

TAMPA ELECTRIC

December 9, 1998

Mr. Edward Svec
Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Building
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32399-2400

Via Facsimile and FedEx
Airbill No. 808009421823

Re: Tampa Electric Company (TEC)
Polk Power Station
EPA Objections to the Proposed Title V Permit

Dear Mr. Svec:

We hereby provide the following information in support of issues we discussed during our November 20, 1998 meeting regarding the Environmental Protection Agency's (EPA's) objections to the Polk Power Station (PPS) Title V permit.

The following is the results of four compliance test conducted over the past two years for the PPS combustion turbine. Two tests were conducted on syngas and two tests were conducted on fuel oil. These test results demonstrate that the PPS combustion turbine emission rates are well below these stringent BACT emission limits. Therefore based on these emission rates and the low level of the emission limits, sufficient monitoring is provided by the present testing requirements of the proposed Title V permit.

<i>Particulate Matter (lb/hr)</i>	<i>Limit</i>	<i>5/15/97</i>	<i>6/15/98</i>	<i>8/29/97</i>	<i>10/24/98</i>
CT-Oil	17	-	-	9.27	11.97
CT-Syngas	17	0.42	NT	-	-

NT- Not tested (initial test only for syngas)

<i>Carbon Monoxide (lb/hr)</i>	<i>Limit</i>	<i>5/15/97</i>	<i>6/15/98</i>	<i>8/29/97</i>	<i>10/24/98</i>
CT-Oil	99	-	-	6.89	3.13
CT-Syngas	99	6.0	5.62	-	-

<i>Nitrogen Oxides (ppm @ 15% O₂)</i>	<i>Limit</i>	<i>5/15/97</i>	<i>6/15/98</i>	<i>8/29/97</i>	<i>10/24/98</i>
CT-Oil	42	-	-	41.8	38.4
CT-Syngas	25	19.7	17.3	-	-

TAMPA ELECTRIC COMPANY
P. O. BOX 111 TAMPA, FL 33601-0111

(813) 228-4111

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CUSTOMER SERVICE:
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OUTSIDE HILLSBOROUGH COUNTY 1 (888) 223-0800

Mr. Edward Svec
 December 9, 1998
 Page 2 of 3

VOC (lb/hr)	Limit	5/15/97	6/15/98	8/29/97	10/24/98
CT-Oil	32	-	-	<MDL	<MDL
CT-Syngas	2	0.15*	<MDL	-	-

* One run was <MDL

MDL- Minimum Detection Limit

CT-Syngas Metals	Limit	5/15/97
Arsenic (lb/hr)	0.08	0.0057
Beryllium (lb/hr)	0.001	<MDL
Mercury (lb/hr)	0.025	0.0049
H ₂ SO ₄ (lb/hr)	55	NT*

NT*- Not tested, no test requirement in the permit.

Coal analysis which demonstrates the limited variability of metals in the base coal for the Polk Power Station is provided in the table below. This data demonstrates that metal concentrations do not vary significantly between fuel batches and therefore further monitoring is not required.

Date of Composite Analysis	Arsenic (ppm)	Lead (ppm)	Beryllium (ppm)	Mercury (ppm)
02/13/98	1.34	86.94	13.87	NA
03/13/98	1.47	74.26	15.97	NA
04/14/98	1.75	63.88	14.59	NA
05/14/98	1.82	68.28	13.63	0.05
06/15/98	1.46	110.00	13.76	0.06
07/14/98	1.91	68.75	14.85	0.05
08/18/98	3.11	78.00	16.34	0.05
09/14/98	1.70	101.00	14.69	0.06
10/15/98	1.73	105.00	13.20	0.05

Average	1.81	84.01	14.54	0.05
Standard Deviation	0.522	17.428	1.066	0.005

Each sample is a monthly composite of the base coal for the Polk Power Station.

The following is a more detailed description of the coal handling system at the Polk Power Station. The fact that the coal handling system has the level of control that is described below and it is currently required to test annually, provides sufficient monitoring to assurance compliance with its applicable limit. It appears that Subpart Y does apply to the fuel handling system at the PPS. The application of this requirement will mean the use of Method 9 for the annual compliance test.

Mr. Edward Svec
December 9, 1998
Page 3 of 3

The solid fuel handling system consists of a bottom unloading station where water/surfactant spray may be applied to the incoming fuel as needed for dust control, enclosed conveying systems, rubber skirted drop points from bins, two fuel silos with an associated baghouse, a fuel surge bin with an associated baghouse and two rod mill crushers for slurry production.

