determination, the permit Specific Conditions will be amended as follows:



"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Mr. Robert S. Chatham AC 53-214903 [PSD-FL-190(A)] December 2, 1994 Page 2 of 5

I. Specific Condition Number;

18. From

Sulfur and nitrogen content and lower heating value of the fuel being fired in the combustion turbines shall be determined as specified in 40 CFR 60.334(b). Any request for a future custom monitoring schedule shall be made in writing and directed to the Southwest District office. Any custom schedule approved by DEP pursuant to 40 CFR 60.334(b) will be recognized as enforceable provisions of the permit, provided that the holder of this permit demonstrates that the provisions of the schedule will be adequate to assure continuous compliance. The records of distillate fuel oil usage shall be kept by the company for a two-year period for regulatory agency inspection purposes. For sulfur dioxide, periods of excess emissions shall be reported if the fuel being fired in the gas turbine exceeds 0.05 percent sulfur by weight.

<u>To</u>

This source shall be in compliance with all requirements of 40 CFR 60, Subpart GG (Standards of Performance for Stationary Gas Turbines), 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), and Rule 62-296.800(2)(a), F.A.C. (Standards of Performance for New Stationary Sources (NSPS)).

A. Natural Gas

Pursuant to 40 CFR 60.334(b)(2), a custom fuel monitoring schedule shall be followed for the natural gas fired at this facility and shall be as follows:

Custom Fuel Monitoring Schedule for Natural Gas (NG)

 Monitoring of fuel nitrogen content shall not be required when NG is the only fuel being fired in the turbines.

2. Sulfur Monitoring

a. Analysis for fuel sulfur content of the NG fired at this facility shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are ASTM D1072-80, ASTM D3031-81, ASTM D3246-81, and ASTM D4084-82, as referenced in 40 CFR 60.335(b)(2).

Mr. Robert S. Chatham
AC 53-214903 [PSD-FL-190(A)]
December 2, 1994
Page 3 of 5

- b. This custom fuel monitoring schedule shall become effective on the date this permit is amended. Effective the date of this custom schedule, sulfur monitoring of NG fired at the facility shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.
- c. If, after the monitoring required in item 2(b) above, or herein, the sulfur content of the NG fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333 and in this permit, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.
- d. Should any sulfur analysis, as required in items 2(b) or 2(c), above, indicate noncompliance with 40 CFR 60.333 or this permit, the owner or operator shall notify the Department of such excess emissions and the custom schedule shall be re-examined by the Environmental Protection Agency. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
- 3. If there is a change in fuel supply, the owner or operator must notify the Department of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
- 4. Records of sample analysis and fuel supply pertinent to this custom fuel monitoring schedule for NG shall be retained for a period of five years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

B. <u>Distillate Fuel Oil</u>

The records of distillate fuel oil usage shall be kept by the company for a five-year period for regulatory agency inspection purposes. For sulfur dioxide, periods of excess emissions shall be reported if the distillate fuel oil being fired in the gas turbine exceeds 0.05 percent sulfur content, by weight.

Mr. Robert S. Chatham AC 53-214903 [PSD-FL-190(A)] December 2, 1994 Page 4 of 5

II. Attachments to be Incorporated;

- Destec letter received September 12, 1994.
- FDEP letter dated August 18, 1994.
- U.S. EPA letter received October 12, 1994.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

- (a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the amendment request/application have the right to petition to become a party to the proceeding. The petition must conform to the

Mr. Robert S. Chatham
AC 53-214903 [PSD-FL-190(A)]
December 2, 1994
Page 5 of 5

requirements specified above and be filed (received) within 14 days of receipt of this amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

This letter amendment must be attached to Construction Permit, No. AC 53-214903 [PSD-FL-190(A)], and shall become part of the permit.

Sincerely,

Howard L. Rhodes

Director

Division of Air Resources

Management

HLR/cl/b

Attachments

cc: G. Kissel, SWD

- J. Harper, EPA
- J. Bunyak, NPS
- K. Kosky, KBN

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this AMENDMENT and all/copies were mailed by certified mail before the close of business on $\sqrt{2/6/944}$ to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to 120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is

hereby acknowledged.

Clark

D4+4/

Florida Power Corporation Tiger Bay Facility Auxiliary Boiler Information

The Tiger Bay auxiliary boiler is a small (65 bhp), natural gas-fired steam boiler. Please refer to the attached data sheet for additional information.

Maximum potential annual NOx emissions

Maximum heat input: 2.8 mmBtu/hr

Natural gas heat content: 1050 Btu/cf

NOx emission factor: 170 lb/mmscf (maximum gas-fired boiler emission

factor from AP-42)

2,800,000 Btu/hr * 1/1050 Btu/cf * 170 lb/mmscf * 10⁶ * 8760 hr/yr = 3,971 lb = 1.98 tons

The maximum potential NOx emissions are therefore approximately 2 tons/year, so the auxiliary boiler qualifies as an insignificant source under Title V.

BEST AVAILABLE COPY

Unit Nameplate:

Va Power Watertube Steam Boiler Vapor Canada Ltd. 3955 Courtrai Ave. Montreal 249 Quebec

Spec No.: 78502 087 Model No.: HS2 4617 VHL

Main Burner: Natural gas Pilot Burner: Natural gas

Main Burner Input: Max 2,800,000 btu/hr

Pilot Burner Input: 40,000 btu/hr

Main Power Supply: 575V, 60 Hz, 5A, 3 ph.

