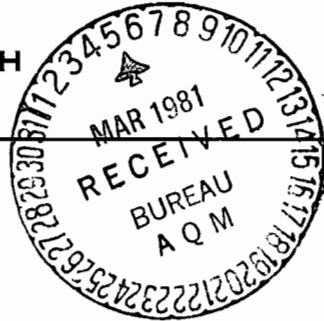


**BLACK & VEATCH**  
CONSULTING ENGINEERS

TEL. (913) 967-2000  
TELEX 42-6263



1500 MEADOW LAKE PARKWAY  
MAILING ADDRESS: P.O. BOX NO. 8405  
KANSAS CITY, MISSOURI 64114

Orlando Utilities Commission  
Stanton Energy Center  
PSD Analysis

B&V Project 8927.SCP  
B&V File 8927.32.0203  
February 25, 1981

Department of Environmental Regulation  
Montgomery Building  
2562 Executive Center Circle, East  
Tallahassee, Florida 32301

Attention: Mr. Larry George

Gentlemen:

As a result of recent telephone discussions between Larry Alfred (B&V) and Lou Nagler (EPA Region IV) and between Larry Alfred and Larry George (FDER), we are including in this letter our intended general plan for the PSD air modeling effort for the proposed Orlando Utilities Commission (OUC) Stanton Energy Center Units 1 & 2. The areas of interest in this letter are the assessment of impacts from OUC stack plumes and fugitive dust sources, with respect to NAAQS and PSD increments. Also of interest are contributions of other sources which could effect the PSD increments in the area of the plant site. The following is a list of specific points resulting from the above telephone conversations.

1. Florida has been delegated PSD authority and this PSD application will be filed with Florida DER.
2. The only sources other than Stanton Units 1 & 2 that must be addressed in the PSD analysis are those that are within 50 kilometers of the proposed site and on the PSD inventory list supplied by EPA.
3. These must be identified in the analysis but not necessarily modeled.
4. There are four sources that fulfill the criteria in item 2 and will be included in the analysis.

- Florida Power & Light      Coal preparation plant at Sanford
- (K for applic. ● Reedy Creek      Incinerator at Lake Buena Vista
- Trans Gulf Pipeline      Tank facility at Midway
- Trans Gulf Pipeline      Petroleum facility at Kissimmee

There are no other new PSD applications on file for this general area.

Orlando Utilities Commission  
Stanton Energy Center  
PSD Analysis

2

B&V Project 8927.SCP  
February 25, 1981

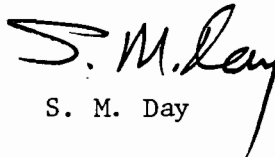
5. Florida Power & Light's Sanford Unit 4 and Canaveral plant have variances from FDER for increased particulate emissions. It is our understanding that these expire prior to operation of the Stanton Energy Center units. Therefore, the increased particulate emissions resulting from the variances will not be included in the analysis as PSD increment consumers.
6. Single source CRSTER, multiple source CRSTER, MPTER, and ISC (rural) are all appropriate dispersion models for use in the analysis.
7. Five years of meteorological data will be used in the modeling study. The data set is for the years 1974 to 1978 and includes surface data from Orlando and mixing depths from Tampa. All missing values in the upper air data have been replaced by interpolation in accordance with EPA Region IV guidance.
8. On-site monitored air quality data is suitable for establishing baseline values for assessment against the NAAQS. Discussion of representativeness of data to the site will be included in the application.
9. Impacts resulting from fugitive dust emissions from the coal handling and storage facilities will be estimated using the ISC model and one year of meteorological data.

The modeling effort for the PSD application will follow the plan as outlined above. If you have any revisions or modifications to this plan that you believe must be implemented in order to develop an acceptable PSD application, we would appreciate an early response to this letter.

If you have any questions or comments with regard to this matter, please contact Larry Alfred.

Very truly yours,

BLACK & VEATCH

  
S. M. Day

LRA/cmc

cc: Mr. Lou Nagler, EPA Region IV

## INTEROFFICE MEMORANDUM

For Routing To District Offices  
And/Or To Other Than The Addressee

To: _____	Loctn.: _____
To: _____	Loctn.: _____
To: _____	Loctn.: _____
From: _____	Date: _____

TO: Power Plant Siting Review Committee

FROM: Buck Oven, Power Plant Siting Section *HSD*

DATE: May 18, 1981

SUBJECT: Orlando Utilities Commission (OUC)  
Curtis H. Stanton Energy Center  
Unit 1 (PA 81-14)

DER received the attached application on May 18, 1981. Please review the application for completeness (and sufficiency, if obvious on first reading). Completeness basically means whether the applicant has addressed all appropriate sections of the DER application form in at least a cursory fashion. We do not at this time expect the application to have major gaps since OUC has kept in close contact with this agency regarding such matters, but oversights may have occurred. We are required by law to make a determination of completeness by 10 days after receipt.

In regards to determining sufficiency, Ch. 17-17 FAC allows us 75 days to ascertain whether or not sufficient information has been provided to allow us to properly evaluate the application. If not, then that is the time period within which we can request additional information. It should be noted that in practice, there is a low level exchange of information throughout the entire review process; however, technically, if there are large gaps in the information supplied, it should be called to the utility's attention within the allotted time period. Thus, we recommend that you perform a sufficiency type review as soon as possible.

We will hold a meeting on May 27th at 1:30 p.m. in the 4th floor conference Room A to discuss completeness, procedures, the application in general, as well as sufficiency concerns if you have them.

Please have written comments if possible, but verbal ones will be most helpful as well. Please refer to I.M.M. 5.8.1 regarding Department processing. A copy of the I.M.M. was distributed with the TECo application, but if you need another, please let me know.

INTEROFFICE MEMORANDUM

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To: \_\_\_\_\_ Locn.: \_\_\_\_\_  
From: \_\_\_\_\_ Date: \_\_\_\_\_

Power Plant Siting Review Committee  
Page Two  
May 18, 1981

Each application we receive is assigned a specific module number. All time spent on the OUC application review should be allocated to module 8184. Any expenses incurred should be billed from module 8184 RCC 0340. I will need to sign travel vouchers billed to that number. Also, please indicate on any travel forms that such travel pertains to PA81-14, the trust fund account number for this particular application.

HS0jr:sb

Distribution: Lou Hubener - General Counsel  
Bill Thomas - Air Quality  
Jay Thabaraj - Water Quality  
Larry Olsen - Biology  
Beverly Birkett - Dredge/Fill  
Ralph Baker (Don Kell, Barney Barnes, Bob McVety)  
Bill Hinkley (Al Bishop, Chuck Collins, J. P. Subramani)

cc: Suzanne Walker

Attachment: (3 Volume Set of Application)

State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION

**INTEROFFICE MEMORANDUM**

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From: _____	Date: _____	
Reply Optional [ ]	Reply Required [ ]	Info. Only [ ]
Date Due: _____	Date Due: _____	

TO: Charles Collins, St. Johns River District  
Buck Oven, Power Plant Siting Section  
Bob King, BAQM ✓  
Larry George, BAQM

FROM: Ed Palagyi, BACT Coordinator

DATE: July 17, 1981

SUBJ: Request for a BACT determination - Orlando Utilities  
Commission - Coal fired electric generator No. 1.

