

United States Department of the Interior

FISH AND WILDLIFE SERVICE

1875 Century Boulevard Atlanta, Georgia 30345 December 16, 1999

Re: PSD-FL-280

RECEIVED

DEC 27 1999

BUREAU OF AIR REGULATION

Mr. C. H. Fancy Chief, Bureau of Air Regulation Department of Environmental Regulation Twin Towers Office Building 2600 Blair Stone Road, MS 48 Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

Our Air Quality Branch has reviewed the Prevention of Significant Deterioration Application for IPS Avon Park Corporation's (IPS), proposal to construct a 510 MW power production facility known as the Shady Hills Generating Station in Pasco County, Florida. The facility is located 28 km south of Chassahowitzka Wilderness, a Class I area, administered by the U.S. Fish and Wildlife Service.

The technical review comments from our Air Quality Branch are enclosed. IPS's analyses were performed correctly and predicted that the project would not adversely affect Chassahowitzka. However, IPS's analyses predicted several exceedances of the Class I sulfur dioxide increments. Because IPS did not contribute significantly to increment consumption at the time of the exceedances, IPS is considered to comply with the increments. However, we are concerned about these exceedances and ask that your Department identify the sources responsible for the exceedances and take remedial action to rectify the exceedances. Please respond to the Air Quality Branch as soon as possible on this issue.

Thank you for giving us the opportunity to comment on this permit application. We appreciate your cooperation in notifying us of proposed projects with the potential to impact the air quality and air quality related resources of our Class I air quality areas. If you have questions, please contact Ms. Ellen Porter of our Air Quality Branch in Denver at 303/969-2617.

Sincerely yours,

Sam D. Hamilton Regional Director

Enclosure

CC: T. Heron, BAR SWD FOR J. Ellis, IPS K. Kosky, Golden Assoc. cc:

Mr. Doug Neeley Chief, Air and Radiation Branch U.S. EPA, Region IV 100 Alabama St., SW. Atlanta, Georgia 30303

bcc:

FWS-REG. 4: AQC

Refuge Manager, Chassahowitzka NWR, FL

AQD-DEN: Ms. Ellen Porter

National Park Service - AIR

P.O. Box 25287

Denver, CO 80225

Technical Review of Prevention of Significant Deterioration Permit Application For the Construction of a 510 MW Power Production Facility Shady Hills Generating Station Pasco County, Florida PSD-FL-280

by

Air Quality Branch, Fish and Wildlife Service – Denver August 31, 1999

IPS Avon Park Corporation (IPS) proposes to construct a 510 MW power production facility, composed of three 170 MW General Electric GE PG7241 (FA) simple cycle gas/oil turbines. The facility would be located in Pasco County, Florida, 28 km south of Chassahowitzka Wilderness, a Class I area administered by the U.S. Fish and Wildlife Service (FWS).

This project will result in PSD-significant increases in emissions of nitrogen oxides (NO_x), sulfur dioxide (SO_2), sulfuric acid mist (SAM), particulate matter (PM-10), and carbon monoxide (CO). Emissions (in tons per year – TPY) are summarized below.

POLLUTANT	EMISSIONS INCREASE (TPY)		
NO _x	756		
SO ₂	166		
SAM	25		
PM-10	61		
СО	259		

Class I Increment Exceedances

IPS's analyses predicted several exceedances of the Class I SO₂ increments. IPS evaluated the project's contribution to Class I increments with the Industrial Source Complex (ISCST3) model and predicted that the project would contribute significantly (i.e., maximum impacts exceeded the Environmental Protection Agency's significant impact levels) to the 3-hour and 24-hour Class I SO₂ increments. Therefore, as required, IPS performed a cumulative analysis with the CALPUFF model, modeling SO₂ emissions from all increment-consuming sources within 150 km of Chassahowitzka. The cumulative analysis predicted one exceedance of the 3-hour and three exceedances of the 24-hour SO₂ increments, respectively. However, the Shady Hills project did not contribute significantly to these exceedances and, therefore, is considered to comply with the Class I increments.

It is now the responsibility of the Florida Department of Environmental Protection (FDEP) to determine which sources are significantly contributing to the increment exceedances and take remedial actions to rectify the exceedances.

Best Available Control Technology (BACT) Analysis

The use of dry low-NO_x burners to meet a 9-ppm NO_x limit represents BACT for a simple cycle turbine burning natural gas; 42-ppm is acceptable for limited oil firing.

Use of 0.05% sulfur oil represents BACT for a back-up fuel.

Shady Hills' BACT analysis is acceptable.

Air Quality Related Values Analysis

The visibility analysis was done correctly and indicated that there would be low potential for impacts to visibility due to plumes in the Class I area.

Contact: Ellen Porter, Air Quality Branch (303) 969-2617.

THE TAMPA TRIBUNE Published Dail Tampa, Hillsborough County, Florida

State of Florida }
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DEC 23 1999

LEGAL	L NOTICE (PASCO)	
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CC: SWD EPA NPS

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 1010373-001-AC (PSD-FL-280) Shady Hills Generating Station - Units 1-3 Pasco County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit under the requirements for the Prevention of Significant Deterioration (PSD) of Air Quality to IPS Avon Park Corporation. The permit is to construct three nominal 170 megawatt (MW) natural gas and distillate fuel oil-fired combustion turbine-electrical generators with 60-foot stacks and one 2.8 million gallon fuel oil storage tank for the proposed Shady Hills Generating Station East of Hudson in unincorporated Pasco County. A Best Available Control Technology (BACT) determination was required for sulfur dioxide (SO2), particulate matter (PM/PM10), nitrogen oxides (NOx), sulfuric acid mist (SAM), and carbon monoxide (CO) pursuant to Rule 62-212.400, FA.C. The applicant's name and address are IPS Avon Park Corporation, 1560 Gulf Boulevard, #701, Clearwater, Florida 33767.