Solid fuel is received by truck and bottom unloaded to the fuel unloading bin. Fugitive emissions are controlled by water spray with surfactant applied at the unloading bin as needed. Fuel is conveyed via enclosed conveyor from the unloading bin to the fuel silos. The transfer points from the bin to the belts is rubber skirted. Fugitive emissions from the fuel silos are controlled by an associated baghouse. Fuel is then reclaimed from the silos via enclosed conveyors to the surge bin inside the slurry preparation building. Fugitive emissions from the surge bin are controlled by an associated baghouse. Fuel and water is then mixed in the rod mill crushers to produce a coal slurry.

In reference to comments on periodic monitoring for the sulfuric acid plant, the sulfuric acid plant is a pollution control device that converts hydrogen sulfide to sulfuric acid which is specifically exempted from NSPS standard Subpart H by 40CFR 60.81 (a). Although this exemption is not explicit in Chapter 62-296.402, it is implicit in the adoption of 40 CFR 60.81 by Chapter 62-204.800 (7) (b) 11. Therefore the application of the SO₂ and sulfuric acid mist requirements for this acid plant are not appropriate.

I hope that this information provides the data you need to satisfy the objections made by EPA to the proposed PPS Title V permit. If you have any questions or need further data please contact Patrick Shell or me at (813) 641-5210.

Sincerely,



James Hunter
Administrator-Air Programs
Environmental Planning

EPgmVLS112



Sent by: SHELL

Time: _____

FAX COVER LETTER

PLEASE DELIVER THE FOLLOWING 3 PAGE(S)
(INCLUDING THIS COVER LETTER)

DATE: 12/17/98

TO: ED SUEC

COMPANY: FDEP

FAX#: 850-922-6979

FROM: DARRELL SHELL

Comments:

ENCLOSED:

- ① BACT ANALYSIS SINGAS 40.07%
 - ② SINGAS ANALYSIS SINGAS 0.04%
- Soil WEIGHT.

Thank you,

IF THE ABOVE TRANSMISSION IS NOT COMPLETE, PLEASE CONTACT (813) 671-3361

TAMPA ELECTRIC COMPANY
PRODUCTION SERVICE CENTER
6944 U.S. HWY 41 NORTH
APOLLO BEACH, FL 33572-9200
FAX#: (813) 641-5281 - outside line
46-281 - direct inside extension



CORE LABORATORIES

PM-1/C-10

LABORATORY TESTS RESULTS
05/29/97

NUMBER: 972303 CUSTOMER: CUBIX CORPORATION ATTN: LEONARD BRENNER

IDENT I.D.:
DATE SAMPLED: 05/15/97
TIME SAMPLED: 00:00
SAMPLE DESCRIPTION: #22 Syn Gas

LABORATORY I.D.: 972303-0003
DATE RECEIVED: 05/23/97
TIME RECEIVED: 11:33
REMARKS:

DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Gas Analysis		*1		UOP 539	05/28/97	LS
Hydrogen	38.55	0.1	Mol %			
Hydrogen Sulfide	<0.01	0.01	Mol %			
Carbon Monoxide	42.53	0.01	Mol %			
Carbonyl Sulfide	0.03	0.01	Mol %			
Oxygen/Argon	1.20	0.01	Mol %			
Nitrogen	3.61	0.01	Mol %			
Carbon Dioxide	14.08	0.01	Mol %			
Methane	<0.01	0.01	Mol %			
Total	100.00	0.01	Mol %			
Relative Density	0.70084	0				
Gross Heating Value	261.5	0	BTU/ft (real)			
Carbon Content	33.52	0.01	Wt. %			
Hydrogen Content	3.83	0.01	Wt. %			
Nitrogen Content,	4.98	0.01	Wt. %			
Oxygen Content	57.63	0.01	Wt. %			
Sulfur	0.040	0.001	Wt. %			
Sulfur, Total by Microcoulometry	410	1	ppm wt.	ASTM D-3246	05/29/97	LS
Sulfur Components of Natural Gas		*1		ASTM D-5504	05/28/97	VP
Hydrogen Sulfide	0.8	0.2	ppm v/v			
Carbonyl Sulfide	254	1	ppm v/v			
Sulfur Dioxide	<1	1	ppm v/v			
Carbon Disulfide	1	1	ppm v/v			
Methyl Mercaptan	<1	1	ppm v/v			
Ethyl Mercaptan	<1	1	ppm v/v			
Isopropyl Mercaptan	<1	1	ppm v/v			
n-Propyl Mercaptan	<1	1	ppm v/v			
tert-Butyl mercaptan	<1	1	ppm v/v			
sec-Butyl mercaptan	<1	1	ppm v/v			
Isobutyl Mercaptan	<1	1	ppm v/v			
n-Butyl Mercaptan	<1	1	ppm v/v			
Methyl Sulfide	<1	1	ppm v/v			
Ethyl Methyl Sulfide	<1	1	ppm v/v			
Ethyl Sulfide	<1	1	ppm v/v			
Methyl Disulfide	<1	1	ppm v/v			
Ethyl Methyl Disulfide	<1	1	ppm v/v			
Ethyl Disulfide	<1	1	ppm v/v			
Thiophene	<1	1	ppm v/v			
Unidentified Sulfur Compounds	0	0	ppm wt sulfur			
Sulfur Vapor by Length of Stain	1.5	0.1	ng/L	ASTM D-4888	05/29/97	LS

