

*E 5/10/86*

State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION

DISTRICT ROUTING SLIP

TO: *Bill Thomas* *MT* DATE: *12/2/86*

C.C.  
TO:

<input type="checkbox"/>	PENSACOLA	NORTHWEST DISTRICT	<input type="checkbox"/>
<input type="checkbox"/>	PANAMA CITY	Northwest District Branch Office	<input type="checkbox"/>
<input type="checkbox"/>	TALLAHASSEE	Northwest District Branch Office	<input type="checkbox"/>
<input checked="" type="checkbox"/>	TAMPA	SOUTHWEST DISTRICT	<input type="checkbox"/>
<input type="checkbox"/>	ORLANDO	ST. JOHNS RIVER DISTRICT	<input type="checkbox"/>
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<input type="checkbox"/>	GAINESVILLE	Northeast District Branch Office	<input type="checkbox"/>
<input type="checkbox"/>	FORT MYERS	SOUTH FLORIDA DISTRICT	<input type="checkbox"/>
<input type="checkbox"/>	PUNTA GORDA	South Florida District Branch Office	<input type="checkbox"/>
<input type="checkbox"/>	MARATHON	South Florida District Branch Office	<input type="checkbox"/>
<input type="checkbox"/>	WEST PALM BEACH	SOUTHEAST FLORIDA DISTRICT	<input type="checkbox"/>
<input type="checkbox"/>	PORT ST. LUCIE	Southeast Florida Subdistrict	<input type="checkbox"/>
Reply Optional <input type="checkbox"/>		Reply Required <input type="checkbox"/>	Info. Only <input type="checkbox"/>
Date Due: _____		Date Due: _____	

COMMENTS:

D. E. R.

DEC 04 1986

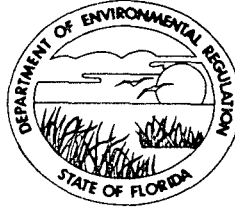
SOUTH WEST DISTRICT  
TAMPA

FROM: *Ferry George*

TEL.: *278-1344*

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

November 26, 1986

~~DATE~~

DEC 04 1986

Mr. Jerry Williams, Director  
Environmental  
Tampa Electric Company  
P. O. Box 111  
Tampa, Florida 33601-0111

SOUTH WEST DISTRICT  
TAMPA

Re: Air Operation Permit Review - Gannon Unit 1

Dear Mr. Williams:

The department considers the meeting held between your staff and consultants and Larry George and Shao-Hang Chu on October 30, 1986, to be responsive to the October 17, 1986, Hillsborough County Environmental Protection Commission (HCEPC) letter of incompleteness on the operation permit application for Gannon Unit 1. During the meeting you stated that you did not plan to revise the "Protocol for Detecting Changes in Sulfur Dioxide Emission Variability" that you submitted on December 11, 1984 (in response to condition 5.a. of permit AO 29-80043), and that you were not in agreement with the alternative procedures recommended by the department and forwarded to you by the HCEPC on July 29, 1986. Since the letter of incompleteness had asked you to address these points, HCEPC has agreed to restart the 90-day clock for the Unit 1 permit application effective October 30, 1986.

Having heard your position on the coal-sulfur variability issue and considered it carefully, the department has come to the following conclusions:

1. The pre-daily coal sampling portion of the "Francis J. Gannon Station Sulfur Dioxide Regulatory Compliance Plan" and the associated yearly seven-day verification test are based on the underlying assumption that the population of coals burned at the Gannon station does not change. If this assumption is correct, the limited power of the verification test to detect a change in the population is unimportant; in fact, the test itself is unnecessary.
2. Although a substantial fraction of the coal burned at the Gannon station comes from a single mine, it is not valid to

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assume that the population of coals burned at the plant has not and will not change. Coals from other sources, including the spot market, are used and reasonably could affect the statistics of the coal that is actually consumed.

3. As long as the mean sulfur content of the coal being burned remains well below the  $2.4 \text{ lb}/10^6 \text{ Btu}$  weekly limit, the department has no reason to be concerned over the fact that the underlying assumption of the compliance plan may not hold. Even with mean sulfur contents as high as  $2.2 \text{ lb}/10^6 \text{ Btu}$ , a very large departure ( $> 100\%$ ) from the assumed sulfur variability would have to occur before the pre-daily coal sampling program would become inadequate. Such a large departure would probably be detected by the yearly seven-day test.

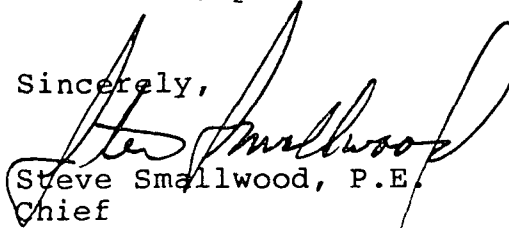
Based on these conclusions, the department proposes to approve the December 11, 1984, protocol with the caveat that the seven-day verification test is valid only, as the compliance plan states, as an extra level of confidence that sulfur variability has not changed significantly. This implies the existence of a more basic level of assurance that sulfur variability is not expected to change. To provide this more basic level of assurance, the department will consider proposing, for future rulemaking, a corrective amendment to the compliance plan to replace or supplement the seven-day verification test with a test such as we have recommended in previous correspondence.

In addition, the department will reserve its option to amend, at any time as it should become necessary, the Gannon Station operation permits to provide reasonable assurance that continued operation of the plant will not jeopardize attainment of ambient air quality standards. This option will be considered upon the occurrence of a weekly mean sulfur content greater than  $2.2 \text{ lb}/10^6 \text{ Btu}$  for any unit at the station or upon a finding, based on the seven-day test, that sulfur variability may have increased. Such amendment would require a demonstration that the underlying assumption of the compliance plan still holds; specifically, that at the 95% probability level, the expected maximum 24-hour sulfur dioxide emissions rate would not exceed  $2.58 \text{ lb}/10^6 \text{ Btu}$ , provided the  $2.4 \text{ lb}/10^6 \text{ Btu}$  weekly limitation is met.

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If you have any questions on this issue, please feel free to call me at (904) 488-1344.

Sincerely,



Steve Smallwood, P.E.  
Chief  
Bureau of Air Quality  
Management

SS/LG/ps

cc: Larry George  
Shao-Hang Chu  
Bill Thomas, DER Tampa  
Jerry Campbell, HCEPC