The new units will be General Electric nominal 170 MW PG7241FA combustion turbines-electrical generators. The units will operate in simple cycle mode and intermittent duty. The units will operate primarily on natural gas and will be permitted to operate 3,390 hours per year of which no more than 1000 hours per year will be using 0.05 percent sulfur distillate fuel oil.

NOx emissions will be controlled by Dry Low NOx (DLN-2.6) combustors. The units must meet a continuous emission limit of 9 parts per million by volume at 15 percent oxygen (ppm). NOx will be controlled to 42 ppm by wet injection when firing fuel oil. Sulfuric acid mist, SO2, and PMPM10 will be limited by use of clean fuels. Emissions of VOC and CO will be controlled by good combustion practices.

The maximum emissions from the combustion turbines in tons per year based on the original application are summarized below. There will be minor emissions of VOC from the fuel oil storage tank. However total VOC emissions will still be less than significant for PSD purposes.

Pollutant -	Maximum Potential Emissions	PSD Significant Emission Rate	
PM/PM10	61	25/15	
CO	259	100	
NOx	756	40	
VOC	34	40 40	
SO2	166 05	7	
Sulfuric Acid Mist	, 25	,	

Air quality and regional haze impact analyses were conducted. Maximum predicted impacts due to proposed emissions from the project are less than the applicable PSD Class I and Class II significant impact levels. There will be insignificant impacts on visibility in the Class I Chassahowitzka National Wildlife Area. Based on the required analyses, the Department has reasonable assurance that the proposed project will not cause or significantly contribute to a violation of any AAQS or PSD increment.

The Department will issue the FINAL Permit, in accordance with the conditions of the DRAFT Permit, unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Coursel of the Department at 3900 Commonwealth Boulevaro, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection

Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida 32301 Telephone: 850/488-0114

Fax: 850/922-6979

Department Environmental Protection

Southwest District Office 3804 Coconut Palm Drive Tampa, Florida 33619-8218 Telephone: 813/744-6100

Fax: 813/744-6084

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.



Department of Environmental Protection

Jeb Bush Governor Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

David B. Struhs Secretary

November 30, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Gregg Worley, Chief Preconstruction/HAP Section Air, Radiation Technology Branch US EPA Region IV 61 Forsyth Street Atlanta. GA 30303

Re: PSD Review and Custom Fuel Monitoring Schedule IPSAPC Shady Hills Generating Station PSD-FL-280

Dear Mr. Worley:

Enclosed are two copies of the Department's Intent to Issue package for the IPSAPC Shady Hills Generating Station in Pasco County. It will be a natural gas and oil-fired simple cycle facility consisting of three nominal 170-megawatt (MW) simple cycle combustion turbine-electrical generators.

Please provide your comments on the Draft BACT determination and Draft Permit. The project is not subject to the Florida's Power Plant Siting procedure because it will generate no electricity from steam.

Please send your written comments on or approval of the applicant's proposed custom fuel monitoring schedule. The plan is based on the letter dated January 16, 1996 from Region V to Dayton Power and Light. The Subpart GG limit on SO₂ emissions is 150 ppmvd @ 15% O₂ or a fuel sulfur limit of 0.8% sulfur. Neither of these limits could conceivably be violated by the use of pipeline quality natural gas with a sulfur limit of 1 grain per 100 standard cubic feet or by back-up fuel oil with a 0.05% sulfur content. The requirements have been incorporated into the enclosed draft permit as Specific Conditions 44 and 45 and read as follows:

- 44. Natural Gas Monitoring Schedule: A custom fuel monitoring schedule pursuant to 40 CFR 75 Appendix D for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2) provided the following requirements are met:
 - The permittee shall apply for an Acid Rain permit within the deadlines specified in 40 CFR 72.30.
 - The permittee shall submit a monitoring plan, certified by signature of the Designated Representative, that commits to using a primary fuel of pipeline supplied natural gas (sulfur content less than 20 gr/100 scf pursuant to 40 CFR 75.11(d)(2)).

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

- Each unit shall be monitored for SO₂ emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.
- This custom fuel monitoring schedule will only be valid when pipeline natural gas is used as a primary fuel. If the primary fuel for these units is changed to a higher sulfur fuel, SO, emissions must be accounted for as required pursuant to 40 CFR 75.11(d).
- 45. Fuel Oil Monitoring Schedule: The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at this facility an analysis which reports the sulfur content and nitrogen content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d).

Please comment on Specific Conditions 40 and 41 which allow the use of the acid rain NO_X CEMS for demonstrating compliance as well as reporting excess emissions, as well as Specific Condition 42 which allows the use of CEMS in lieu of measuring the water to fuel ratio. Typically NO_X emissions will be less than 9 ppmvd @15% O₂ (natural gas) which is less than one-tenth of the applicable Subpart GG limit based on the efficiency of the unit. A CEMS requirement is stricter and more accurate than any Subpart GG requirement for determining excess emissions.

The Department recommends your approval of the custom fuel monitoring schedule and these NO_X monitoring provisions. If you have any questions on these matters please contact me at 850/921-9523.

Sincerely,

A. A. Linero, P.E. Administrator

New Source Review Section

AAL/al

Enclosures

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