Specific Gravity & Heating Value calculated in accordance with ASTM D 3588.

P O BOX 34766
HOUSTON, TX 77234-4282
(713) 943-9776

The analysis report, reports or interpretations contained in this report do not constitute information and material furnished by the user for safety purposes and consumer use. The user's responsibility is to ensure that the information is used in accordance with the intended purpose. Core Laboratories, Inc. makes no warranty of representation, express or implied, of any kind, and no person or entity shall be held liable for any damages or consequences arising from the use of this report. This report is the property of Core Laboratories, Inc. and shall remain the property of Core Laboratories, Inc. until it is returned to Core Laboratories, Inc. in accordance with the terms and conditions of the report. This report shall not be reproduced, in whole or in part, without the written consent of Core Laboratories, Inc.



BACT-Tampa Electric Company
 PSD-FL-194
 PA-92-32
 Page 3

- a - IGCC emissions include the highest annual emissions estimates from the 7F CT (based on the larger of 100 percent CGCU or 50/50 CGCU/HGCU), plus related combustion emissions (e.g., thermal oxidizer), plus other associated process and fugitive emissions (PM, CO, VOC, and H₂S).
- b - CC emissions represent the totals for four stand-alone CTs in CC mode.
- c - SC emissions represent the totals for six stand-alone CTs in simple cycle mode.

The proposed facility will also include one 49.5 MMBtu/hr auxiliary boiler fired with low sulfur (0.05% or less by weight) distillate fuel oil. The auxiliary boiler will operate only during startup and shutdown of the IGCC unit, or when steam from the IGCC unit's HRSG is unavailable. The auxiliary boiler will operate a maximum of 1,000 hours per year.

The coal gasification facility will serve as a source of medium Btu, low sulfur (0.07% or less, by weight, sulfur bearing compounds) coal-derived gas. The coal used in the gasification facility will have a maximum sulfur content of 3.05% and have a minimum heating value of approximately 11,035 Btu/lb. The coal gasification plant will consist of coal receiving, storage and process facilities, air separation unit, gasifier, product gas cleaning facilities, acid gas removal unit, and auxiliary equipment. The coal gasification unit will have two stacks, one flare stack used during startup, shutdown and emergency conditions and one thermal oxidation unit stack which will be used continuously.

The applicant has indicated the maximum tonnage of regulated air pollutants emitted from the IGCC unit CT during the initial phase, demonstration and post demonstration periods to be as shown in Table 3.

Table 3

Maximum Annual Emissions from IGCC Unit CT for Various Operating Configurations

Pollutant	Demonstration Period (tpy) ^a	Post-Demonstration Period (tpy) ^b
PM _T	74.5	74.5
SO ₂	2,269	1,564
NO _x	2,908	1,044
CO	430	430
VOC	38.5	38.5



RECEIVED

DEC 10 1998

BUREAU OF
AIR REGULATION

December 9, 1998

Mr. Edward Svec
Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Building
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32399-2400

Via Facsimile and FedEx
Airbill No. 808009421823

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Mr. Edward Svec
December 9, 1998
Page 3 of 3

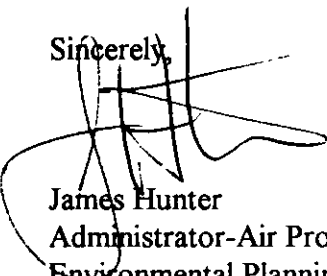
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I hope that this information provides the data you need to satisfy the objections made by EPA to the proposed PPS Title V permit. If you have any questions or need further data please contact Patrick Shell or me at (813) 641-5210.

