

**Golder Associates Inc.**

6241 NW 23rd Street, Suite 500  
Gainesville, FL 32653-1500  
Telephone (352) 336-5600  
Fax (352) 336-6603



October 24, 2000

BUREAU OF AIR REGULATION

9939525-0300

Florida Department of Environmental Protection  
Bureau of Air Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Attention: Mr. A.A. Linero, P.E., Administrator, New Source Review Section

RE: Shady Hills Generating Station  
DEP File No. 1010373-001-AC (PSD-FL-280)  
Increase in Stack Height; Decrease in Stack Diameter

Dear Al:

This correspondence is being submitted to update the Department on the final stack design for the project. In the permit application, the stack was originally contemplated to be 60 feet high and 22 feet in diameter. The final stack design will be 75 feet high and 18 feet in diameter based on General Electric's recommendation and design for the Frame 7FA gas turbine. The increase in stack height coupled with about a 50 percent increase in stack velocity would generally improve dispersion over initial stack design. Golder Associates has performed modeling to confirm this observation. The modeling confirmed that the impacts for the facility are equal to or less than the results submitted in the application. Indeed, the impacts are still below the Prevention of Significant Deterioration significant impact levels for all pollutant and averaging times. These results can be submitted if desired by the Department. In addition, the updated stack design will meet all requirements of Rule 62-297.310(6) F.A.C.

Please call if you have any questions.

Sincerely,

GOLDER ASSOCIATES INC.

A handwritten signature in black ink, appearing to read "Kennard F. Kosky".

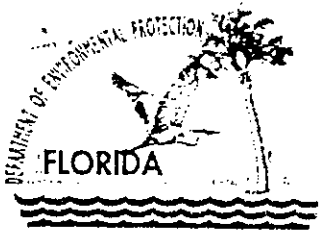
Kennard F. Kosky, P.E.  
Principal

KFK/arz

cc: Betty Robinson, Golder Tampa  
Jon Stroble, Shady Hills Power Company, L.L.C.

A handwritten signature in black ink, appearing to read "C. Carlson".

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Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

October 19, 2000

## CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Jon C. Stroble, Project Manager  
Shady Hills Power Company, L.L.C.  
1001 Louisiana Street  
Houston, Texas 77002

Mr. John S. Ellis  
IPS Avon Park Corporation  
1560 Gulf Boulevard, #701  
Clearwater, Florida 32767

Re: DEP File No. 1010373-001-AC (PSD-FL-280)  
Shady Hills Generating Station  
Transfer of Ownership

Gentlemen:

This letter is to acknowledge receipt of the attached letter dated October 9, 2000 from Golder Associates requesting a transfer of ownership of the Shady Hills Generating Station from IPS Avon Park Corporation to Shady Hills Power Company, L.L.C. Shady Hills Power Company L.L.C. is an affiliate of El Paso Energy Corporation. The proposed facility will be constructed pursuant to the referenced air construction permit near Hudson in Pasco County, Florida.

Golder Associates was the consultant for the original applicant and owner, IPS Avon Park Corporation. The request from Golder Associates includes a signature from a representative of Shady Hills Power Company, L.L.C. Accordingly, the Department has reasonable assurance that a transfer of ownership is in effect between the two parties. The Department has amended its records in the Air Resources Management System to reflect new ownership.

Please advise the Department immediately if any facts stated above are in error. If you have any questions regarding this matter, please call Al Linero at 850/921-9523.

Sincerely,

C. H. Fancy, P.E., Chief,  
Bureau of Air Regulation

CHF/al

Enclosure

Cc: Ken Kosky, P.E., Golder Associates  
Betty Robinson, Golder Associates  
Bill Thomas, DEP SWD

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**U.S. Postal Service**  
**CERTIFIED MAIL RECEIPT**  
*(Domestic Mail Only; No Insurance Coverage Provided)*

7099 3400 0000 1449 4758

Article Sent To:  
**Mr. John S. Ellis, IPS Avon Park**

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
<b>Total Postage &amp; Fees</b>	<b>\$</b>	