Attached is a partial BACT Determination for subject applicant. Please send your recommended BACT and justification to my attention on or before August 3, 1981. This is the third BACT determination requested for a coal fired electrical generator, the others being in Tampa and Jacksonville.

A final determination will be made based on the comments received. Your willingness to be on this BACT review panel is greatly appreciated. The rewards are too numerous to mention.

EP:caa

Best Available Control Technology (BACT) Determination  
Orlando Utilities Commission  
Orange County

The proposed facility is the construction of one 415 net megawatt coal-fired electric utility steam generating unit and one 92 million Btu per hour heat input oil-fired auxiliary boiler. The site is to be known as the Curtis H. Stanton Energy Center and is to be designed to accommodate four generating units. This determination is for Unit No. 1, the only installation proposed at this time.

The Energy Center is to be located approximately ten miles south-east of Orlando in Orange County classified non-attainment only for the pollutant ozone (17-2.16(1)(g)F.A.C.). The facility must comply with the provisions of 17-2.04 F.A.C. (Prevention of Significant Deterioration).

BACT Determination Requested by the Applicant:

Pollutant	Emission Limit
Particulates	0.03 lb/million Btu input
SO <sub>2</sub>	NSPS
NO <sub>x</sub>	0.60 lb/million Btu input

Particulate emissions to be controlled with a cold side Electrostatic Precipitator (ESP). Sulfur dioxide emissions to be controlled with a wet limestone flue gas scrubber. There is no specific technology to control NO<sub>x</sub> emissions, therefore, BACT is to be the manufacturer's guarantee for state-of-the-art burner design parameters to minimize NO<sub>x</sub> emissions.

Fugitive dust from the coal handling system will be controlled with bag filters, water sprays, and a telescopic chute. Fugitive dust from the limestone handling system will be controlled with bag filters, telescopic chute, pile compaction, and covered conveyors. Emissions from the fly ash vacuum type pneumatic transfer system will be controlled with a fabric filter baghouse. Dust generated by vehicle traffic over unpaved roads will be reduced by wetting with water or a dust palliative.

Date of Receipt of a BACT Application:

July 9, 1981

Date of Publication in the Florida Administrative Weekly:

July 24, 1981

Review Group Members:

Buck Oven, Power Plant Siting Section

Bob King, DER New Source Review Section

Larry George, DER Air Modeling Section

Charles Collins, St. Johns River District

BACT Determination and Justification:

Please send your recommendations with justification for BACT to Ed Palagyi, BAQM by August 3, 1981. A determination will then be made based on the comments received.

State of Florida

DEPARTMENT OF ENVIRONMENTAL REGULATION

## INTEROFFICE MEMORANDUM

For Routing To District Offices  
And/Or To Other Than The Addressee

To: _____	Locn.: _____
To: _____	Locn.: _____
To: _____	Locn.: _____
From: _____	Date: _____

TO: Buck Oven, Power Plant Siting Section

FROM: Bill Thomas, Bureau of Air Quality Management

DATE: July 24, 1981

SUBJ: Comments on Sufficiency Review - Curtis H. Stanton  
Energy Center, Orlando Utilities Commission

The following comments relate to both the Site Certification Application for Unit 1 and the application for a federal PSD permit for Units 1 and 2.

1. The proposed boiler will use No. 6 fuel oil for start-up, low load operation, and flame stabilization. Please evaluate SO<sub>2</sub> and particulate emissions and the emission controls while burning fuel oil. What is the maximum sulfur content of the fuel oil that will be used in Unit No. 1?
2. Please estimate fugitive coal dust emission rates for all the Sources of Emissions listed in Table 3.2-2.
3. Please estimate fugitive limestone dust emission rates for all the Sources of Emissions listed in Table 3.9-1.
4. What is the maximum quantity of gas bypassing the FGD system?
5. Please address carbon monoxide and fluoride emissions from each unit. A BACT analysis is required for CO emissions. A material balance on fluoride is requested. If emissions exceed the significant level, a BACT will be required for this pollutant.
6. For information only, please provide a summary of the NO, NO<sub>x</sub>, and IP onsite measurements which you consider valid and representative.
7. Please provide precise ( $\pm 10$  m) UTM coordinates of each emission point, if known at this time, or approximate ( $\pm 50$  m) UTM coordinates of one point and relative (x,y) coordinates of the others.



Buck Oven  
July 24, 1981  
Page Two

8. Please provide copies of all final model runs (CRSTER and ISC output) showing input data, receptor locations, and principle output tables for the two unit case.
9. For purposes of the federal PSD permit, please provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the plant.

If you have any questions on the data requested, please contact this office. Larry George should be contacted on any question (6-9) related to modeling, and Bob King on the other data requested.

BT:dav

August 1, 1981

Mr. B. E. Shoup  
Orlando Utilities Commission  
Post Office Box 3193  
Orlando, Florida 32802

Dear Mr. Shoup:

The Bureau of Air Quality Management has raised the following questions and issues concerning Stanton Units 1 and 2. The comments relate to both Site Certification and the federal PSD permits.

- 1) The proposed boiler will use No. 6 fuel oil for start-up, low load operation, and flame stabilization. Please evaluate SO<sub>2</sub> and particulate emissions and the emission controls while burning fuel oil. What is the maximum sulfur content of the fuel oil that will be used in Unit No. 1?
- 2) Please estimate fugitive coal dust emission rates for all the Sources of Emissions listed in Table 3.2-2.
- 3) Please estimate fugitive limestone dust emission rates for all the Sources of Emissions listed in Table 3.9-1.
- 4) What is the maximum quantity of gas bypassing the FGD system?
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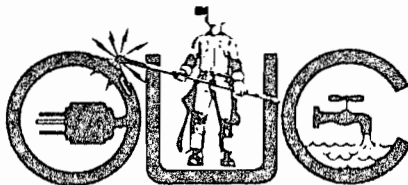
- 6) For information only, please provide a summary of the NO, NO<sub>x</sub>, and IP onsite measurements which you consider valid and representative.
- 7) Please provide precise ( $\pm 10$  m) UTM coordinates of each emission point, if known at this time, or approximate ( $\pm 50$  m) UTM coordinates of one point and relative (x,y) coordinates of the others.
- 8) Please provide copies of all final model runs (CRSTER and ISC output) showing input data, receptor locations, and principle output tables for the two unit case.
- 9) For purposes of the federal PSD permit, please provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the plant.

If you have any questions of items (1-5), contact Bill Thomas or Bob King. For items (6-9), contact Larry George in the Bureau of Air Quality Management.