Controls: 120V, 60 Hz, 10A, 1ph.

Max. WP. 300 psi

Bhp

65

Heating Surface: 107 sq.ft.

Min. clearance to combustible materials

Front:

48"

Top:

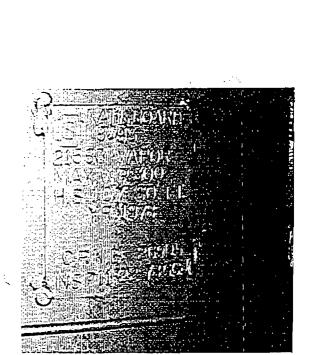
48″ 18″

Flue: Sides:

R - 12", L - 36"

National Board Certification:

S stamp
NAT'L BOARD 8493
21583 VAPOR
MAX W.P. 300
H.S. 107 SQ.FT.
YR 1978
C.R.N.B. 2690.5
INSP.11-22-78 G.C.J.



FVR1A.doc Gryphon Int'l Engineering FLORIDA POWER CORP - TIGER BAY FACTORY VISIT REPORT 1

Page 3 2.24.99

66/77/70



March 18, 1999

RECEIVED

MAR 26 1999

BUREAU OF AIR REGULATION

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE:

Florida Power Corporation, Tiger Bay Cogeneration Facility

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

Draft Permit No. 1050223-002-AV

On October 30, 1998, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit. A review of the permit conditions has revealed that several issues remain to be resolved. Accordingly, FPC requests an extension of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including May 1, 1999, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties' mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial.

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

habest A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Jeffrey Brown, DEP OGC

GENERAL OFFICE: 3201 Thirty-fourth Street South • P.O. Box 14042 • St. Petersburg • Florida 33733 • (813) 866-5151

A Florida Progress Company

RECEIVED

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

MAR 1 0 1999

FLORIDA POWER CORPORATION (TIGER BAY COGENERATION),

BUREAU OF AIR REGULATION

Petitioner,

vs.

OGC CASE NO. 98-2966

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondent.

ORDER GRANTING REQUEST FOR EXTENSION OF TIME TO FILE PETITION FOR HEARING

This cause has come before the Florida Department of Environmental Protection (Department) on receipt of a request made by Petitioner, Florida Power Corporation (Tiger Bay Cogeneration), to grant an extension of time to file a petition for an administrative hearing on Application No. 1050223-002-AV. See Exhibit 1.

Respondent, State of Florida Department of Environmental Protection, has no objection to it. Therefore,

IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until April 1, 1999, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this 5th day of March, 1999, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

F PERRY ODOM General Counsel

Douglas Building, MS #35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314

CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to:

W. Jeffrey Pardue, C.E.P. Director, Environmental Services Department Florida Power Corporation Post Office Box 14042 St. Petersburg, FL 33733-4042

on this <u>full</u> day of March, 1999.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

W. DOUGLAS ELASON

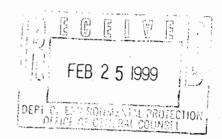
Assistant General Counsel Florida Bar No. 379239

Mail Station 35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314

BEST AVAILABLE COPY



February 23, 1999



Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE: Florida Power Corporation, Tiger Bay Cogeneration Facility

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

Draft Permit No. 1050223-002-AV

On October 30, 1998, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit. A review of the permit conditions has revealed that several issues remain to be resolved. Accordingly, FPC requests an extension of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including April 1, 1999, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties' mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial.

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP Doug Beason, DEP OGC



MAR UZ 1999

BUREAU OF AIR REGULATION

February 24, 1999

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

Dear Mr. Fancy:

Re: Status of Title V Permits

BAR conference room

March 17 (10-12 noon

1-3 p.m.

As you know, several of Florida Power Corporation's (FPC) Title V permits remain in the Initial Draft or Revised Draft stages and progress is being made very slowly. This is no one's fault in particular, it's difficult to establish any momentum when the involved parties are processing so many permits and some of the issues (e.g., periodic monitoring) are moving targets. As you and Mr. Scott Osbourn recently discussed, it may be helpful if all involved parties at FPC and the Department were to meet at one time to discuss any remaining unresolved issues.

FPC proposes, with your concurrence, to arrange for a one- or two-day meeting between FPC and the Department to resolve issues associated with the following Title V permits that remain in either the Initial Draft or Revised Draft stage: Anclote, Bartow, Crystal River, Suwannee, Tiger Bay, Bayboro and the University of Florida. It would be desirable to have you, Scott Sheplak and the permit engineers responsible for these facilities in attendance. Mr. Scott Osbourn and I will represent FPC.

It is FPC's desire to advance these Title V permits to the Final Permit stage as expeditiously as possible. FPC has recently requested additional extensions of time on the above-mentioned permits until April 1, 1999 and would like to resolve these permits prior to that date. We will contact you in the next day or two to coordinate a meeting date. If you should have any questions in the meantime, please contact either Scott Osbourn at (727) 826-4258 or me at (727) 826-4334.

processor Sincerely, mike Andote See responses to

KPC comments for

Baiton or CrystM

River for

Consistency J. Mohartha Baiton J. Michael Kennedy, Q/E.P. Manager, Air Programs CC: Scott Sheplak Doug Beason, OGC

Jeffrey Brown, OGC Bay Lovo Robert Manning, HGS&S



FEB 25 1999

BUREAU OF AIR REGULATION

February 23, 1999

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE:

Florida Power Corporation, Tiger Bay Cogeneration Facility

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

Draft Permit No. 1050223-002-AV

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If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Doug. Beason, DEP OGC;

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

RECEIVED

FLORIDA POWER CORPORATION (TIGER BAY COGENERATION),

rEB 09 1999

BUREAU OF AIR REGULATION

Petitioner,

vs.

