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SOUTHWEST DISTRICT
TAMPA

October 30, 1991

Mr. Roger Stewart, Director
Environmental Protection Commission
of Hillsborough County
1900 Ninth Avenue
Tampa, FL 33605

Certified Mail #P276823593
Return Receipt Requested

Richard D. Garrity, Ph.D.
Florida Department of Environmental
Regulation
Southwest Regulation
4520 Oak Fair Boulevard
Tampa, FL 33610

Certified Mail #P740380496
Return Receipt Requested

RE: Tampa Electric Company
Air Operations Permit - Renewal Application
F.J. Gannon Station Unit One

Gentlemen:

Enclosed please find an original and three (3) copies of an application for renewal of permit to operate the above referenced air pollution source, including an operation and maintenance plan for the unit, and an authorization letter for the applicant.

The application package, together with a check for \$2645 to Hillsborough County Board of County Commissioners, and a check for \$2000 to the Florida Department of Environmental Regulation, are included in Mr. Stewart's copy.

Should you have any questions, please feel free to call Ms. Janice Taylor or me at 813/228-4836.

Sincerely,

Lynn F. Robinson
Lynn F. Robinson
Manager, Environmental Planning

REC'D

OCT 31 1991

ENV. PROT. COMM.
OF H.C.

dh/QQ444

Enclosures

TAMPA ELECTRIC COMPANY

P.O. Box 111 Tampa, Florida 33601-0111 (813) 228-4111
P.O. Box 271 Winter Haven, Florida 33882-0271 (813) 294-4171
P.O. Drawer N Plant City, Florida 33564-9009 (813) 752-1115
P.O. Box 588 Dade City, Florida 33526-0588 (904) 567-5101

P.O. Box 907 Ruskin, Florida 33570-0907 (813) 645-6461
(Ruskin Engineering & All Other Inquiries (813) 641-1411)
137 S. Parsons Av. Brandon, Florida 33511-5224 (813) 681-4451
P.O. Box 215 Mulberry, Florida 33860-0215 (813) 425-4988

F.J. Gannon Station - Unit #1

Operation and Maintenance Plan for the Processing System and Particulate Control/Collection System

INTRODUCTION

F.J. Gannon Station is owned and operated by Tampa Electric Company. The station is located on the eastern shore of Hillsborough Bay at Port Sutton. The station consists of six coal fired, steam electric generating units.

Unit 1 was placed in service in 1957. The boiler was manufactured by the Babcock and Wilcox Corporation, and is of the "wet" bottom, cyclone firing type. Boiler exhaust gases pass through an electrostatic precipitator prior to discharge through a 306 foot stack.

PROCESS SYSTEM PERFORMANCE PARAMETERS

The Unit 1 boiler burns low sulfur coal. The design fuel consumption at maximum continuous rating is 50 tons/hr., operating pressure is 1575 psi and operating temperature is 1000°F.

The maximum design steam capacity of the boiler is 910,000 pounds per hour. Steam flow is recorded on a continuous basis.

PARTICULATE CONTROL EQUIPMENT DATA

Gannon Unit 1 is equipped with an electrostatic precipitator for the control of particulate emissions. The rigid frame precipitator was manufactured by Combustion Engineering, Inc. Fly ash collected by the precipitator is wither pneumatically transported to a storage silo for sale or reinjected into the boiler. Fly ash is reinjected into the boiler when the silo approaches its maximum storage capacity. Important design information and data applicable to the particulate control system are listed below.

Precipitator Data

Design Flow Rate	440,000 acfm
Primary Voltage	460 volts
Primary Current	258 amps
Secondary Voltage	56.6 kilovolts
Secondary Current	1500 ma
Design Efficiency	99.09%
Pressure Drop	1.59 inches of H ₂ O (avg.)
Rapper Frequency	1/1.5 min-1/4.0 min (avg.)
Rapper Duration	Impact
Temperature	260 ± 55°F (avg.)