



Final Determination

Orlando Utilities Commission  
Stanton Energy Center Units 1 & 2  
Orange County, Florida

Permit Number  
Federal - PSD-FL-084

Florida Department of Environmental Regulation  
Bureau of Air Quality Management  
Central Air Permitting  
May 14, 1982

RESPONSE TO PUBLIC COMMENT

ORLANDO UTILITIES COMMISSION

(PSD-FL-084)

Comments on the Preliminary Determination were received from Mr. Tommie A. Gibbs, Chief of Air Facilities Branch, EPA and Mr. Charles Collins, St. Johns River District Office, DER. The significant portion of their comments and DER's response are as follows:

Comment 1

Mr. Gibbs requested that General Condition #9 be modified to designate Mr. James T. Wilburn as EPA contact for correspondence.

Response

This comment has been accepted by the Bureau.

Comment 2

EPA has assumed in the past that bulldozer activity on coal storage pile generates uncontrolled emission. What would the uncontrolled emissions estimate be for this operation?

Response

OUC on its application estimates that the uncontrolled dust emissions from the bulldozer activity can be reduced to 50% by using water spray before and during the activity. There is no 50% control efficiency requirement for bulldozer activity listed on the Preliminary Determination, except 20% opacity limit.

Comment 3

Mr. Gibbs pointed out that 100% of the 24 hour SO<sub>2</sub> increment has been consumed for the proposed 2 units.

Response

OUC has totally become aware of the fact. For any additional unit construction, further decrease of SO<sub>2</sub> emissions from units 1 and 2 shall be achieved.

Comment 4

EPA considered that the November 6, 1981 OUC response to DER's incompleteness letter established the completion date. If completion date was November 6, 1981, would increment allocations be affected in any way?

Response

Application was substantially complete on May 18, 1981. The letter DER sent to OUC, just asked for clarification of certain items. Increment would not be affected in any case.

Comment 5

Mr. Collins suggested that the Coal Stacking Spray should be operating at all times during stacking operations and that up to 20% opacity limit would be based on the spray operating and doing its best.

Response

This comment has been accepted by the Bureau.

Comment 6

Mr. Collins pointed out that the pH alarm should be used to control upper level pH value not the lower level pH value, because the less SO<sub>2</sub> removed by scrubber water the higher the pH value in the scrubber water.

Response

This comment has been accepted by the Bureau.

Comment 7

Under General Condition 5, Mr. Collins requested that the District Manager should be notified immediately by telephone for any non-compliance with emission limitations happening at the site.

Response

The comment has been accepted by the Bureau.

Conclusion

All of the above comments accepted by the Bureau have been considered in the development of the Final Determination. The revised Specific Conditions and General Conditions are attached.

Comment 8

Mr. Shoup noted in Specific Condition No. 10.d. that including the limestone handling receiving hopper was in error. The controls used in this operation will be water spray and does not operate under negative pressure.

Response

This comment has been accepted by the Bureau.

Conclusion

All of the above comments accepted by the Bureau have been considered in the development of the Final Determination. The revised Specific Conditions and General Conditions are attached.

### Specific Conditions

1. The proposed steam generating station shall be constructed and operated in accordance with the capabilities and specifications of the application including the 4136 MMBtu/hr. heat input rate for each steam generator.
2. Emissions for each unit shall not exceed the allowable emission limits listed in the following Table for SO<sub>2</sub>, PM, NO<sub>x</sub> and visible emissions. The control technology and allowable emission limits for Unit 2 shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of the unit. At such time, the applicant shall demonstrate the adequacy of this BACT determination or propose a modification to it, taking into account energy, environmental and economic impacts.

#### Allowable Emission Limits

<u>Pollutant</u>	<u>lb/MMBtu</u>
PM	0.03
SO <sub>2</sub>	1.14 (3 hr. average) and 90 percent reduction (30 day rolling average)
NO <sub>x</sub>	0.60 (30-day rolling average)
Visible Emissions	20% (6-minute average), except for one 6-minute period per hour of not more than 27% opacity.