Sincerely,



James Hunter
Administrator-Air Programs
Environmental Planning

EP\gm\PLS112

12/10/98 cc: Ed Svec
Scott Shepler



TAMPA ELECTRIC

December 7, 1998

RECEIVED

DEC 08 1998

BUREAU OF AIR REGULATION

Carla Pierce
Region IV
Air Pesticide and Toxics Management Division
Operating Permits Section
61 Forsyth Street
Atlanta, Ga 30303

Re: EPA's Review of the Proposed Title V Permit
Tampa Electric Company
Polk Power Station
Permit No. 1050233-001-AV

Via FedEx
Airbill No 808009421960

Dear Ms. Pierce:

The purpose of this letter is to update you on the status of the response to your October 8, 1998 letter concerning objections to the proposed Title V permit for the Polk Power Station. On November 20, 1998 Tampa Electric and staff from the Florida Department of Environmental Protection (FDEP) met to discuss the objections raised in EPA's October 8th letter. This meeting was every productive in establishing consensus on responses to the objections raised by the EPA. Based on our meeting and communications since, staff at the FDEP are currently drafting a letter containing revised permit conditions and comments to address the objections. We expect that this letter will be completed by the FDEP soon.

In light of time sensitive nature of the Title V permitting process, Tampa Electric is working with the FDEP to provide the EPA with changes and/or comments to address the objections raised prior to the end of the 90 day response period. If these comments do not sufficiently address EPA's concerns, Tampa Electric would like to meet with the EPA and the FDEP in order to expediently resolve any outstanding issues. If you have any questions or concerns about the response to the objections please contact Patrick Shell or me at (813)641-5210.

Sincerely,

Jamie Hunter
Administrator - Air Programs

EP/bj/pls109

c: Gracy Danois
Scott Sheplak

12/17/98 cc: Scott Sheplak
Ed Svec

TAMPA ELECTRIC COMPANY
P. O. BOX 111 TAMPA, FL 33601-0111

(813) 228-4111

AN EQUAL OPPORTUNITY COMPANY
HTTP://WWW.TECOENERGY.COM

CUSTOMER SERVICE:
HILLSBOROUGH COUNTY (813) 223-0800
OUTSIDE HILLSBOROUGH COUNTY 1 (888) 223-0800



Barbara / File

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

October 26, 1998

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Charles A. Shelnut
General Manager
Tampa Electric Company
Post Office Box 775
Mulberry, Florida 33860-0775

Re: EPA Objection to PROPOSED Title V Permit No. 1050233-001-AV
Plant Name: Tampa Electric Company - Polk Power Station

Dear Mr. Shelnut:

On October 12, the department received a timely written objection from the United States Environmental Protection Agency to the referenced proposed permit. A copy of EPA's objection is attached.

In accordance with Section 403.0872(8), Florida Statutes (F.S.), the department must not issue a final permit until the objection is resolved or withdrawn. Pursuant to Section 403.0872(8), F.S., the applicant may file a written reply to the objection within 45 days after the date on which the department serves the applicant with a copy of the objection. The written reply must include any supporting materials that the applicant desires to include in the record relevant to the issues raised by the objection. The written reply must be considered by the department in issuing a final permit to resolve the objection of EPA. Please submit any written comments you wish to have considered concerning the objection to Mr. Scott M. Sheplak, P.E., at the above letterhead address.

Pursuant to 40 CFR 70.8(c)(4) the department will have to resolve the objection by issuing a permit that satisfies EPA within 90 days of the objection, or EPA will assume authority for the permit.

If you should have any questions, please contact Mr. Scott M. Sheplak, P.E., at 850/921-9532.

Sincerely,

Scott M. Sheplak
for C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/sms/k

Enclosures

cc: Thomas W. Reese, Esquire w/enclosures
Pat Comer, OGC w/enclosures
Douglas Neeley, USEPA w/o enclosures
Carla Pierce, USEPA w/o enclosures
Lynda Crum, USEPA w/o enclosures

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

P 263 584 899

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail. (See reverse)

Se
Mr. Charles A. Sheinut
General Manager
Tampa Electric Company
P. O. Box 775
Mulberry, FL 33860-0775
Ca

Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	10-26-98

596

PS Form 3800 April 1995

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Charles A. Sheinut
General Manager, Polk Power Station
Tampa Electric Company
P. O. Box 111
Tampa, FL 33601

4a. Article Number

P 263 584 899

4b. Service Type

- Registered
- Express Mail
- Return Receipt for Merchandise
- Certified
- Insured
- COD

7. Date of Delivery

11-5-98

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

X

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

OCT 8 1998

4APT-ARB

Howard L. Rhodes, Director
Air Resources Management Division
Florida Department of Environmental Protection
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