Sincerely,

Hamilton S. Oven, Jr., P.E.  
Administrator  
Power Plant Siting

HSO:sb



## ORLANDO UTILITIES COMMISSION

500 SOUTH ORANGE AVENUE • P. O. BOX 3193 • ORLANDO, FLORIDA 32802 • 305/423-9100

October 21, 1981

GRACE C. LINDBLOM  
President

Mr. Steve Smallwood, Chief  
Bureau of Air Quality Management  
Department of Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32301

V. M. SANDERLIN  
First Vice President

Dear Mr. Smallwood:

RICHARD WEINER  
Second Vice President

Orlando Utilities Commission (OUC) has filed a Prevention of Significant Deterioration (PSD) permit application for Stanton Energy Center Units 1 and 2. OUC has reviewed the recently proposed PSD regulations to determine their potential impact upon that PSD permit application. The review indicated that the period when PSD authority is being transferred to the DER could pose problems for our PSD permit application for the Stanton Energy Center. These potential problems would be eliminated by the addition of a "safety net" clause to your final PSD regulations. The attached "safety net" provision is suggested by OUC. It would allow the DER to take final action under the final PSD regulations on pending PSD permit applications if the following conditions are met.

BILL FREDERICK  
Mayor

- 1) The EPA grants PSD authority to Florida after the date of submittal of a substantially complete application.
- 2) The EPA refuses to issue the PSD permit.

CHARLES J. HAWKINS  
Immediate Past President

In similar situations involving other states, the EPA-Region IV refused to issue the PSD permit if the public notice of the proposed permit was not published prior to the transfer of PSD authority.

CURTIS H. STANTON  
Executive Vice President  
& General Manager

OUC would like to see such permits issued by Florida without the applicant having to refile the application or interrupt the schedule for power plant site certification.


GURNEY, GURNEY &  
HANDLEY, P.A.  
General Counsel

BES/jh  
Attachment

J. THOMAS GURNEY, SR.  
P.O. Box 1273  
Orlando, FL 32802  
305/843-9500

cc: Mr. C. H. Stanton w/attachment  
Mr. H. C. Luff w/attachment  
Mr. L. E. Stone w/attachment  
Mr. W. H. Herrington w/attachment  
Mr. P. C. Cunningham w/attachment  
Mr. J. T. Gurney, Sr. w/attachment  
Mr. T. B. Tart w/attachment  
Mr. E. C. Windisch w/attachment  
Mr. S. M. Day w/attachment

Sincerely yours,

  
B. E. Shoup  
Director  
Environmental Division



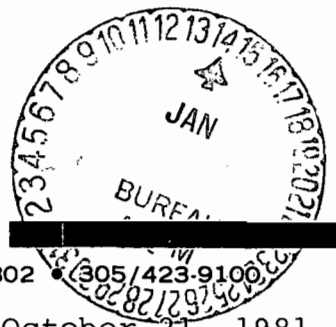
DRAFT PSD "SAFETY NET" PROVISION

Insert as Florida Administrative Code Chapter 17-2.500(1) (b) and redesignate existing subsections (b) and (c) as (c) and (d) respectively.

(b) Applicability to applications on file

Applications for a permit required by Section 165 of the Clean Air Act which meet the following criteria shall be deemed to have been filed and shall be reviewed in accordance with this section, Section 17-2.500, and will not require refileing.

- (1) The application was filed prior to November 1, 1981.
- (2) The EPA has not taken final action on the application.
- (3) The EPA has transferred full PSD permitting authority on delegation by the Department.



**ORLANDO UTILITIES COMMISSION**

500 SOUTH ORANGE AVENUE • P. O. BOX 3193 • ORLANDO, FLORIDA 32802

October 21, 1981

GRACE C. LINDBLOM  
President

Mr. Steve Smallwood, Chief  
Bureau of Air Quality Management  
Department of Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32301

W. M. SANDERLIN  
First Vice President

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I. RICHARD WEINER  
Second Vice President

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BILL FREDERICK  
Mayor

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CHARLES J. HAWKINS  
Immediate Past President

OUC would like to see such permits issued by Florida without the applicant having to refile the application or interrupt the schedule for power plant site certification.

CURTIS H. STANTON  
Executive Vice President  
& General Manager

Sincerely yours,

B. E. Shoup  
Director  
Environmental Division

GURNEY, GURNEY &  
HANDLEY, P.A.  
General Counsel

BES/jh  
Attachment

J. THOMAS GURNEY, SR.  
P.O. Box 1273  
Orlando, FL 32802  
305/843-9500

- cc: Mr. C. H. Stanton w/attachment  
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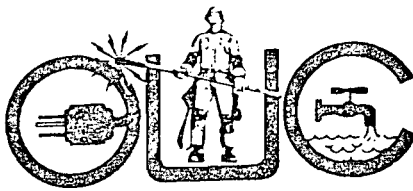
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## ORLANDO UTILITIES COMMISSION

500 SOUTH ORANGE AVENUE • P. O. BOX 3193 • ORLANDO, FLORIDA 32802 • 305/423-9100

GRACE C. LINDBLOM  
President

October 29, 1981

W. M. SANDERLIN  
First Vice President

Mr. H. S. Oven  
Florida Department of  
Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301

I. RICHARD WEINER  
Second Vice President

Dear Buck:



BILL FREDERICK  
Mayor

A Best Available Control Technology Determination (BACT) was signed on August 28, 1981 for the proposed Curtis H. Stanton Energy Center. OUC has reviewed the determination and provides the following comments.

1. Unit 2 Determination

The BACT determination should be made for Unit 2 as well as for Unit 1. The application is for a two unit phased construction permit as described in the Introduction to the Site Certification Application. The proposed BACT for Unit 2 is identical to Unit 1. OUC believes that a phased construction permit is essential to protect OUC's investments being made in common facilities which will serve Unit 2 as well as Unit 1. OUC also understands that the BACT determination for Unit 2 will be reexamined under the current rules prior to its start of construction. Therefore, OUC requests again that the BACT determination for Unit 2 be made (subject to later reevaluation) as requested in the PSD permit application.

2. Date of Receipt of Application

The date of receipt of the BACT application was not July 9, 1981 as indicated on Page 2 of the BACT determination. The application was part of the Site Certification Application submitted on May 18, 1981 and accepted as complete for filing on May 26, 1981.

GURNEY, GURNEY &  
HANDLEY, P.A.  
General Counsel

J. THOMAS GURNEY, SR.  
P.O. Box 1273  
Orlando, FL 32802  
305/843-9500



3. BACT for SO<sub>2</sub> - Steam Generator

The BACT determination requested was identical to NSPS. The BACT determination made by the DER was more stringent than NSPS at 0.76 pounds/10<sup>6</sup> BTU heat input. OUC has examined the sulfur content and heat content of the 38 coals which were bid to OUC for combustion in the unit. The limit of 0.76 would eliminate two of these coals unnecessarily. The low heat content of the worst bid coal is 10,813 BTU/pound. The high sulfur content is 4.46%. This would yield uncontrolled emissions of 8.25 pounds of SO<sub>2</sub>/10<sup>6</sup> BTU heat input. OUC would like to maintain flexibility in fuel selection so that the most economical energy can be produced. An emission limit of 0.83 pounds SO<sub>2</sub>/10<sup>6</sup> BTU heat input (30 day rolling average) would include these other two coals and would provide OUC with the flexibility needed. OUC therefore requests that the DER reconsider its BACT determination of SO<sub>2</sub> for the steam generator to a level of 0.83 rather than 0.76.