3. The fuel oil to be fired in each unit and the auxiliary boiler shall be "new oil", which means an oil which has been refined from crude oil and has not been used. Emissions from the auxiliary boiler for burning No. 2 fuel oil shall not exceed the allowable emission limits listed in the following table.

Allowable Emission Limits

<u>Pollutant</u>	<u>lb/MMBtu</u>
PM	0.015
SO <sub>2</sub>	0.51
NO <sub>x</sub>	0.16
Visible Emissions	20% Opacity

4. The flue gas scrubber shall be put into service during normal operational startup, and shutdown, when No. 6 fuel oil is being burned. The emission limits when burning No. 6 fuel oil shall be 0.80 lb/MMBtu for SO<sub>2</sub> and 0.03 lb/MMBtu for particulate matter, except during normal startup and shutdown and malfunctions as provided in 40 CFR 60.46a.
5. Samples of all fuel oil and coal fired in the boilers shall be taken and analyzed for sulfur content, ash content, and heating value. Accordingly, samples shall be taken of each fuel oil shipment received. Coal sulfur content shall be determined and recorded on a daily basis

in accordance with EPA Reference Method 19. Records of all the analyses shall be kept for public inspection for a minimum of two years.

6. No fraction of the flue gas shall be allowed to bypass the FGD system to reheat the gases exiting from the FGD system, if the bypass will cause overall SO<sub>2</sub> removal efficiency less than 90 percent (or 70% for mass SO<sub>2</sub> emission rates less than or equal to 0.6 lb/MMBtu). The percentage and amount of flue gas bypassing the FGD system shall be documented and records kept for a minimum of two years available for public inspection.
7. A flue gas oxygen meter shall be installed for each unit, to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback or manual controls to continuously maintain optimum air/fuel ratio parameters.

The applicant shall install and operate continuously monitoring devices for each main unit exhaust for sulfur dioxide, nitrogen oxide and opacity. The monitoring devices shall meet the applicable requirements of 40 CFR 60.47a.

8. Visible emissions from the following facilities with air pollution control equipment shall be limited to 5%

opacity or 0.02 gr/acf: coal, lime, limestone and flyash handling systems.

9. Coal shall not be burned in the unit unless both the electrostatic precipitator and limestone scrubber are operating properly except as provided under 40 CFR 60.46a.
  
10. The following requirements shall be met to minimize fugitive dust emissions from the coal storage and handling facilities, the limestone storage and handling facilities, haul roads and general plant operations:
  - a. All conveyors and conveyor transfer points will be enclosed to preclude PM emissions (except those directly associated with the coal stacker/reclaimer and the emergency stockout facilities for which enclosure is operationally infeasible).
  
  - b. Inactive coal storage piles will be shaped, compacted and oriented to minimize wind erosion.
  
  - c. Water sprays or chemical wetting agents and stabilizers will be applied to storage piles, handling equipment, etc. during dry periods and as necessary to all facilities to maintain an opacity of less than or equal to 5 percent except when adding,



transferring and/or removing coal from the coal pile during which the opacity allowed shall be 20%. During adding, transferring or removing coal activity, the coal stacking spray should be operating at all times.

- d. The limestone handling receiving hopper, transfer conveyors and day silos will be maintained at negative pressures while operating with the exhaust vented to a control system.
  - e. The fly ash handling system (including transfer and silo storage) will be totally enclosed and vented (including pneumatic system exhaust) through fabric filters.
11. Within 90 days of commencement of operations, the applicant will determine and submit to EPA and FDER the pH level in the scrubber effluent that correlates with 90% removal of the SO<sub>2</sub> in the flue gas (or 70% for mass SO<sub>2</sub> emission rates less than or equal to 0.6 lb/MMBtu). Moreover, the applicant is required to operate a continuous pH meter equipped with an upset alarm to ensure that the operator becomes aware when pH value of the scrubber effluent rises above certain limited value. The value of the scrubber pH may be revised at a later date provided notification to EPA and FDER is made

demonstrating that the minimum percent removal will be achieved on a continuous basis. Further, if compliance data show that higher FGD performance is necessary to maintain the minimum removal efficiency limit, a different pH value will be determined and maintained.