DIVISION OF AIR
RESOURCES MANAGEMENT

AIR REGULATION
BUREAU OF

OCT 12 1998

RECEIVED

SUBJ: EPA's Review of Proposed Title V Permit
Tampa Electric Company
Polk Power Station
Permit No. 1050233-001-AV

Dear Mr. Rhodes:

The purpose of this letter is to provide comments to the Florida Department of Environmental Protection (DEP) on the proposed title V operating permit for Tampa Electric Company, Polk Power Station, which was posted on DEP's web site on August 25, 1998. Based on the Environmental Protection Agency's (EPA's) review of the proposed permit and the supporting information for this facility, EPA formally objects, under the authority of Section 505(b) of the Clean Air Act (the Act) and 40 C.F.R. § 70.8(c) (see also Florida Regulation 62-213.450), to the issuance of the title V permit for this facility. The basis of EPA's objection is that the permit does not fully meet the periodic monitoring requirements of 40 C.F.R. § 70.6(a)(3)(i), the permit does not identify 40 C.F.R. Part 60, Subpart Y as an applicable requirement, and the permit contains inadequate averaging times and start-up/shutdown reporting requirements.

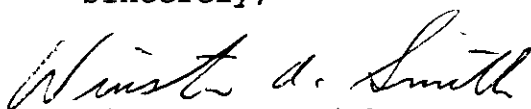
As you know, 40 C.F.R. § 70.8(c) requires EPA to object to the issuance of a proposed permit in writing within 45 days of receipt of the proposed permit (and all necessary supporting information) if EPA determines that the permit is not in compliance with the applicable requirements under the Act or 40 C.F.R. Part 70. Section 70.8(c)(4) and Section 505(c) of the Act further provide that if the State fails to revise and resubmit a proposed permit within 90 days to satisfy the objection, the authority to issue or deny the permit passes to EPA and EPA will act accordingly. Because the objection issues must be fully addressed within the 90 days, we suggest that the revised permit be submitted in advance in order that any outstanding issues may be addressed prior to the expiration of the 90-day period.

Pursuant to 40 C.F.R. § 70.8(c), this letter and its enclosure provide a statement of EPA's reasons for its objection. The enclosure contains a detailed explanation of the objection issues and the changes necessary to make the permit consistent

with the requirements of 40 C.F.R. Part 70. The enclosure also contains general comments applicable to the permit.

If you have any questions or wish to discuss this further, please contact Ms. Carla E. Pierce, Chief, Operating Source Section at (404) 562-9099. Should your staff need additional information they may contact Ms. Gracy R. Danois, Florida Title V Contact, at (404) 562-9119, or Ms. Lynda Crum, Associate Regional Counsel, at (404) 562-9524.

Sincerely,



Winston A. Smith
Director
Air, Pesticides & Toxics
Management Division

Enclosure

cc: Mr. Charles A. Shelnut
General Manager
Tampa Electric Company

Enclosure

U.S. EPA Region 4 Objection
Proposed Part 70 Operating Permit
Tampa Electric Company
Polk Power Station
Permit no. 1050233-001-AV

I. EPA Objection Issues

1. Periodic Monitoring: Conditions A.1. and B.1., establish the permitted capacity for the combined cycle combustion turbine and the auxiliary boiler, respectively. The origin of these conditions is the PSD permit for this facility. The permit needs to include appropriate periodic monitoring or recordkeeping requirements to reasonably assure compliance with these conditions. In order to satisfy this requirement, the permit must require that the facility maintain fuel usage records to demonstrate compliance with the applicable heat input rate. Since the limits are expressed as hourly limits, the condition should establish an hourly fuel usage recordkeeping.
2. Periodic Monitoring: The permit does not require sufficient periodic monitoring to ensure compliance with the applicable SO₂, PM/PM₁₀, CO, VOC, visible emissions (VE), lead, inorganic arsenic, beryllium, and mercury limits in Section III, subsection A. The TEC-Polk County permit only requires testing once every five years for SO₂, PM/PM₁₀, CO, VE, and VOC, and no testing for the remaining pollutants. This monitoring scheme does not constitute adequate periodic monitoring to ensure compliance with the limits contained in the permit. As for the lead, inorganic arsenic, beryllium and mercury limitations, EPA is concerned that the concentration of these pollutants could vary significantly with every fuel batch. In order for infrequent testing to be approved as the periodic monitoring method for this facility, the State must provide a technical demonstration that no additional monitoring is warranted to ensure compliance with the limits listed above. The demonstration should identify the rationale for basing the compliance certification on data from a short-term test once every five years. If it is determined that additional monitoring is necessary to ensure compliance with the permit conditions, more frequent testing requirements must be included in the permit.