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Respondent.

ORDER GRANTING REQUEST FOR EXTENSION OF TIME TO FILE PETITION FOR HEARING

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Respondent, State of Florida Department of Environmental Protection, has no objection to it. Therefore,

IT IS ORDERED:

. .

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until March 1, 1999, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this 5th day of February, 1999, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

F. PERRY ODOM General Counsel

Douglas Building, MS #35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314

CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to:

W. Jeffrey Pardue, C.E.P.
Director, Environmental Services Department
Florida Power Corporation
Post Office Box 14042
St. Petersburg, FL 33733-4042

on this ____ day of February, 1999.

a/n/99: Poss Pollock

. .

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

W. DOUGLAS (BEXEON Assistant General Counsel

Assistant General Counse Florida Bar No. 379239

Mail Station 35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314



06C 98-2966

January 27, 1999

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RF.

Florida Power Corporation, Tiger Bay Cogeneration Facility

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

Draft Permit No. 1050223-002-AV

On October 30, 1998, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit. A review of the permit conditions has revealed that several issues remain to be resolved. Accordingly, FPC requests an extension of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including April 1, 1999, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties' mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial.

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Jeffrey Brown, DEP OGC

GENERAL OFFICE

13) 988 5151



January 27, 1999

RECEIVED

JAN 29 1999

BUREAU OF AIR REGULATION

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE:

Florida Power Corporation, Tiger Bay Cogeneration Facility

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit.

Draft Permit No. 1050223-002-AV

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If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Jeffrey Brown, DEP OGC



JAN 27 1999

BUREAU OF AIR REGULATION

January 21, 1999

Scott Sheplak, P.E.
Bureau of Air Regulation
Division of Air Resources Management
Department of Environmental Protection
2600 Blair Stone Road, MS 5505
Tallahassee, FL 32399-2400

Dear Mr. Sheplak:

Re: T

Tiger Bay Cogeneration Facility

Draft Title V Permit No.: 1050023-002-AV

Florida Power Corporation (FPC) is providing comments related to the draft Title V permit dated October 27, 1998. Our comments are directed at specific conditions for the facility and emissions units. The comments are presented below in the same order as the conditions appear in the initial draft permit. FPC has filed a Request for Extension of Time until February 1, 1999. In this regard, if we are unable to resolve each of the issues described below before this time, FPC intends to file an additional Request for Extension. Accordingly, at your earliest convenience after reviewing this letter, please contact me at (727) 826-4258 to discuss.

- 1. Page 2. The Title V application (Facility Regulatory Classification) indicated that the facility was not a major source of HAPs. To the best of our knowledge, the facility classification has not changed.
- 2. Page 3. Brief Description of Unregulated Units. FPC requests that the units described as unregulated (i.e., internal combustion engines, emergency generator, and fresh water cooling towers) be re-classified as insignificant.
- 3. Page 7. Description. First Paragraph. The model number listed in line 2 for the combustion turbine should be MS7221 FA. The MS7001 FA is the general model classification made by General Electric. The HRSG was not manufactured by GE, as stated in line 4. Since the HRSG is not an emissions unit, it is not necessary to include a vendor designation. Also, all references to a duct burner, fuels for a duct burner, and emissions from the HRSG because of a duct burner, should be deleted as the duct burner has been physically removed.

- 4. Page 7. Second Paragraph. The flow rate listed in the paragraph (4th line) is for distillate oil; the flow rate listed in the application is 1,072,001 acfm. It should be noted the flow and other parameters change as a result of load and turbine inlet temperature. These data were included in the original construction permit application. It is suggested that these data be so qualified. Also, for your information, the statement that the emissions from the CT are controlled with DLN 2.6 will be accurate when the permit becomes effective; FPC has ordered this equipment and will have it installed in 1999.
- 5. Page 7. Condition A.3. This Condition should be deleted because it does not impose any existing requirement; it simply states that a "modification" to the unit will subject it to the NSPS requirements.
- 6. Page 8. Condition A.4. This Condition should clarify that the heat input is dependent upon the ambient temperature in accordance with manufacturer's curves. Also, as stated above, the reference to the duct burner should be deleted.
- 7. Page 8. Condition A.6.a. The description of the distillate fuel should be changed from "New" to "distillate fuel oil." This would be consistent with the terminology in the PSD/BACT permit that did not characterize the distillate oil as either "new", "No. 2" or "low sulfur." The latter comment applies to Condition A.6.b. Also, the third and fourth sentences of Condition A.6.a should be deleted: as stated above, the HRSG does not contain a duct burner, and the pre-construction requirements are redundant with Appendix TV-1.
- 8. All citations to the BACT as authority for a permit condition should be deleted because the BACT is simply the basis for the PSD permit. The PSD permit is appropriately listed, and is sufficient authority.
- 9. Pages 9-11. Conditions A.12, A.15, A.19, A.22, A.25, and A.28 should be deleted because the HRSG does not contain a duct burner.
- 10. Page 10. Condition A.20. The phrase "at full load conditions" should be added to this condition as was done in Condition A.21. This terminology is consistent with the PSD permit conditions.
- 11. Pages 10 and 11. In the Title V application, FPC requested that the Conditions for sulfuric acid mist, listed in Conditions A.26., A.27., and A.28, be deleted from the Title V Permit. These conditions were added to the original PSD Permit for the Tiger Bay Cogeneration Facility, as was common practice for other similar facilities at the time of permitting. These conditions are currently obsolete and no longer included in PSD permits for combustion turbines firing natural gas and distillate oil.
- 12. Page 11. In the Title V application, FPC requested that the conditions for mercury, arsenic, beryllium and lead, listed in Conditions A.31 through A.34, be deleted from the Title V Permit. These conditions were added to the original PSD Permit for the Tiger Bay Cogeneration Facility, as was common practice for other similar facilities at the