Name (Please Print Clearly) (to be completed by mailer)  
**Mr. John S. Ellis**  
 Street, Apt. No., or PO Box No.  
**1560 Gulf Blvd., #701**  
 City, State, ZIP+4  
**Clearwater, FL 32767**

PS Form 3800, July 1999 See Reverse for Instructions

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:  
**Mr. John S. Ellis**  
**IPS Avon Park Corp.**  
**1560 Gulf Boulevard, #701**  
**Clearwater, FL 32767**

2. Article Number (Copy from service label)  
**7099 3400 0000 1449 4758**

**COMPLETE THIS SECTION ON DELIVERY**

A. Received by (Please Print Clearly) **N. McHenry** B. Date of Delivery **10/24**  
 C. Signature **N. McHenry**  Agent  Addressee  
**X**  **N. McHenry**  
 D. Is delivery address different from item 1?  Yes  No  
 If YES, enter delivery address below:

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

**U.S. Postal Service**  
**CERTIFIED MAIL RECEIPT**  
*(Domestic Mail Only; No Insurance Coverage Provided)*

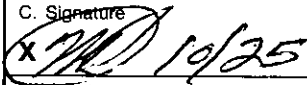
7099 3400 0000 1449 4727

Article Sent To:  
**Jon C. Stroble, Project Mgr.**

Postage	\$	Shady Hills Power Co.  Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
<b>Total Postage &amp; Fees</b>	<b>\$</b>	

Name (Please Print Clearly; to be completed by mailer)  
**Jon C. Stroble**  
 Street, Apt. No., or PO Box No.  
**1001 Louisiana St.**  
 City, State, ZIP+4  
**Houston, TX 77002**

PS Form 3800, July 1999 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>■ Print your name and address on the reverse so that we can return the card to you.</li> <li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul> <p>1. Article Addressed to:            Jon C. Stroble, Project Mgr.            Shady Hills Power Co., L.L.C.            1001 Louisiana St.            Houston, TX 77002</p>	<p>A. Received by (Please Print Clearly) <b>UCT 25 2009</b>      B. Date of Delivery</p> <p>C. Signature       <input type="checkbox"/> Agent  <input type="checkbox"/> Addressee</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes          If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>2. Article Number (Copy from service label)            7099 3400 0000 1449 4727</p>	<p>3. Service Type  <input type="checkbox"/> Certified Mail    <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered        <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail      <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee)      <input type="checkbox"/> Yes</p>

**Golder Associates Inc.**

6241 NW 23rd Street, Suite 500  
Gainesville, FL 32653-1500  
Telephone (352) 336-5600  
Fax: (352) 336-6603



October 9, 2000

9939525A/02

Florida Department of Environmental Protection  
Bureau of Air Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Attention: Mr. C. H. Fancy, P.E., Chief

RE: SHADY HILLS GENERATING STATION  
DEP FILE NO. 1010373 (PSD-FL-280)

RECEIVED

OCT 10 2000

BUREAU OF AIR REGULATION

Dear Clair:

This correspondence is being submitted to request a transfer in the ownership of the Shady Hills Generating Station from IPS Avon Park Corporation to Shady Hill Power Company, L.L.C. Attached please find pages 1, 3, and 7 of the DEP Form No. 62-210.900(1) with the relevant information. I understand, after discussions with your Bureau's staff, that DEP Form 62-1.201 is no longer valid.

Please call if you have any questions.

Sincerely,

GOLDER ASSOCIATES INC.

A handwritten signature in cursive script, appearing to read 'Ken'.

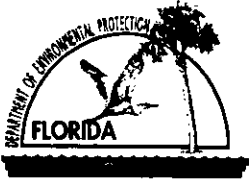
Kennard F. Kosky, P.E.  
Principal

KFK/jkw

Enclosures

cc: Betty Robinson, Golder Tampa  
John Ellis, IPS Avon Park Corporation  
Jon Stroble, Shady Hills Power Company, L.L.C.

A handwritten signature in cursive script, appearing to read 'Betty'.