Regarding the VE limit, the State must use the existing COMs to ensure compliance with the opacity standard. Requiring that the opacity monitor be used for

conducting periodic monitoring imposes little or no additional burden on the source.

Additionally, this unit has a continuous emission monitor for SO₂. While fuel analysis may be adequate for determining SO₂ emissions from fuel oil combustion, it may not be true for syngas because of the variability of the fuel. Use of the data gathered by the SO₂ monitors would provide a more reasonable assurance of compliance than fuel sampling analysis.

3. Periodic Monitoring: Section III, Subsection B, condition B.4 limits the hours of operation for the auxiliary boiler. This Subpart needs to include recordkeeping requirements for this condition.
4. Periodic Monitoring: Section III, Subsection C does not contain adequate periodic monitoring requirements to provide reasonable assurance of compliance with the limitations for VE, SO₂ and Acid Mist. Since the permit only requires testing once every five years, the testing frequency does not provide a reasonable assurance of compliance with the pollutant limitations contained in this subsection. In order to approve the infrequent testing for the pollutants included in this subsection as the periodic monitoring method, the State must provide a technical demonstration that no additional monitoring is warranted to ensure compliance with the limits. The demonstration should identify the rationale for basing the compliance certification on data from a short-term test once every five years. If it is determined that additional monitoring is necessary to ensure compliance with the permit conditions, more frequent testing requirements must be included in the permit.

Also, daily recordkeeping of the plant production must be kept to ensure that the facility does not exceed the limit contained in condition C.1. This requirement is very important because it is limiting the source's production below 300 tons per day. If the facility exceeded the 300 tons per day production capacity, F.A.C. rule 62-296.402 requires that the facility install and operate continuous emissions monitors for VE, SO₂, and Acid Mist.

5. Periodic Monitoring: Section III, subsection D, condition D.4 specifies that the facility conduct a Method 22 test once per year. The infrequent testing does not provide a reasonable assurance of compliance with the VE limitation contained in this subsection. In order to approve the infrequent testing for visible emissions, the State must provide a technical demonstration that no additional monitoring is

warranted to ensure compliance with the VE limit or require the source to conduct daily VE readings.

6. Reporting and Recordkeeping: Section III, subsection C, condition C.8 addresses the excess emissions from start-up, shutdown, and malfunctions. Condition C.20 requires the reporting of excess emissions due to malfunctions only. This condition needs to also require reporting of excess emissions from start-up and shutdown.
7. Missing Applicable Requirement: Subsection D of the permit must include a statement establishing that the source is subject to the requirements of 40 C.F.R. Part 60, Subpart Y, Standards of Performance for Coal Preparation Plants.
8. Control Equipment Requirements: The description provided in Subsection E of this permit describes various pieces of control equipment. The permit does not contain any references to the control equipment nor does it contain adequate periodic monitoring requirements for the equipment. The State must explain and provide information in the statement of basis supporting the decision not to require parametric monitoring of the control equipment in the permit.
9. Averaging Times: In order for the emissions standards in conditions A.5 and A.6 to be practicably enforceable, appropriate averaging times must be specified in the permit. If the pounds per hours standards are the ones for which the facility would have to demonstrate compliance, the 30-day rolling average is not the appropriate averaging time. Also, for condition A.5, it is unclear whether the facility would have to demonstrate compliance with the limitations listed under "Basis" or the "LB/HR" numbers or both.

II. EPA General Comments

1. Section II, condition 11: Replace "Operating Source Section" with "Air & EPCRA Enforcement Branch, Air Compliance Section."
2. Section III, subsection A, condition A.3.b: The equation should read:
$$[\text{Load}(\%)] / 100\% * \text{hrs. of operation} \leq 876 \text{ hrs}$$
3. Section III, subsection A, condition A.48: EPA recommends that this condition be moved to the "Emissions Limitations and Standards" section since it

is related to the NO_x limit that the facility would have to comply with after the demonstration period.