time of permitting. These conditions are currently obsolete and no longer included in PSD permits for combustion turbines firing natural gas and distillate oil. In addition, arsenic and beryllium have been deleted from the list of PSD Significant Emission Rates, by the Department. This request is consistent with Department guidance (DARM-PER/GEN-18).

- 13. Page 11. Condition A.35. In accordance with the attached start-up curve, FPC requests that this unit be specifically authorized to have excess emissions for 3 hours (rather than 2 hours) in any 24-hour period, unless specifically authorized by the Department for longer duration. Also, the pertinent excess emission provisions of 40 CFR Part 60 should be included in this section of the permit, i.e., §§ 60.8(c), 60.11(c), and 60.43c(d).
- 14. Page 12. Condition A.39. This Condition is identical with Condition A.37 and therefore should be deleted.
- 15. Page 12. Condition A.41. This condition should be replaced with the Custom Fuel Monitoring Schedule issued by the Department and dated December 2, 1994 (attached).
- 16. Page 13. Condition A.43. The reference to 40 CFR Part 75 on line 5 should be put into context with Part 60 and the word "or" should be added. The following is suggested: "(July 2, 1992) or 40 CFR Part 75, whichever is more stringent." Also, the last sentence of this Condition should be deleted because it does not appear in the PSD permit.
- 17. Page 14. Condition A.46. The references to annual testing for VOCs and H₂SO₄ should be deleted. A sentence should be added to this Condition stating that "VOC testing is only required if the CO test indicates an exceedance of the CO standard. See Condition A.55." In accordance with Comment No. 11, there should be no need for annual H₂SO₄ testing. Also, as stated above, the Permitting Note should be revised to reflect the deletion of the limits for mercury, arsenic, beryllium, and lead.
- 18. Page 14. Condition A.47. Section 60.335(a) applies only to fuel oil, since the nitrogen in gas is not fuel bound as provided in Section 60.332(a)(3).
- 19. Page 14. Condition A.48. This condition was deleted from the PSD permit by the Department letter dated April 23, 1996, which changed several permit conditions.
- 20. Conditions A.44, A.45, A.49, A.50, A.51, A.52, A.57, A.58, A.59, and A.67 through A. 72 should be deleted. Other Title V permits for similar facilities do not have these conditions and they are either misapplied to this unit or simply cause confusion. For example, Condition A.44 is not appropriate because the only CEM on this unit is for NOx and Method 20 (a stack test method) is the compliance determination method pursuant to Condition A.48. Also, the permit should not reference 40 CFR 60.335(c)(2) in Condition A.49 as clarified by DEP guidance (DARM-EM-05).

- 21. Page 15. Condition A.53. The references to the other permit conditions should be revised as follows: "A.13, A.14, and A.16; and A.26 A.27."
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FPC appreciates the opportunity to comment on the Initial Title V Permit. Thank you again for your prompt attention to this matter.

Sincerely,

Scott H. Osbourn

Senior Environmental Engineer

Attachments

cc: Ken Kosky, P.E., Golder Assoc.

Robert Manning, HGS&S

1/27/99 cc - Scott She





Todd R. Nass, Facility Manager FPC Tiger Bay

GE Energy Services

Contractual Services 3219 County Road 630 West Fort Meade, FL 33841 (941) 285-1200 (941) 285-1206 Fax Cell 941-512-0204 Todd.Nass@ps.ge.com

November 19, 1998

TO: Mike Kennedy

Florida Power Corporation

MAC BBIA

Re:

7FA Gas Turbine Soft Start Sequence

Mike,

Per your request attached please find a graph showing the start up sequence for the 7FA at Florida Power's Tiger Bay Facility. As we discussed the attached sequence occurs automatically after any gas turbine shutdown of 50 hours or more duration. General Electric has added this revised start up sequence (titled "Soft Start") to the gas turbine controls as a protective measure to minimize potentially damaging thermal stresses in the turbine rotor during a cold startup.

Of note is the long period at which the gas turbine operates below the steady state pre-mix mode (just over 2 hours from initial start up command). At loads below steady state pre-mix the combustion system is not capable of achieving 25 ppmvd NOx levels. Shortening of the cycle to get the turbine into steady state pre-mix sooner would offset the benefit of allowing the slower warm-up of the turbine rotor and may result in pre-mature failure of turbine components.

I trust this information will assist you in revising the Tiger Bay Air permit. If I can provide any further information on this or any other matter please do not hesitate to call me.