4. BACT for CO - Steam Generator

The BACT determination by the DER was 0.05 pounds CO/10<sup>6</sup> BTU heat input. As you are aware, emission measurements for CO are almost nonexistent. The emission rates which would actually occur from the facility are currently unknown. Because of this lack of information, no CO emission guarantee can be obtained from our boiler manufacturer. In view of this lack of emission data, OUC must object to the imposition of a CO emission limit as part of the BACT determination.

5. BACT for Fluorides

OUC has determined that Fluoride emissions may potentially exceed three tons per year and hence may require a BACT determination. More detailed information on Fluoride emissions is being developed and will be submitted shortly.

6. BACT for Opacity - Coal, Limestone, and Flyash Handling Systems

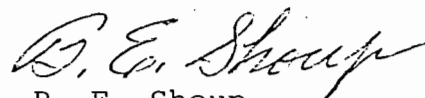
The BACT determination made by the DER for coal, limestone, and flyash handling systems for opacity is 5% maximum. The NSPS for coal processing plants is 20% and, while no NSPS exists for the other facilities, OUC believes that a BACT of 20% opacity is the proper determination for emissions from these facilities and requests a reevaluation of this BACT determination.

7. Other BACT Matters

OUC is still reviewing other portions of the BACT determination and may be submitting additional comments prior to the BACT hearings.

Please advise me as to the proper procedure for obtaining the reevaluations requested in this letter. By copy of this letter, Steve Smallwood, Victoria Tschinkel, and the other members of the BACT Review Group are being advised of OUC's request.

Sincerely yours,



B. E. Shoup  
Director  
Environmental Division

BES/jh

cc: Mr. C. H. Stanton  
Mr. H. C. Luff  
Mr. L. E. Stone  
Mr. W. H. Herrington  
Mr. J. T. Gurney, Sr.  
Mr. T. B. Tart  
Mr. E. C. Windisch  
Mr. S. M. Day  
Ms. V. Tschinkel  
Mr. S. Smallwood ✓  
Mr. C. Collins  
Mr. R. King  
Mr. Larry George

State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION

## INTEROFFICE MEMORANDUM

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Reply Optional [ ]	Reply Required [ ]	Info. Only [ ]
Date Due: _____	Date Due: _____	

TO: H. S. Oven  
 THRU: Clair Fancy *CF*  
 FROM: Ed Palagyi *EP*  
 DATE: November 16, 1981  
 SUBJ: Orlando Utilities Commission (OUC)

The following comments are replies to the questions Mr. B. E. Shoup asked in his letter to you on October 29, 1981. The questions asked pertain to the BACT determination of August 28, 1981, for the Curtis H. Stanton Energy Center.

The replies are in numeric sequence with the questions asked.

1. The applicant (OUC) requests the BACT determination for unit No. 1 also apply to unit No. 2, subject to later re-evaluation. Unit No. 2 is scheduled to commence construction in July 1990.

The BACT determination to which the applicant refers is valid for Site Certification purposes only and, therefore, cannot be extended to include unit No. 2. The Site Certification Application covers unit No. 1 only.

In the federal PSD permit for units No. 1 and No. 2, a BACT determination for unit No. 2 will be made, subject to the phased construction provisions of 40 CFR 52.21(j)(4). This BACT determination will be included as part of the Department's Preliminary Determination regarding the application for a federal PSD permit (PSD-FL-084).

2. The date of receipt of the BACT application as indicated on Page 2 of the determination is the date the BACT coordinator received the information. This date does not affect any time schedule (clock) for site certification or permitting.

Page Three

3. The applicant has indicated a worst case coal analysis of 4.46% sulfur content with a heat content of 10,813 Btu per pound. The emission limit for SO<sub>2</sub> determined as BACT is 0.76 pounds per million Btu heat input. The applicant contends this SO<sub>2</sub> limit removes two coal sources from the 38 available for use. Based upon AP-42 emission factors, the SO<sub>2</sub> emission limit for the worst case coal would be 0.78 pound per million Btu.

The review group does not believe the difference of 0.02 lb/million Btu on a 30-day rolling average will result in the applicant being denied coal purchase flexibility. The SO<sub>2</sub> emission limit determined as BACT agrees with Department determinations for JEA and TECO.

4. The applicant objects to the CO emission limit of 0.05 pounds per million Btu on the basis that the actual CO emissions are currently unknown. The BACT review group recognizes that combustion control requirements must be a balanced trade-off between NO<sub>x</sub> and CO emissions through the use of a flue gas oxygen monitor. The review group also points out that actual emissions for all the pollutants are currently unknown but are estimated from AP-42 and/or from actual similar source test results.

The BACT review group, therefore, recommended a CO emissions limit equal to a previous determination for JEA which is 0.05 lbs. CO per million Btu heat input.

5. This was a statement not requiring a response.

6. The applicant has requested the visible emissions (VE) limitation of 5% opacity for coal, limestone, and flyash handling systems be changed to 20% opacity. The 5% opacity or no visible emission limitation is attainable using available technology. The review group recommends the 5% opacity limit be retained.

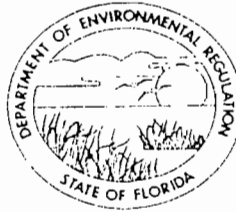
7. This was a statement not requiring a response.

EP:caa

STATE OF FLORIDA  
**DEPARTMENT OF ENVIRONMENTAL REGULATION**

*yellow  
CM*

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



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

November 19, 1981

Mr. B. E. Shoup  
Orlando Utilities Commission  
Post Office Box 3193  
Orlando, Florida

Dear Mr. Shoup:

The Bureau of Air Quality Management has prepared the following comments to your letter of October 29, 1981:

The replies are in numeric sequence with the questions asked.

1. The applicant (OUC) requests the BACT determination for unit No. 1 also apply to unit No. 2, subject to later re-evaluation. Unit No. 2 is scheduled to commence construction in July 1990.

The BACT determination to which the applicant refers is valid for Site Certification purposes only and, therefore, cannot be extended to include unit No. 2. The Site Certification Application covers unit No. 1 only.

In the federal PSD permit for units No. 1 and No. 2, a BACT determination for unit No. 2 will be made, subject to the phased construction provisions of 40 CFR 52.21(j)(4). This BACT determination will be included as part of the Department's Preliminary Determination regarding the application for a federal PSD permit (PSD-FL-084).

2. The date of receipt of the BACT application as indicated on Page 2 of the determination is the date the BACT coordinator received the information. This date does not affect any time schedule (clock) for site certification or permitting.

3. The applicant has indicated a worst case coal analysis of 4.46% sulfur content with a heat content of 10,813 Btu per pound. The emission limit for SO<sub>2</sub> determined as BACT is 0.76 pounds per million Btu heat input. The applicant contends this SO<sub>2</sub> limit removes two coal sources from the 38 available for use. Based upon AP-42 emission factors, the SO<sub>2</sub> emission limit for the worst cast coal would be 0.78 pound per million Btu.