4. Section III, subsection A, conditions A.7 and A.51: EPA recommends that the State combine conditions A.7 and A.51, since they refer to the same parameter and are based on the same PSD permit requirement. We also recommend that the resulting condition be placed in the "Emissions Limitations and Standards" portion of subsection A.
5. Section III, subsection A, condition A.49: This condition states that results from NO_x testing conducted on the combustion turbine every two months for 12 to 18 months after the demonstration will not be used for compliance purposes. The State needs to provide the basis for this decision in the statement of basis.
6. Section III, subsection B, conditions B.7 and B.52: EPA recommends that the State combine conditions B.7 and B.52, since they refer to the same parameter and are based on the same PSD permit requirement. We also recommend that the resulting condition be placed in the "Emissions Limitations and Standards" portion of subsection B.
7. Section III, subsection B, conditions B.19 and B.32: EPA recommends that the State combine conditions B.19 and B.32, since they refer to the same parameter and are based on the same NSPS Subpart. We also recommend that the resulting condition be placed in the "Emissions Limitations and Standards" portion of subsection B.
8. Section III, subsection C, C.3: The intent of this condition is unclear. It appears that this condition is intended to limit the fuel used by this plant to propane. If this is the case, the State should rephrase the condition to clearly state that intent.

Date: 10/1/98 11:42:00 AM
From: Danois.Gracy
Subject: EPA Comments on TEC-Polk Power Station
To: sheplak_s
CC: Huey.Joel
CC: Pierce.Carla

Attached are EPA comments on the proposed permit for
TEC-Polk Power. Please call me if you have any questions.

Gracy

ELECTRONIC TRANSMISSION

Date: October 1, 1998
To: Scott Sheplak, FDEP - Tallahassee
From: Gracy R. Danois, EPA Region 4
Subject: Initial Comments on Proposed Title V Permit
TEC - Polk Power Station
Permit no. 1050233-001-AV

Below are initial comments from EPA Region 4 on the above referenced source. Our comments are divided into two categories: 1) Significant Comments and 2) General Comments. Significant comments are defined as those comments that would trigger an objection under 40 CFR Part 70. Given that EPA has several significant comments on this proposed permit, we would like to attempt resolution of all issues in order to avoid a formal objection on this permit. If resolution of our significant comments is not achieved, EPA Region 4 will issue an objection to the proposed permit pursuant to 40 CFR 70.8(c) on or before day-45 of the review period. For purposes of this permit review, day-45 is defined as **October 9, 1998**.

Another option available to you is withdrawal of the proposed permit from EPA review. If you choose to utilize this option, you must submit to EPA a written request that the permit be withdrawn including a statement that a proposed permit will be resubmitted for EPA review at a later date. Your written request to withdraw the proposed permit must be submitted to our office by no later than **October 9, 1998**.

Please contact me as soon as possible regarding resolution of this matter. You may reach me at (404) 562-9119.

1) Significant Comments:

- a. Periodic Monitoring: Conditions A.1. and B.1., establish the permitted capacity for the combined cycle combustion turbine and the auxiliary boiler, respectively. The origin of these conditions is the PSD permit for this facility. The permit needs to include appropriate periodic monitoring or recordkeeping requirements to reasonably assure compliance with these conditions. In order to satisfy this requirement, the permit must require that the facility maintain fuel usage records to demonstrate compliance with the applicable heat input rate. Since the limits are expressed as hourly limits, the condition should establish an hourly fuel usage recordkeeping.
- b. Periodic Monitoring: The permit does not require sufficient periodic monitoring to ensure compliance with the applicable SO₂, PM/PM₁₀, CO, VOC, visible emissions, lead, inorganic arsenic, berillium, and mercury limits in Section III, subsection A. The TEC-Polk County permit only requires testing once every five years for SO₂, PM/PM₁₀, CO visible emissions and VOC, and no testing for the remaining pollutants. It is not clear whether or not this monitoring scheme constitutes adequate periodic monitoring to ensure compliance with the limits contained in the permit. As for the lead, inorganic arsenic, berillium and mercury limitations, EPA is concerned that the concentration of these pollutants could vary significantly with every fuel batch. In order for infrequent testing to be approved as the periodic monitoring method for this facility, the State must

provide a technical demonstration that no additional monitoring is warranted to ensure compliance with the limits listed above. The demonstration should identify the rationale for basing the compliance certification on data from a short-term test once every five years. If it is determined that additional monitoring is necessary to ensure compliance with the permit conditions, more frequent testing requirements need to be included in the permit.

Regarding the visible emissions limit, the State needs to use the existing COMs to ensure compliance with the opacity standard. Requiring that the opacity monitor be used for conducting periodic monitoring imposes little or no additional burden on the source.

Additionally, this unit has a continuous emission monitor for SO₂. While fuel analysis may be adequate for determining SO₂ emissions from fuel oil combustion, that may not be true for syngas because of the variability of the fuel. We believe that using the data gathered by the SO₂ monitors would provide a better compliance demonstration than the fuel sampling analysis.

