## Golder Associates Inc.

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



February 27, 2002

BUREAU OF AIR REGULATION

0139517-0100

Florida Department of Environmenta Protection 111 South Magnolia Drive, Suite 4 Magnolia Park Courtyard Tallahassee, FL 32301

Attention: Joseph Kahn, P.E. Administrator, Emissions Monitoring Section

RE: SHADY HILLS GENERATING STATION (FACILITY ID - 1010373) – REQUEST FOR ONE LOAD TESTING

## Dear Joe:

This letter serves as a request in behalf of Shady Hills Generating Station located in Pasco County to perform one-load testing on their combustion turbines for their determination of initial compliance. This request refers specifically to Florida Department of Environmental Protection (FDEP) Air Construction Permit PSD-FL-280 (1010373-001-AC) Permit Condition III.29 as follows:

"29. Initial (I) performance tests (for both fuels) shall be performed on each unit while firing natural gas as well as while firing oil. Initial tests shall also be conducted after any modifications (and shake down period not to exceed 100 days after re-starting the CT) of air pollution equipment such as change or tuning of combustors. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 – September 30) pursuant to Rule 62-297.310(7), F.A.C., on each unit as indicated. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior FDEP approval is received in writing.

- EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources" (I,A).
- EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources" (I,A).
- EPA Reference Method 20, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines." Initial test only for compliance with 40 CFR 60 Subpart GG and (I,A) short-term NO<sub>x</sub> BACT limits (EPA reference Method 7E, "Determination of Nitrogen Oxides Emissions from Stationary Sources" or RATA test data may be used to demonstrate compliance for annual test requirements).
- EPA Reference Method 18, 25 and/or 25A, "Determination of Volatile Organic Concentrations. Initial test only."

The applicable NSPS (i.e., 40 CFR 60 Subpart GG) specifies that performance testing for  $NO_x$  at "30, 50, 75 and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including minimum point in the range and peak load". [See Section 60.335 (c)(2) and (3)]

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The turbines associated with the project normally run at peak load. In addition, due to the wintertime period, sufficient natural gas is not available to test at four load points. Therefore, it is requested that the Department approve for initial testing at one-load point for the turbines. These turbines are equipped with continuous emission monitoring systems (CEMs) for NO<sub>x</sub>, which will monitor compliance at other operating loads. These CEMs will be required to undergo RATA testing each years to support the 40 CFR Part 75 requirements.

Please call me at (352) 336-5600 if you have any questions.

Sincerely,

GOLDER ASSOCIATES INC.

Kennard F. Kosky, P.E.

Principal

KFK/EG/nav

cc: A. A. Linero, FDEP New Source review

Teresa Heron, FDEP New Source Review
L. Glenn Keeling, Mirant Corporation
Bruce Lobach, Shady Hills Generating Station

Allen Dial, Shady Hills Generating station

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