12. The applicant will comply with all requirements and provisions of the New Source Performance Standard for electric utility steam generating units (40 CFR 60 Part Da). In addition, the applicant must comply with the provisions and the requirements of the attached General Conditions.
  
13. As a requirement of this specific condition, the applicant will comply with all emissions limits and enforceable restrictions required by the State of Florida Department of Environmental Regulation which are more restrictive, that is lower emissions limits or stricter operating requirements and equipment specifications, than the requirements of specific conditions 1-12 of this permit.

## GENERAL CONDITIONS

1. The permittee shall notify the permitting authority in writing of the beginning of construction of the permitted source within 30 days of such action and the estimated date of start-up of operation.
2. The permittee shall notify the permitting authority in writing of the actual start-up of the permitted source within 30 days of such action and the estimated date of demonstration of compliance as required in the specific conditions.
3. Each emission point for which an emission test method is established in this permit shall be tested in order to determine compliance with the emission limitations contained herein within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. The permittee shall notify the permitting authority of the scheduled date of compliance testing at least thirty (30) days in advance of such test. Compliance test results shall be submitted to the permitting authority within forty-five (45) days after the complete testing. The permittee shall provide (1) sampling ports adequate for test methods applicable to such facility, (2) safe sampling platforms, (3) safe access to sampling platforms, and (4) utilities for sampling and testing equipment.
4. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of two (2) years from the date of recording.
5. If, for any reason, the permittee does not comply with or will not be able to comply with the emission limitations specified in this permit, the permittee shall immediately notify the State District Manager by telephone and provide the District Office and the permitting authority with the following information in writing within four (4) days of such conditions:
  - (a) description for noncomplying emission(s),
  - (b) cause of noncompliance,
  - (c) anticipated time the noncompliance is expected to continue or, if corrected, the duration of the period of noncompliance,

(d) steps taken by the permittee to reduce and eliminate the noncomplying emission,

and

(e) steps taken by the permittee to prevent recurrence of the noncomplying emission.

Failure to provide the above information when appropriate shall constitute a violation of the terms and conditions of this permit. Submittal of this report does not constitute a waiver of the emission limitations contained within this permit.

6. Any change in the information submitted in the application regarding facility emissions or changes in the quantity or quality of materials processed that will result in new or increased emissions must be reported to the permitting authority. If appropriate, modifications to the permit may then be made by the permitting authority to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause violation of the emission limitations specified herein.
7. In the event of any change in control or ownership of the source described in the permit, the permittee shall notify the succeeding owner of the existence of this permit by letter and forward a copy of such letter to the permitting authority.
8. The permittee shall allow representatives of the State environmental control agency or representatives of the Environmental Protection Agency, upon the presentation of credentials:
  - (a) to enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of the permit;
  - (b) to have access to any copy at reasonable times any records required to be kept under the terms and conditions of this permit, or the Act;
  - (c) to inspect at reasonable times any monitoring equipment or monitoring method required in this permit;

(d) to sample at reasonable times any emission of pollutants;

and

(e) to perform at reasonable times an operation and maintenance inspection of the permitted source.

9. All correspondence required to be submitted to this permit to the permitting agency shall be mailed to:

Mr. James T. Wilburn  
Chief, Air Management Branch  
Air & Waste Management Division  
U.S. EPA, Region IV  
345 Courtland Street, NE  
Atlanta, GA 30365

10. The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

The emission of any pollutant more frequently or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.