The review group does not believe the difference of 0.02 lb/million Btu on a 30-day rolling average will result in the applicant being denied coal purchase flexibility. The SO<sub>2</sub> emission limit determined as BACT agrees with Department determinations for JEA and TECO.

4. The applicant objects to the CO emission limit of 0.05 pounds per million Btu on the basis that the actual CO emissions are currently unknown. The BACT review group recognizes that combustion control requirements must be a balanced trade-off between NO<sub>x</sub> and CO emissions through the use of a flue gas oxygen monitor. The review group also points out that actual emissions for all the pollutants are currently unknown but are estimated from AP-42 and/or from actual similar source test results.

The BACT review group, therefore, recommended a CO emission limit equal to a previous determination for JEA which is 0.05 lbs. CO per million Btu heat input.

5. This was a statement not requiring a response.

6. The applicant has requested the visible emissions (VE) limitation of 5% opacity for coal, limestone, and flyash handling systems be changed to 20% opacity. The 5% opacity or no visible emission limitation is attainable using available technology. The review group recommends the 5% opacity limit be retained.

7. This was a statement not requiring a response.

Sincerely,

*Hamilton S. Owen, Jr.*

Hamilton S. Owen, Jr., P.E.  
Administrator  
Power Plant Siting



ORLANDO UTILITIES COMMISSION

500 SOUTH ORANGE AVENUE • P. O. BOX 3193 • ORLANDO, FLORIDA 32802 • 305/423-9100

November 6, 1981

GRACE C. LINDBLOM  
President

W. M. SANDERLIN  
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HANDLEY, P.A.  
General Counsel

J. THOMAS GURNEY, SR.  
P.O. Box 1273  
Orlando, FL 32802  
305/843-9500

Mr. H. S. Oven  
Florida Department of  
Environmental Regulation  
Twin Towers Office Bldg.  
2600 Blair Stone Road  
Tallahassee, Florida 32301



Dear Mr. Oven:

In accordance with your letter of August 1, 1981, concerning air quality matters related to the Stanton Energy Center, Units 1 and 2 Site Certification Application and PSD application, our consultants, Black & Veatch, have prepared the enclosed response.

Attachment 1 to these responses consists of many pages of computer printouts and only one copy has been submitted. This copy of Attachment 1 has been enclosed with the copy of this letter sent to Steve Smallwood, Chief of the Bureau of Air Quality Management.

Should, after review, you desire any or all of the attached amended into the applications, please advise.

Sincerely yours,

B. E. Shoup  
Director  
Environmental Division

BES/jh  
Enclosure

cc: Mr. C. H. Stanton w/encl. (w/o Attach. 1)  
Mr. L. E. Stone w/encl. (w/o Attach. 1)  
Mr. W. H. Herrington w/encl. (w/o Attach. 1)  
Mr. E. C. Windisch  
Mr. S. M. Day  
Mr. Steve Smallwood w/encl. (w/Attach. 1)

ORLANDO UTILITIES COMMISSION

RESPONSE TO COMMENT LETTER RECEIVED AUGUST 1, 1981

OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL  
REGULATION, BUREAU OF AIR QUALITY MANAGEMENT



COMMENT OF FDER-BAQM

1) *The proposed boiler will use No. 6 fuel oil for start-up, low load operation, and flame stabilization. Please evaluate SO<sub>2</sub> and particulate emissions and the emission controls while burning fuel oil. What is the maximum sulfur content of the fuel oil that will be used in Unit No. 1?*

OUC RESPONSE

The maximum expected sulfur content of the No. 6 fuel oil to be used for startup, low load operation and flame stabilization will be 2.5%. Based on this maximum sulfur content, the generated sulfur dioxide would be 2.73 lb SO<sub>2</sub>/10<sup>6</sup>Btu. Before startup of the unit, the flue gas scrubber will be put into service. The flue gas scrubber will reduce sulfur dioxide emissions to under 0.60 lb SO<sub>2</sub>/10<sup>6</sup>Btu.

The maximum expected ash content of the No. 6 fuel oil will be 0.5 per cent. Based on this maximum ash content, the generated particulate would be .273 lb per 10<sup>6</sup>Btu. Because of the possibilities of fire in the precipitator during startup (high excess air and possible unburned combustibles), the precipitator will not be operated during this time. The only removal of ash will be the scrubbing of particulate from the flue gas while in the flue gas scrubber. It is expected that the flue gas scrubber will remove about 50 per cent of the fly ash resulting in an emission level of .137 lb ash/10<sup>6</sup>Btu.

COMMENT OF FDER-BAQM

2) *Please estimate fugitive coal dust emission rates for all the Sources of Emissions listed in Table 3.2-2.*

3) *Please estimate fugitive limestone dust emission rates for all the Sources of Emissions listed in Table 3.9-1.*

## OUC RESPONSE

The predicted fugitive dust impact was based on conservative assumptions for emission factors and realistic "worst case" coal and limestone handling situations. All baghouse particulate emissions were derived from the maximum design inlet loading of 13 grains per cubic foot and a collection efficiency of 99.9 per cent. The coal and limestone activities each had two emissions rates. A modeling option allowed for the use of a variable emission rate based on wind speed categories. Wind erosion was included when wind speeds exceeded 12 miles per hour. Field studies have shown that significant wind erosion may occur when the wind speed exceeds this threshold value. A basic conservative assumption in the analysis was that the fugitive dust sources were continuous emitters when in actuality the facilities would only operate part of the time.

The following assumptions were considered to be representative of a 24-hour realistic "worst case" coal and limestone handling situation. Fugitive dust emission rates were determined for this situation and then used to assess their impact.

- A coal unit train (10,000 tons) will be received and stocked out directly to the active coal pile.
- The reclaimer will load-out enough coal for Units 1 and 2 to operate at 100 per cent capacity for 24 hours (8,600 tons).
- Wind erosion estimates were for a two-unit active coal pile.
- Trucks will deliver 800 tons of limestone to the active limestone pile.
- The daily limestone reclaim is equaled to the maximum limestone consumed by both units operating at 100 per cent load.

The following are descriptions of the fugitive dust emissions associated with the sources identified in Table 3.2-2 and 3.9-1 of the Site Certification Application.

### COAL HANDLING

Bottom Car Dumper. Particulate emissions are 0.56 grams per second. This is based on the maximum design inlet loading of 13 grains per cubic foot and a collection efficiency of 99.9 per cent.

Conveyor 2 and Transfer Building. Conveyor 2 is enclosed and connects with the transfer building. Any fugitive emissions from conveyor 2 would be controlled by the transfer building baghouse. The total particulate emission rate is 0.63 grams per second.

Conveyor 3 and Related Active Coal Storage Activities. The fugitive dust emissions for these sources were evenly distributed over an area equivalent to a two-unit coal storage pile. This area was represented as two 70-metre square area sources. The Industrial Source Complex (ISC) model required that the emission rates for area sources be given as grams per second per square metre. The emission rates for the active coal storage sources are, respectively, 0.00011 and 0.00005 grams per second per square metre for with and without wind erosion.