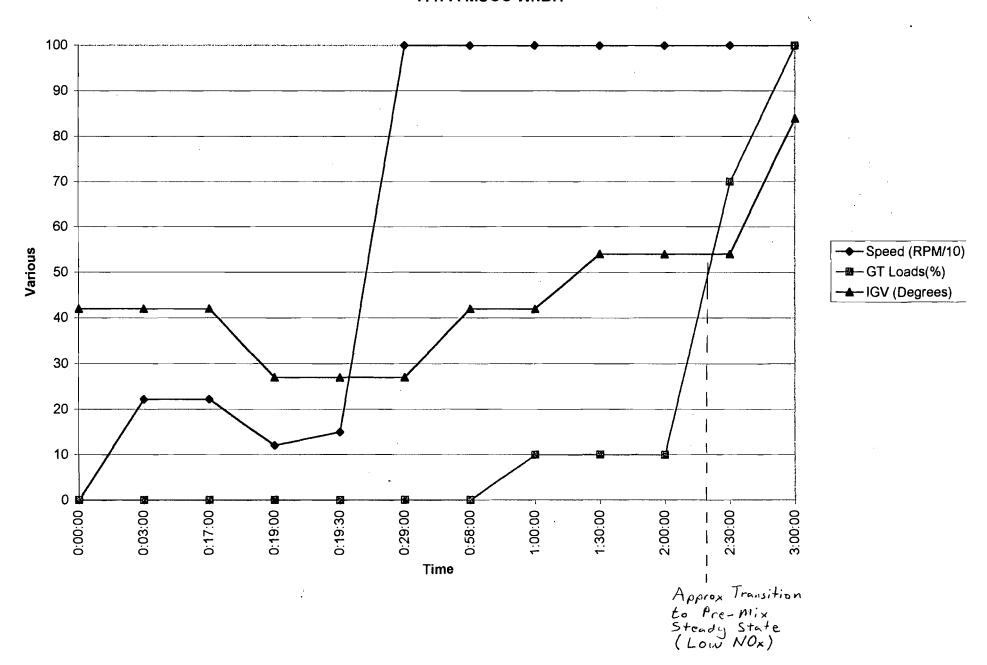
Regards.

Todd Nass

Copy to Letterbook

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7F/FA MSCC W/IBH





JAN 22 1999

BUREAU OF AIR REGULATION

January 21, 1999

Scott Sheplak, P.E.
Bureau of Air Regulation
Division of Air Resources Management
Department of Environmental Protection
2600 Blair Stone Road, MS 5505
Tallahassee, FL 32399-2400

Dear Mr. Sheplak:

Re: Tiger Bay Cogeneration Facility

Draft Title V Permit No.: 1050023-002-AV

Florida Power Corporation (FPC) is providing comments related to the draft Title V permit dated October 27, 1998. Our comments are directed at specific conditions for the facility and emissions units. The comments are presented below in the same order as the conditions appear in the initial draft permit. FPC has filed a Request for Extension of Time until February 1, 1999. In this regard, if we are unable to resolve each of the issues described below before this time, FPC intends to file an additional Request for Extension. Accordingly, at your earliest convenience after reviewing this letter, please contact me at (727) 826-4258 to discuss.

- 1. Page 2. The Title V application (Facility Regulatory Classification) indicated that the facility was not a major source of HAPs. To the best of our knowledge, the facility classification has not changed.
- 2. Page 3. Brief Description of Unregulated Units. FPC requests that the units described as unregulated (i.e., internal combustion engines, emergency generator, and fresh water cooling towers) be re-classified as insignificant.
- 3. Page 7. Description. First Paragraph. The model number listed in line 2 for the combustion turbine should be MS7221 FA. The MS7001 FA is the general model classification made by General Electric. The HRSG was not manufactured by GE, as stated in line 4. Since the HRSG is not an emissions unit, it is not necessary to include a vendor designation. Also, all references to a duct burner, fuels for a duct burner, and emissions from the HRSG because of a duct burner, should be deleted as the duct burner has been physically removed.

- 4. Page 7. Second Paragraph. The flow rate listed in the paragraph (4th line) is for distillate oil; the flow rate listed in the application is 1,072,001 acfm. It should be noted the flow and other parameters change as a result of load and turbine inlet temperature. These data were included in the original construction permit application. It is suggested that these data be so qualified. Also, for your information, the statement that the emissions from the CT are controlled with DLN 2.6 will be accurate when the permit becomes effective; FPC has ordered this equipment and will have it installed in 1999.
- 5. Page 7. Condition A.3. This Condition should be deleted because it does not impose any existing requirement; it simply states that a "modification" to the unit will subject it to the NSPS requirements.
- 6. Page 8. Condition A.4. This Condition should clarify that the heat input is dependent upon the ambient temperature in accordance with manufacturer's curves. Also, as stated above, the reference to the duct burner should be deleted.
- 7. Page 8. Condition A.6.a. The description of the distillate fuel should be changed from "New" to "distillate fuel oil." This would be consistent with the terminology in the PSD/BACT permit that did not characterize the distillate oil as either "new", "No. 2" or "low sulfur." The latter comment applies to Condition A.6.b. Also, the third and fourth sentences of Condition A.6.a should be deleted: as stated above, the HRSG does not contain a duct burner, and the pre-construction requirements are redundant with Appendix TV-1.
- 8. All citations to the BACT as authority for a permit condition should be deleted because the BACT is simply the basis for the PSD permit. The PSD permit is appropriately listed, and is sufficient authority.
- 9. Pages 9-11. Conditions A.12, A.15, A.19, A.22, A.25, and A.28 should be deleted because the HRSG does not contain a duct burner.
- Page 10. Condition A.20. The phrase "at full load conditions" should be added to this
 condition as was done in Condition A.21. This terminology is consistent with the PSD
 permit conditions.
- 11. Pages 10 and 11. In the Title V application, FPC requested that the Conditions for sulfuric acid mist, listed in Conditions A.26., A.27., and A.28, be deleted from the Title V Permit. These conditions were added to the original PSD Permit for the Tiger Bay Cogeneration Facility, as was common practice for other similar facilities at the time of permitting. These conditions are currently obsolete and no longer included in PSD permits for combustion turbines firing natural gas and distillate oil.
- 12. Page 11. In the Title V application, FPC requested that the conditions for mercury, arsenic, beryllium and lead, listed in Conditions A.31 through A.34, be deleted from the Title V Permit. These conditions were added to the original PSD Permit for the Tiger Bay Cogeneration Facility, as was common practice for other similar facilities at the