# Department of Environmental Protection

## Division of Air Resources Management

### APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

#### I. APPLICATION INFORMATION

##### Identification of Facility

1. Facility Owner/Company Name: <b>Shady Hills Power Company, L.L.C.</b>	
2. Site Name: <b>Shady Hills Energy Park</b>	
3. Facility Identification Number: <span style="float: right;"><input checked="" type="checkbox"/> Unknown</span>	
4. Facility Location: Street Address or Other Locator: City: <b>Unincorporated</b> County: <b>Pasco</b> Zip Code:	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Permitted Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

##### Application Contact

1. Name and Title of Application Contact: <b>Jon C. Stroble, Project Manager</b>	
2. Application Contact Mailing Address: Organization/Firm: <b>Shady Hills Power Company, L.L.C.</b> Street Address: <b>1001 Louisiana Street</b> City: <b>Houston</b> State: <b>TX</b> Zip Code: <b>77002</b>	
3. Application Contact Telephone Numbers: Telephone: <b>( 713 ) 420-2844</b> Fax: <b>( 713 ) 420-2483</b>	

##### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

**Owner/Authorized Representative or Responsible Official**

1. Name and Title of Owner/Authorized Representative or Responsible Official: <b>Jon C. Stroble, Project Manager</b>
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: <b>Shady Hills Power Company, L.L.C.</b> Street Address: <b>1001 Louisiana Street</b> City: <b>Houston</b> State: <b>TX</b> Zip Code: <b>77002</b>
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: <b>( 713 ) 420-2844</b> Fax: <b>( 713 ) 420-2483</b>
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative*(check here [X], if so) or the responsible official (check here [ ], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>   Signature _____ Date <u>9/26/00</u>

\* Attach letter of authorization if not currently on file.

**Professional Engineer Certification**

1. Professional Engineer Name: <b>Kennard F. Kosky</b> Registration Number: <b>14996</b>
2. Professional Engineer Mailing Address: Organization/Firm: <b>Golder Associates Inc.</b> Street Address: <b>6241 NW 23rd Street, Suite 500</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32653-1500</b>
3. Professional Engineer Telephone Numbers: Telephone: <b>( 352 ) 336 - 5600</b> Fax: <b>( 352 ) 336 - 6603</b>

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates: Zone: <b>17</b> East (km): <b>347.0</b> North (km): <b>3139.0</b>			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): <b>28 / 22 / 00</b> Longitude (DD/MM/SS): <b>82 / 30 / 00</b>			
3. Governmental Facility Code: <b>0</b>	4. Facility Status Code: <b>C</b>	5. Facility Major Group SIC Code: <b>49</b>	6. Facility SIC(s): <b>4911</b>
7. Facility Comment (limit to 500 characters):  <b>Project consists of three 170-MW dual-fuel, General Electric Frame 7FA combustion turbines(CT) that will use dry low-nitrogen oxide combustion technology when firing natural gas and water injection when firing distillate fuel oil. Each CT will operate up to 3,390 hours per year. The fuel oil tank will hold approximately 2.8 million gallons of very low sulfur content fuel oil.</b>			

#### Facility Contact

1. Name and Title of Facility Contact: <b>Jon C. Stroble, Project Manager</b>			
2. Facility Contact Mailing Address: Organization/Firm: <b>Shady Hills Power Company, L.L.C.</b> Street Address: <b>1001 Louisiana Street</b> City: <b>Houston</b> State: <b>TX</b> Zip Code: <b>77002</b>			
3. Facility Contact Telephone Numbers: Telephone: <b>( 713 ) 420-2844</b> Fax: <b>( 713 ) 420-2483</b>			





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

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

FEB 04 2000

**RECEIVED**

FEB 10 2000

4APT-ARB

Mr. A. A. Linero, P.E.  
Administrator  
New Source Review Section  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

BUREAU OF AIR REGULATION

**SUBJECT: Custom Fuel Monitoring Schedule Proposed for IPS Avon Park Corporation - Shady Hills Generating Station located in Pasco County, Florida**

Dear Mr. Linero:

This letter is in response to your November 30, 1999, request for approval of a custom fuel monitoring schedule for IPS Avon Park Corporation - Shady Hills Generating Station. IPS Shady Hills will operate three natural gas-fired simple cycle combustion turbines subject to 40 C.F.R. Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines. As requested, Specific Conditions 40, 41, 42, 44 and 45 have been reviewed. Region 4 has concluded that the use of acid rain nitrogen oxides (NO<sub>x</sub>) continuous emission monitoring system (CEMS) for demonstrating compliance, as described in Specific Conditions 40, 41 and 42, is acceptable. Region 4 has also concluded that the natural gas custom fuel monitoring schedule proposed in Specific Condition 44 and the fuel oil monitoring schedule described in Specific Condition 45 are both acceptable.