- c. Periodic Monitoring: Section III, Subsection B, condition B.4 limits the hours of operation for the auxiliary boiler. This subpart needs to include recordkeeping requirements for this condition.
- d. Periodic Monitoring: Section III, Subsection C does not contain adequate periodic monitoring requirements to provide reasonable assurance of compliance with the limitations for Visible Emissions, Sulfur Dioxide and Acid Mist. The permit only requires testing once every five years. It is not clear whether this testing frequency would provide reasonable assurance of compliance with the pollutant limitations contained in this subsection. In order to approve the infrequent testing for the pollutants included in this subsection as the periodic monitoring method, the State must provide a technical demonstration that no additional monitoring is warranted to ensure compliance with the limits. The demonstration should identify the rationale for basing the compliance certification on data from a short-term test once every five years. If it is determined that additional monitoring is necessary to ensure compliance with the permit conditions, more frequent testing requirements need to be included in the permit.

Also, daily recordkeeping of the plant production must be kept to ensure that the facility do not exceed the limit contained in condition C.1. This requirement is very important because it is limiting the source's production below 300 tons per day. If the facility exceeded the 300 tons per day production capacity, F.A.C. rule 62-296.402 requires that the facility install and operate continuous emissions monitors for VE, SO₂, and Acid Mist.

- f. Periodic Monitoring: Section III, subsection D, condition D.4 specifies that the facility conducts a Method 22 test once per year. It is not clear whether this infrequent testing provides reasonable assurance of compliance with the visible emission limitation contained in this subsection. In order to approve the infrequent testing for visible emissions, the State must provide a technical demonstration that no additional monitoring is warranted to ensure compliance with the VE limit or require the source to conduct daily VE readings.
- g. Reporting and Recordkeeping: Section III, subsection C, condition C.8 addresses the excess emissions from start-up, shutdown and malfunctions. Condition C.20 requires the reporting of excess emissions due to malfunctions only. This

condition needs to also require reporting of excess emissions from start-up and shutdown.

- h. Missing Applicable Requirement: Subsection D of the permit needs to include a statement establishing that the source is subject to the requirements of 40 CFR Part 60, subpart Y, Standards of Performance for Coal Preparation Plants.
- i. Control Equipment Requirements: The description provided in Subsection E of this permit describes various pieces of control equipment. The permit does not contain any references to the control equipment nor does it contain adequate periodic monitoring requirements for the equipment. The State needs to explain and provide information in the statement of basis supporting the decision not to require parametric monitoring of the control equipment in the permit.
- j. Appropriate Averaging Times: In order for the emissions standards in conditions A.5 and A.6 to be practicably enforceable, appropriate averaging times must be specified in the permit. If the pounds per hours standards are the ones for which the facility would have to demonstrate compliance, the 30-day rolling average is not the appropriate averaging time. Also, for condition A.5, it is unclear whether the facility would have to demonstrate compliance with the limitations listed under "Basis" or the "LB/HR" numbers or both.

2) General Comments

- a. Section II, condition 11: Please replace "Operating Source Section" with "Air & EPCRA Enforcement Branch, Air Compliance Section."
- b. Section III, subsection A, condition A.3.b: The equation should read:
$$[\text{Load}(\%)] / 100\% * \text{hrs. of operation} _ 876 \text{ hrs}$$
- c. Section III, subsection A, condition A.48: EPA recommends that this condition be moved to the "Emissions Limitations and Standards" section since it is related to the NO_x limit that the facility would have to comply with after the demonstration period.
- d. EPA recommends that the State combine conditions A.7 and A.51, since they refer to the same parameter and are based on the same PSD permit requirement. We also recommend that the resulting condition be placed in the "Emissions Limitations and Standards" portion of subsection A.
- e. Section III, subsection A, condition A.49 states that results from NO_x testing conducted on the combustion turbine every two months for 12 to 18 months after the demonstration will not be used for compliance purposes. The State needs to provide the basis for this decision in the statement of basis.
- f. EPA recommends that the State combine conditions B.7 and B.52, since they refer to the same parameter and are based on the same PSD permit requirement. We also recommend that the resulting condition be placed in the "Emissions Limitations and Standards" portion of subsection B.
- g. EPA recommends that the State should combine conditions B.19 and B.32, since they refer to the same parameter and are based on the same NSPS subpart. We also recommend that the resulting condition be placed in the "Emissions

Limitations and Standards” portion of subsection B.

- h. Section III, subsection C, C.3: The intent of this condition is unclear. It seems that this condition is intended to limit the fuel used by this plant to propane. If this is the case, the State should rephrase the condition to clearly state that intent.