time of permitting. These conditions are currently obsolete and no longer included in PSD permits for combustion turbines firing natural gas and distillate oil. In addition, arsenic and beryllium have been deleted from the list of PSD Significant Emission Rates, by the Department. This request is consistent with Department guidance (DARM-PER/GEN-18).

- 13. Page 11. Condition A.35. In accordance with the attached start-up curve, FPC requests that this unit be specifically authorized to have excess emissions for 3 hours (rather than 2 hours) in any 24-hour period, unless specifically authorized by the Department for longer duration. Also, the pertinent excess emission provisions of 40 CFR Part 60 should be included in this section of the permit, i.e., §§ 60.8(c), 60.11(c), and 60.43c(d).
- 14. Page 12. Condition A.39. This Condition is identical with Condition A.37 and therefore should be deleted.
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FPC appreciates the opportunity to comment on the Initial Title V Permit. Thank you again for your prompt attention to this matter.

Sincerely,

Scott H. Osbourn

Senior Environmental Engineer

Attachments

CC:

Ken Kosky, P.E., Golder Assoc. Robert Manning, HGS&S

1/25/99 cc: Scott Sheplat Ross Pollock





Todd R. Nass, Facility Manager FPC Tiger Bay

GE Energy Services

Contractual Services 3219 County Road 630 West Fort Meade, FL 33841 (941) 285-1200 (941) 285-1206 Fax Cell 941-512-0204 Todd.Nass@ps.ge.com

November 19, 1998

TO: Mike Kennedy

Florida Power Corporation

MAC BB1A

Re: 7FA Gas Turbine Soft Start Sequence

Mike,

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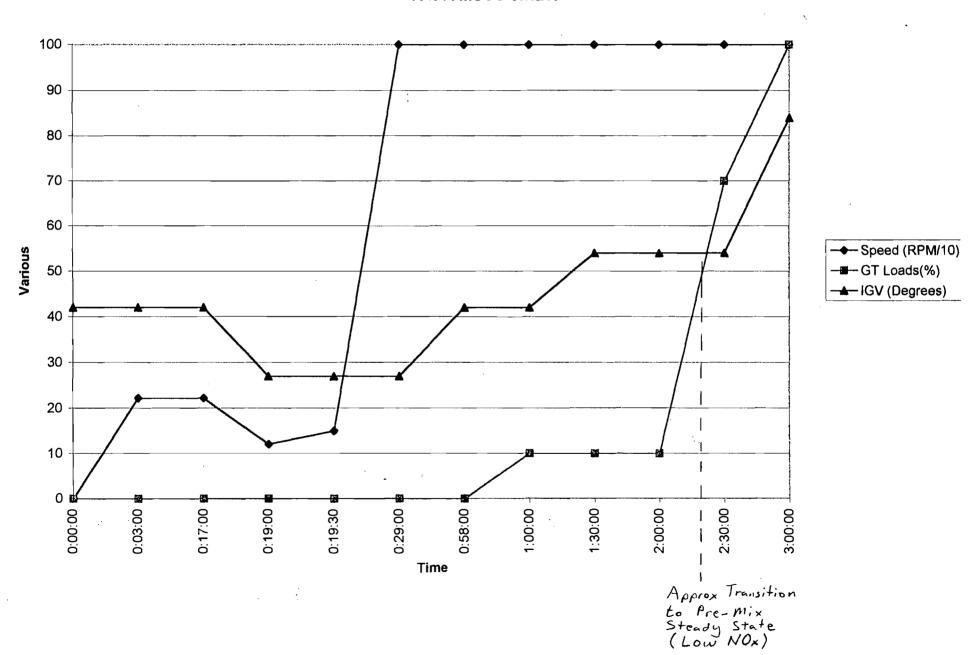
Regards.

Todd Nass

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7F/FA MSCC W/IBH



STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

FLORIDA POWER CORPORATION (TIGER BAY COGENERATION),

Petitioner,

vs.

OGC CASE NO. 98-2966

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondent.

ORDER GRANTING REQUEST FOR EXTENSION OF TIME TO FILE PETITION FOR HEARING

This cause has come before the Florida Department of Environmental Protection (Department) on receipt of a request made by Petitioner, Florida Power Corporation (Tiger Bay Cogeneration), to grant an extension of time to file a petition for an administrative hearing on Application No. 1050223-002-AV. See Exhibit 1.

Respondent, State of Florida Department of Environmental Protection, has no objection to it. Therefore,

IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until January 30, 1999, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this 30 day of December, 1998, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

F PERRY ODOM General Counsel

Douglas Building, MS #35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314

CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to:

W. Jeffrey Pardue, C.E.P. Director, Environmental Services Department Florida Power Corporation Post Office Box 14042 St. Petersburg, FL 33733-4042

on this ____ day of December, 1998.