According to 40 C.F.R. 60.334(b)(2), owners and operators of stationary gas turbines subject to Subpart GG are required to monitor fuel nitrogen and sulfur content on a daily basis if a company does not have intermediate bulk storage for its fuel. 40 C.F.R. 60.334(b)(2) also contains provisions allowing owners and operators of turbines that do not have intermediate bulk storage for their fuel to request approval of custom fuel monitoring schedules that require less frequent monitoring of fuel nitrogen and sulfur content.

Region 4 reviewed Specific Condition 44 which allows SO<sub>2</sub> emissions to be quantified using procedures in 40 C.F.R. 75 Appendix D in lieu of daily sampling as required by 40 C.F.R. 60.334(b). Since the specific limitations listed in the permit condition are consistent with previous determinations, we have concluded that the use of this custom fuel monitoring schedule is acceptable.

Specific Conditions 40, 41 and 42 involve the method used to monitor NO<sub>x</sub> excess emissions. Under the provisions for 40 C.F.R. 60.334(c)(1), the operating parameters used to

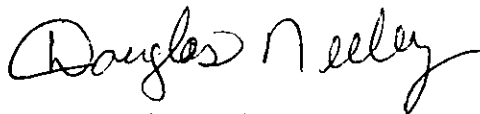
identify NO<sub>x</sub> excess emissions for Subpart GG turbines are water-to-fuel injection rates and fuel nitrogen content. As an alternative to monitoring NO<sub>x</sub> excess emissions using these parameters, IPS Shady Hills is proposing to use a NO<sub>x</sub> CEMS that is certified for measuring NO<sub>x</sub> emissions under 40 C.F.R. Part 75. Based upon a determination issued by EPA on March 12, 1993, NO<sub>x</sub> CEMS can be used to monitor excess emissions from Subpart GG turbines if a number of conditions specified in the determination are met and included in the permit condition.

Specific Condition 40 addresses the potential for correcting results to ISO standard day conditions. The basis for this requirement is that, under the provisions of 40 C.F.R. 60.335(c), NO<sub>x</sub> results from performance tests must be converted to ISO standard day conditions. As an alternative to continuously correcting results to ISO standard day conditions, IPS Shady Hills plans to keep records of the data needed to make this conversion, so that NO<sub>x</sub> results could be calculated on an ISO standard day condition basis anytime at the request of EPA or the Florida DEP. This approach is acceptable, since the construction permit contains NO<sub>x</sub> limits that are more stringent than those in Subpart GG, and compliance with Subpart GG for these units would be a concern only in cases when a turbine is in violation of the NO<sub>x</sub> limits in its permit.

Finally, Specific Condition 45 addresses the monitoring schedule for fuel oil. According to 40 C.F.R. 60.334(b)(1), the nitrogen and sulfur content of the fuel oil must be monitored each time a new shipment of fuel oil is transferred to bulk storage. IPS Shady Hills is proposing to use the fuel analysis provided by the fuel vendor instead of sampling each shipment directly. Provided that all the oil received at the plant complies with the applicable sulfur content limit of 0.8 weight percent, this approach is acceptable, since the specific condition states that the fuel vendor's analyses will comply with the test method requirements of 40 C.F.R. 60.335(d).

If you have any questions about the determination provided in this letter, please contact Katy Forney of my staff at 404-562-9130.

Sincerely,



R. Douglas Neeley  
Chief  
Air and Radiation Technology Branch  
Air, Pesticides and Toxics  
Management Division

cc: SWD  
NPS  
Golder Assoc.  
J. Ellis, IPS, APC