Conveyor 4. This is the reserve stockout conveyor and was not included in the modeling analysis.

Emergency Stockout and Reclaim. These activities were considered to occur infrequently and thus not included in the modeling analysis.

Reserve Storage. The fugitive dust emissions associated with the reserve coal storage pile are expected to be minimal. Mitigative measures will be used to effectively seal the storage pile. The reserve pile would then only be disturbed if the coal delivery was disrupted due to a long-term mining or railroad strike. Wind erosion will be minimized because of the crusting and chemical sealing of the pile surface. The coal pile should not deteriorate once it has been sealed, thus the reserve coal storage pile was not included in the modeling analysis.

Conveyor 5. This conveyor is associated with reclaiming coal from the reserve storage pile. Emissions from the conveyor were not modeled because of the expected infrequent use.

Conveyor 6A, 6B, and Crusher Building. The conveyors are enclosed and exhaust into the crusher building. The crusher building will be enclosed and utilize a baghouse for particulate control. The total emission rate was assumed to be 0.21 grams per second.

Conveyor 7A, 7B, Surge Tower and Plant Silo. The conveyors exhaust into the Surge Tower and Plant Silo. The particulate emissions were modeled as being emitted from a single point at a rate of 0.28 grams per second.

#### LIMESTONE HANDLING

The limestone handling equipment have been designed to handle delivery of limestone by railcar and truck. It was assumed that there would be more

fugitive dust emissions associated with truck delivery. The limestone fugitive dust emissions were also assumed to be uniformly distributed over a 100-metre square area.

Bottom Car Dumper and Stockout Conveyor. The car dumper and conveyor were not modeled since limestone was assumed to be delivered by truck directly to the storage pile.

Active Storage Activities. The fugitive dust emissions from these activities were uniformly distributed over a 100-metre square area source. As with the coal pile storage, wind erosion was included only when the wind speed exceeded 12 miles per hour. The total emission rate for all limestone emissions with and without wind erosion is 0.00006 and 0.00003 grams per second per square metre.

Reserve Storage and Reclaim Conveyor. All limestone was assumed to be loaded in and out from only the active storage pile. Wind erosion from the reserve storage was included in the total emission rate for the 100-metre square area source.

Storage Day Bin. The limestone was assumed to be transported into the pollution control equipment and thus the emissions were expected to be very minor.

COMMENT OF FDER-BAQM

4) *What is the maximum quantity of gas bypassing the FGD system?*

OUC RESPONSE

The unit will be provided with a full flow flue gas bypass for emergency operation. The maximum quantity of gas which could be used for flue gas reheat by bypassing the FGD system is approximately 25 per cent. This would occur only when emissions are less than 0.6 pounds  $\text{SO}_2/10^6\text{Btu}$  heat input.

COMMENT OF FDER-BAQM

5) *Please address carbon monoxide and flouride emissions from each unit. A BACT analysis is required for CO emissions. A material balance on flouride is requested. If emissions exceed the significant level, a BACT will be required for this pollutant.*

## OUC RESPONSE

Production of carbon monoxide is detrimental to plant efficiency. Boiler design and unit operations have always been geared toward obtaining complete combustion. Therefore modern boiler design is the Best Available Control Technology for minimizing CO emissions.

An attempt to provide a fluoride material balance has been made. However only a limited amount of mass balance data for fluorides at power plants have been reported. From these data several observations can be made.

- (1) The amount of fluoride in the coal varies substantially from coal to coal.
- (2) The percentage of fluoride which is subject to atmospheric release (that is volatilized rather than adsorbed onto and collected with the fly ash) ranges from 8 per cent to 84 per cent in the published literature.
- (3) Wet scrubbing of flue gas is very effective in removing volatilized fluoride.

Mass balances were attempted using a variety of coals and assumptions. These calculations yielded potential fluoride emission estimates ranging from 1.8 to 40 tons per year depending on the particular assumptions used. Therefore OUC is unable to determine, in advance, whether the unit will have the potential to emit more than the three tons per year significance level.

Even at an emission rate of 40 tons per year, the maximum 24 hour average ground level concentration is well below threshold limits for vegetation damage to even the most sensitive vegetation species.

No control technologies for the removal of fluorides have been developed. OUC believes that the Best Available Control Technology for this plant is no controls since no benefits from fluoride emission reductions could be realized.

## COMMENT OF FDER-BAQM

6) *For information only, please provide and summary of the NO, NO<sub>x</sub>, and IP onsite measurements which you consider valid and representative.*

TABLE 1. SUMMARY OF NO AND NO<sub>x</sub> DATA

First (1) and second (2) highest one hour average concentrations in micrograms per cubic metre referenced to STP (25 C, 760 mmHg). Monthly and annual arithmetic average (Avg) concentrations.

<u>Month</u>		<u>NO</u>	<u>NO<sub>x</sub></u>
May 1980	(1)	10.7	49.6
	(2)	6.4	31.7
	Avg	6.0	8.0
June 1980	(1)	8.0	23.7
	(2)	7.1	10.2
	Avg	6.0	8.0
July 1980	(1)	6.2	33.2
	(2)	6.2	15.0
	Avg	6.0	10.0
August 1980	(1)	14.9	34.0
	(2)	14.9	32.0
	Avg	6.0	15.0
September 1980	(1)	45.1	55.0
	(2)	28.2	32.0
	Avg	6.0	15.0
October 1980	(1)	21.9	113.0
	(2)	21.8	80.0
	Avg	6.0	17.0
November 1980	(1)	15.7	59.4
	(2)	14.4	49.0
	Avg	6.0	12.0
December 1980	(1)	26.5	91.0
	(2)	20.1	82.6
	Avg	7.0	14.0
January 1981	(1)	30.5	89.3
	(2)	28.4	84.2
	Avg	7.0	13.0
February 1981	(1)	16.6	77.7
	(2)	11.4	77.0
	Avg	6.0	14.0
March 1981	(1)	12.1	83.8
	(2)	11.3	70.7
	Avg	6.0	11.0
April 1981	(1)	6.5	32.2
	(2)	6.4	31.5
	Avg	6.0	8.0
Annual	(1)	45.1	113.0
	(2)	30.5	91.0
	Avg	6.2	12.1

TABLE 2. SUMMARY OF INHALABLE PARTICULATE MATTER DATA

First (1) and second (2) highest 24-hour average concentrations in micrograms per cubic metre of the coarse (2.5 to 15 micrometer) and fine (less than 2.5 micrometer) particulate matter size ranges. Also, the fine particulate values corresponding to the two highest coarse values and the coarse values corresponding to the two highest fine values. Monthly and annual arithmetic average concentrations (Avg) of coarse and fine measurements.