12/11/98 cc: Pass Pollock

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

W. DOUGLAS BEASON

Assistant General Counsel Florida Bar No. 379239

Mail Station 35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314



[] B

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November 6, 1998

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE: Florida Power Corporation, Tiger Bay Cogeneration Facility

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

Draft Permit No. 1050223-002-AV

On October 30, 1998, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit. A review of the permit conditions has revealed that several issues remain to be resolved. Accordingly, FPC requests an extension of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including December 11, 1998, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties' mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial.

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Jeffrey Brown, DEP OGC



DEC 1 0 1998

BUREAU OF AIR REGULATION

December 8, 1998

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE: Florida Power Corporation, Tiger Bay Cogeneration Facility

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Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Jeffrey Brown, DEP OGC

12/10/98 cc = Ross Pollock



NOV 20 1998

BUREAU OF AIR REGULATION

November 17, 1998

Mr. Scott Sheplak, P.E. Division of Air Resource Management Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, Florida 32399-2400

Dear Mr. Sheplak:

Re: FPC Tiger Bay Facility, Notice of Intent to Issue Title V Air Operation Permit

Draft Title V Permit No. 1050223-002-AV

Enclosed please find the notarized proof of publication received from the Lakeland Ledger for the Florida Department of Environmental Protection *Notice of Intent to Issue Title V Air Operation Permit* referenced to the above request. The notice was published on November 10, 1998.

If you should have any questions concerning this correspondence; please do not hesitate to contact me at (727) 826-4258.

Sincerely,

Scott H. Osbourn

Senior Environmental Engineer

CC:

Bill Thomas, DEP SW District (w/attach)

Attachment

11/23/98 cc = Ross Pollock

INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL

Date: 10-Nov-1998 08:12am
From: Mary Fillingim TAL

FILLINGIM M

Dept: Air Resources Management

Tel No: 850/488-0114

To: See Below

Subject: New Posting #1050223

There is a new posting on Florida's website.

1050223002AV

TIGER BAY COGENERATION FACILITY

Draft

The notification letter is encoded and attached. If you have any questions, feel free to contact me.

Thanks, Mary

Distribution:

To: adams yolanda (adams.yolanda@epamail.epa.gov@in) (pierce.carla@epamail.epa.gov@in) pierce carla To: Barbara Boutwell TAL (BOUTWELL B) To: Scott Sheplak TAL (SHEPLAK S) To: To: Terry Knowles (KNOWLES T) danois gracy (danois. gracy@epamail.epa.gov@in) To: Elizabeth Walker TAL (WALKER_E) To: Jonathan Holtom TAL (HOLTOM J) CC:



NOV 1 0 1998

BUREAU OF AIR REGULATION

November 6, 1998

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE:

Florida Power Corporation, Tiger Bay Cogeneration Facility

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

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Sincerely.

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Jeffrey Brown, DEP OGC

GENERAL OFFICE: 3201 Thirty-fourth Street South • P.O. Box 14042 • St. Petersburg • Florida 33733 • (813) 866-5151

A Florida Progress Company

Gonipany

Florida's DRAFT Permit Electronic Notification Cover Memorandum

TO: Yolanda Adams, U.S. EPA Region 4

CC: Carla E. Pierce, U.S. EPA Region 4

THRU: Scott M. Sheplak, P.E., Tallahassee Title V Section

FROM: Jonathan Holtom, P.E., Title V Section Permit Engineer

DATE: November 9, 1998

RE: U.S. EPA Region 4 DRAFT Title V Operation Permit Review

The following DRAFT Title V operation permit and associated documents have been posted on the DEP World Wide Web Internet site for your review. Please provide any comments via Internet E-mail, to Scott M. Sheplak, P.E., at "Sheplak S@dep.state.fl.us".

Applicant NameCountyMethod of TransmittalElectronic File Name(s)Florida Power CorporationPolkINTERNET1050223d.zipTiger Bay Cogeneration Facility

This zipped file contains the following electronic files:

1050223d.sob 1050223i.doc 1050223d.doc 10502231.xls 10502232.xls

fednot_d.doc, version dated 8/13/97 Last Updated: 8/13/97, new format for statewide use, JK



Department of Environmental Protection

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

Virginia B. Wetherell Secretary

P.E. Certification Statement

Permittee:

Florida Power Corporation Tiger Bay Cogeneration Facility **DRAFT Permit No.:** 1050223-002-AV

Facility ID No.: 1050223

Project type: Initial Title V Air Operation Permit

I HEREBY CERTIFY that the engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapter 602, 4, and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposed putside of my area of expertise (including but not limited to the electrical, mechanical structural hydrological, and geological features).

Scott M. Sheplak, P.E.

Registration Number: 0048866

Permitting Authority:

Department of Environmental Protection Bureau of Air Regulation 111 South Magnolia Drive, Suite 4 Tallahassee, Florida 32301

Telephone: 850/921-9532 Fax: 850/922-6979

MEMORANDUM

TO:

Scott Sheplak, P. E

FROM:

Jonathan Holtom, P. E.

DATE:

October 19, 1998

Re:

Intent package for DRAFT Permit No.: 1050223-002-AV

Florida Power Corporation

Tiger Bay Cogeneration Facility

Permit Clock: Today is ARMS Day 1

Day 90: January 27, 1999

This revised DRAFT permit incorporates an increase in capacity in the heat recovery steam generator from 74 megawatts to 85.5 megawatts. Due to the increase in capacity the facility is regulated under the Acid Rain Phase II program.