<u>Month</u>		<u>Coarse With Corresponding Fine</u>	<u>Fine With Corresponding Coarse</u>
		May through October - No Data	
November 1980	(1)	29.8, 72.6	72.6, 29.8
	(2)	19.4, 10.2	16.7, 17.7
	Avg	14.9	22.1
December 1980	(1)	11.3, 7.4	11.1, 3.9
	(2)	3.9, 11.1	7.4, 11.3
	Avg	Missing <sup>1</sup>	Missing <sup>1</sup>
January 1981	(1)	11.3, 29.1	33.8, 7.9
	(2)	10.5, 32.8	32.8, 10.5
	Avg	9.0	28.5
February 1981	(1)	16.0, 39.8	58.3, 1.3
	(2)	11.6, 13.0	39.8, 16.0
	Avg	8.0	28.5
March 1981	(1)	76.2, 16.6	28.9, 19.0
	(2)	43.9, 22.3	22.3, 43.9
	Avg	38.2	21.6
April 1981	(1)	24.8, 18.5	25.0, 21.7
	(2)	21.7, 25.0	19.4, 12.6
	Avg	17.0	18.0
November 1980- April 1981	(1)	76.2, 16.6	58.3, 1.3
	(2)	43.9, 22.3	33.8, 7.9
	Avg	17.4	23.7

<sup>1</sup>Insufficient data to compute average.

## OUC RESPONSE

The information in Tables 1 and 2 provide the requested data. Complete data tabulations have been sent already to BAQM. The first three-quarters of the monitoring year were sent on March 2, 1981<sup>(1)</sup> and the last quarter was sent on May 29, 1981.<sup>(2)</sup>

Table 1 is a summary of the NO (nitric oxide) and NO<sub>x</sub> (nitric oxide plus nitrogen dioxide) data for the 12 month monitoring period, May 1980 through April 1981. The two highest one-hour averages and the average concentrations are given for each month and the annual periods. All values are in micrograms per cubic metre, referenced to 25 C and 760 mm Hg temperature and pressure. Some of the apparent variation in monthly NO<sub>x</sub> averages is due to differences in data processing methods for data taken from magnetic tape versus data manually taken from onsite teletype or strip chart records.

Table 2 is a summary of the IP (inhalable particulate) matter data based on the dichotomous sampler measurements. The two highest coarse and fine 24-hour average concentrations are given along with the averages for the monthly and annual periods. In addition, the fine particulate concentration corresponding to each of the two highest coarse values and the coarse particulate concentration corresponding to the two highest fine values are also shown in Table 2.

## COMMENT OF FDER-BAQM

7) *Please provide precise ( $\pm 10$  m) UTM coordinates of each emission point, if known at this time, or approximate ( $\pm 50$  m) UTM coordinates of one point and relative (x,y) coordinates of the others.*

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(1) Letter from S. M. Day of B&V to W. J. Blommel, Environmental Administrator, Florida Department of Environmental Regulations, Bureau of Air Quality Management, dated March 2, 1981.

(2) Letter from S. M. Day of B&V to W. J. Blommel, Environmental Administrator, Florida Department of Environmental Regulations, Bureau of Air Quality Management, dated May 29, 1981.



OUC RESPONSE

For the air quality modeling analysis, the unloading facility was arbitrarily selected as the coordinate reference point. The approximate UTM Coordinates for the train unloading facility are 3,1500,000 N; 483,250 E. Table 3 presents the relative coordinates for the modeled sources with respect to the train unloading facility location.

TABLE 3. MODELING COORDINATES

<u>Emission Source</u>	<u>Relative Coordinates</u>	
	<u>x</u>	<u>y</u>
	m	m
Train Unloading Facility	10000.	10000.
Transfer Building	9985.	10480.
Crusher Building	10105.	10480.
Coal Silo	10490.	10480.
Unit 1 Stack	10340.	10450.
Unit 2 Stack	10340.	10510.
Coal Storage Pile	9725.	10450.
Coal Storage Pile	9795.	10450.
Limestone Storage Pile	10210.	10195.

COMMENT OF FDER-BAQM

8) *Please provide copies of all final model runs (CRSTER and ISC output) showing input data, receptor locations, and principle output tables for the two unit case.*

OUC RESPONSE

Attachment 1 contains copies of the CRSTER and ISC modeling runs that were used to support the two-unit air quality analysis. An index to this attachment (A through N) follows.

INDEX FOR ATTACHMENT 1

- A. 1974 CRSTER dispersion modeling for receptor rings 0.5 to 5.0 km by 0.5 km.
- B. 1974 CRSTER dispersion modeling for receptor rings 1.1 to 2.0 km by 0.1 km.
- C. 1975 CRSTER dispersion modeling for receptor rings 0.5 to 5.0 km by 0.5 km.
- D. 1975 CRSTER dispersion modeling for receptor rings 0.6 to 2.5 km by 0.1 km.
- E. 1976 CRSTER dispersion modeling for receptor rings 0.5 to 5.0 km by 0.5 km.
- F. 1976 CRSTER dispersion modeling for receptor rings 1.1 to 2.0 km by 0.1 km.
- G. 1976 CRSTER dispersion modeling for receptor rings 0.6 to 1.0 km by 0.1 km.
- H. 1977 CRSTER dispersion modeling for receptor rings 0.5 to 5.0 km by 0.5 km.
- I. 1977 CRSTER dispersion modeling for receptor rings 0.6 to 1.5 km by 0.1 km.
- J. 1977 CRSTER dispersion modeling for receptor rings 1.6 to 3.0 km by 0.1 km.
- K. 1978 CRSTER dispersion modeling for receptor rings 0.5 to 5.0 km by 0.5 km and 31 to 40 km by 1.0 km.
- L. 1978 CRSTER dispersion modeling for receptor rings 0.6 to 1.5 km by 0.1 km.
- M. 1974 (All Days) ISC dispersion modeling for assessment of the fugitive dust impact.
- N. 1974 (Day 69) ISC dispersion modeling for determination of individual source contribution to maximum 24-hour concentration.

COMMENT OF FDER-BAQM

9) *For purposes of the federal PSD permit, please provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the plant. (secondary growth)*

OUC RESPONSE

The Stanton Energy Center Unit 1 has been certified for operation in 1986 by the Florida Public Service Commission because of economics of power production; not generating capacity needs related to growth. Additional generating capacity would be required by 1991 to meet increased demands related to growth. From 1986-1991 Unit 1 will offset older oil-fired generating units which do not have modern air pollution control equipment. Therefore, during this period, secondary air quality impacts would primarily consist of a reduction of total SO<sub>2</sub> and TSP emissions.

If it is assumed that the Stanton Energy Center Unit 1 will offset the oil-fired Indian River facilities, the amount of reduction in air pollution emissions per million Btu heat input would be 83 per cent for SO<sub>2</sub> and 70 per cent for particulates.

Future needs for electrical energy have been projected for the OUC service area for the period beyond 1991. Projections of growth for populations and for economic activity were based on historical trends in growth rates and in the types of growth. Induced growth attributable to Stanton Energy Center Unit 1 was not considered. The proposed facility is intended to supply power to meet projected demands which will result from normal economic growth in the service area and is not expected to stimulate additional amounts of growth or to shift the nature of expected growth. Therefore, for the life of the unit beyond 1991, no significant secondary air pollution impacts are expected.