This facility consists of a single combustion turbine (CT) that exhausts through a heat recovery steam generator (HRSG). The facility is permitted to combust natural gas as the primary fuel and distillate fuel oil as back-up fuel. However, the fuel oil capability has yet to be installed. The facility also operates a zero liquid discharge (ZLD) system which provides treatment of process wastewater and exhausts through a baghouse for the control of particulate matter. The total combined capacity of the facility is 269.5 megawatts. A nominal 184 megawatts are provided by the combustion turbine. In addition a nominal 85.5 megawatts are provided by a steam generator. This facility is regulated under Acid Rain Phase II.

No additional information was requested of the applicant. Comments were not received from the district office.

This facility reported that each emissions unit was in compliance at the time of the application.

I recommend that this Intent to Issue be sent out as attached.

APE/

[electronic file name: xxxxxxx1.mem]

STATEMENT OF BASIS

Florida Power Corporation
Tiger Bay Cogeneration Facility
Facility ID No.: 1050223
Polk County

Initial Title V Air Operation Permit **DRAFT Permit No.:** 1050223-002-AV

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213 and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

This facility consists of a single combustion turbine (CT) that exhausts through a natural gas duct burner-fired heat recovery steam generator (HRSG). The facility is permitted to combust natural gas as the primary fuel and distillate fuel oil as back-up fuel. However, the fuel oil capability has yet to be installed. The facility also operates a zero liquid discharge (ZLD) system which provides treatment of process wastewater and exhausts through a baghouse for the control of particulate matter. The total combined capacity of the facility is 269.5 megawatts. A nominal 184 megawatts are provided by the CT. In addition a nominal 85.5 megawatts are provided by the HRSG. This facility is regulated under Acid Rain Phase II.

Emissions unit number -001 is a co-generation facility consisting of the CT and the HRSG. The CT is permitted to combust natural gas (primary fuel) and fuel oil (back-up), is made by General Electric (model number MS70001FA), produces a nominal 184 megawatts (MW) and exhausts through the HRSG. The HRSG is made by General Electric (model number is PG7221FA), is permitted to combust natural gas and produces steam to drive a separate generator with a nominal rating of 85.5 MW. The CT is regulated under 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines. The HRSG is regulated under 40 CFR 60, Subpart Dc, Standards of Performance for Industrial, Commercial and Institutional Steam Generating Units. The facility began commercial operation on July 20, 1994. Emissions from the CT are controlled by the use of dry low-NO_X (DLN 2.6) burners when firing natural gas and will be controlled by water injection at such time that the option to fire fuel oil is implemented. NO_X emissions from the CT are currently limited to 25 ppm. By December 31, 1999, NO_X emissions are required to be at or below 15 ppm. If unable to meet this limitation deadline through advanced combustion technology, the facility must install SCR and meet a NO_X limit of 10 ppm. Emissions from the HRSG are uncontrolled. In conjunction with EPA Region 4, the issuance of permit PSD-FL-190 established allowable emission limitations for this emissions unit for Mercury, Arsenic, Beryllium and Lead, with only an initial compliance test requirement; and, although the emission limitations remain and have been reflected in the Title V permit, there is no requirement for any subsequent periodic compliance testing. Emissions unit -001 is subject to the requirements of Phase II Acid Rain.

Florida Power Corporation, Tiger Bay Cogeneration Facility Statement of Basis
Page 2 of 2

Emissions unit number -002 is a zero liquid discharge (ZLD) system made by Unitech-Graver. This emissions unit has a maximum heat input rate of 3.07 MMBtu/hour and is fired with natural gas. This equipment is used to process the concentrated wastewater brine from two falling-film evaporators. The effluent from the evaporators is pumped to the spray dryer module, where it is atomized into a spray and contacted by heated air to evaporate the liquid, thus resulting in the formation of dry particles from the remaining solids. The exhaust gas stream from the dryer is sent through a baghouse dust collector where the particulate matter (PM) is removed with a removal efficiency of at least 99.9% (based on vendor's guarantee). The emissions unit is regulated under Rule 62-296.700(2), F.A.C., Reasonably Available Control Technology (RACT) Particulate Matter - Exemptions. The permittee has accepted a federally enforceable limit for PM emissions from this emissions unit in order to avoid subjection to the RACT requirements. This emissions unit began commercial operation on August 1, 1994.

The heat input limitations for the CT and the HRSG have been placed in the permit to identify the capacity of each emissions unit for the purposes of confirming that emissions testing is conducted within 95 to 100 percent of the emissions unit's rated capacity (or to limit future operation to 105 percent of the test load), to establish appropriate emissions limits and to aid in determining future rule applicability. A note below the permitted capacity condition clarifies this. Regular record keeping is not required for heat input. Instead, the owner or operator is expected to determine heat input whenever emission testing is required to demonstrate at what percentage of the rated capacity that the emissions unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of process variables for emissions tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.

The heat input limitations for the ZLD have been placed in the permit to identify the capacity of each emissions unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emissions limits and to aid in determining future rule applicability. A note below the permitted capacity condition clarifies this. Regular record keeping is not required for heat input. Instead, the owner or operator is expected to determine heat input whenever emission testing is required to demonstrate at what percentage of the rated capacity that the emissions unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of process variables for emissions tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the initial Title V permit application received June 14, 1996, this facility is a major source of hazardous air pollutants (HAPs).

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