STATE OF FLORIDA  
**DEPARTMENT OF ENVIRONMENTAL REGULATION**

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



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

RECEIVED

*December 17*  
~~November 25, 1981~~

DEC 28 1981

ORLANDO UTILITIES  
COMMISSION

Mr. B. E. Shoup, Director  
Environmental Division  
Orlando Utilities Commission  
P. O. Box 3193  
Orlando, Florida 32802

Dear Mr. Shoup:

I share the concern expressed in your letter of October 21, 1981, that the pending PSD permit application (PSD-FL-084) for Stanton Energy Center Units 1 and 2 may not be acted upon by EPA after EPA transfers PSD authority to the State. We are currently reviewing your November 6, 1981, response to our questions on several air quality matters related to the proposed facilities. Assuming this response is satisfactory, we expect to make a preliminary determination on the application available for public comment in late December. About the same time, we will be submitting to EPA for approval the PSD State Implementation Plan (SIP) revision. Transfer of PSD authority to the State could follow anytime thereafter.

Given the above schedule, I cannot guarantee that the public notice for the pending application will be published prior to the expected transfer of authority, but we think it likely will be. In the event that it is not, we will request EPA to take final action on this and any other pending applications deemed complete prior to November 1, 1981, as a condition of our acceptance of PSD authority.

Mr. B. E. Shoup  
Page Two  
November 25, 1981

By copy of this letter, I am informing EPA of your concern and our possible solution. If EPA is not receptive to this plan, we will consider amending Chapter 17-2 as you suggest. By mid-~~December~~ *January* we should know what course of action looks best.

Sincerely,

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

SS:caa

cc: Winston Smith, EPA Region IV

*Irby G. Pugh*

ATTORNEY AT LAW  
218 ANNIE STREET  
ORLANDO, FLORIDA 32806  
TELEPHONE 843-5840  
AREA CODE (305)

Received DER

NOV 20 1983

P P S

November 21, 1983

Mr. Bob Cooper  
Environmental Assessment Branch  
Environmental Protection Agency,  
Region 4  
345 Courtland Street  
Atlanta, Georgia 30365

Dear Mr. Cooper:

I represent the Sierra Club of Florida and have represented them in their opposition to Orlando Utilities Commission's (OUC) construction of a new coal-fired 415 megawatt electrical generating facility located in southeast Orange County. The EPA gave OUC an air permit for the operation of this proposed coal-fired plant on or about April 10, 1982 and this permit expires on December 10, 1983 according to a copy of a letter received from you, a copy of which is enclosed herewith.

The air permit will terminate on December 10, 1983 unless the facility is "under construction". It is the position of the Sierra Club and any casual observer that construction of this proposed coal-fired plant cannot in truth begin before December 10, 1983. Although OUC may begin some site planning work, the facility is not under construction because:

(a) OUC does not have the requisite statutory authority to issue revenue bonds to finance the construction of this project;

(b) Certain citizens groups and citizens of Orange County have filed lawsuits along with the Sierra Club, in opposition to the construction of this project. This litigation cannot be terminated prior to December 10, 1983. Even the land clearing is improper due to the incomplete licensing of this plant.

I anticipate that OUC will contend it has the project under construction because it has begun site preparation, even though improper. That preliminary word does not constitute "under construction"; clearly a factual determination. Moreover, the EPA

Mr. Bob Cooper  
EPA, Region 4  
November 21, 1983  
Page -2-

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has not required data samples showing the acidity of rainfall in Orange County; and such data was not considered in this permitting process. At the time the permit was issued the Florida Department of Environmental Regulation was only concerned about the emissions of sulfur dioxide, nitrious oxides, carbon monoxide, carbon dioxide and ozone as the basic combustion pollutants. Since the National Academy of Sciences report on acid rain has come out in June, 1983 it is apparent that the EPA is remiss in its air permits if it does not monitor the acidity of rainfall prior to the issuance of an air permit for a coal burning utility.

In March 1982, the Sierra Club and OUC, along with various disinterested parties, conducted an impact hearing pursuant to Florida Statutes, Chapter 403. The ambient air quality data available at that hearing was very limited, confined to a single collector on site by OUC's consultants. Subsequent to March 1982, Orange County, Florida instituted its own acid rain monitoring program. A preliminary report has been issued showing the acidity of rainfall in Orange County, Florida. I am enclosing a copy of that document for your review. As you can see, the rainfall in central Florida at the ambient level is extremely acidic - much more acidic than could be reasonably calculated from the information given under oath by the OUC witness at the impact hearing in March 1982. Although I am aware that EPA has not had specific Ph rainfall level guidelines, because of the new reliable data from Orange County and the linear link between combustion of fossil fuels and acid rain, it is remiss of the EPA not to have some guidelines on the measurement of acid rain in the area where an air quality permittee is located. Instead only the precursor levels are measured. This is an inadequate approach based on new scientifically accepted information.

In sum, because the utility cannot factually begin construction until long after December 10, 1983, and because the degree of acidity in the rainfall at present is critical, I am requesting that EPA terminate the existing permit and reopen the air permit application process on or after December 10, 1983 to compel the applicant to file additional data which would accurately reflect the ambient acidic background. There can be no doubt that this new coal-fired plant will greatly add to an already existing acute problem of acid rain in central Florida since the plant will emit 57 tons of SO<sub>2</sub> which will convert to 85 tons of acid rain at peak operation according to testimony under oath at the impact hearing.

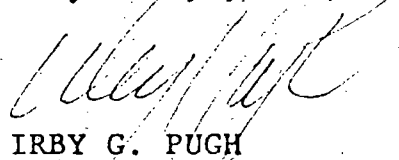
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Moreover, there is no justification for not looking at the enclosed actual operational data when significant changes have occurred in both the scientific knowledge and the amount of rainfall acidity has now been accurately measured by an independent source at the site. Once again, this data was not available at the time of the impact hearing and was not available at the time of the original application by OUC for its air permit.

I urgently request that the EPA terminate the air permit for this plant on December 10, 1983 and require OUC to resubmit new information to consider the amounts of combustion pollutants more stringently than the maximum allowable standards where the background has been shown to be, by reliable data, as acutely acidic as at the location for this permittee. The Sierra Club will be a party to this reapplication process.

If you have any questions, I will be glad to discuss them with you. Please do not hesitate to call on me at any time. However, if the EPA does not want to consider this request on an administrative level, then I shall take such steps as I deem necessary to protect the legal rights of my client and the health and welfare of the citizens of Orange County, Florida.

Very truly yours,



IRBY G. PUGH

IGP/jms

Enclosures

cc: Florida Chapter of the Sierra Club  
Rose Simmons, Orlando Sentinel  
Jim Nesbitt, Orlando Sentinel  
John Bateman, Orange County Pollution Control Dept.  
Vickie Tschinkle, DER  
Buck Oven, Power Plant Siting Director, DER  
Charles R. Jeter, Regional Administrator, EPA