

HAND DELIVERED



October 14, 1986

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SOUTH WEST DISTRICT
TAMPA

Mr. William C. Thomas
Florida Department of
Environmental Regulation
District Office
7601 Highway 301 North
Tampa, Florida 33610-9544

Re: Tampa Electric Company
Air Operations Permit Application
Gannon Station - Unit #1

Dear Mr. Thomas:

Enclosed please find a revised Operation and Maintenance Plan for the Processing System and Particulate Control/Collection Systems (Attachment B) for the Gannon Station Unit #1 application to operate an air pollution source, which was submitted to you on September 17, 1986.

In this revised plan, those preventive maintenance procedures that were performed on a weekly basis have been returned to the original monthly schedule.

Should you have any questions, please feel free to call.

Sincerely,

A. Spencer Autry
Manager
Environmental Planning

ASA/jst/025/EE

Enclosure

cc: Mr. Jerry Campbell (w/enc.)
CERTIFIED MAIL/RETURN
RECEIPT REQUESTED

ATTACHMENT B

F.J. GANNON STATION - UNIT #1

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

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 September, 1957. The boiler was manufactured by the Babcock and Wilcox Corporation and is of the "wet" bottom, cyclone firing type. Boiler flue gas passes 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. Flyash collected by the precipitator is either pneumatically transported to a storage silo for sale or reinjected into the boiler. Flyash 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 (average)
Rapper Frequency	1/1.5 min-1/4.0 min (average)
Rapper Duration	Impact
Temperature	260 ± 55°F (average)

Precipitator (ESP) performance parameters are recorded on a daily basis. The information recorded includes primary voltage, primary current, secondary current and secondary voltage. This information is kept in the precipitator technician's office. Flyash hopper high levels are alarmed in the control room.

MAINTENANCE AND INSPECTION SCHEDULES

Precipitator

All generating units of Tampa Electric Company system are regularly scheduled for periodic maintenance. The schedule for planned maintenance outages is affected by system load and forced outage requirements. Typically, planned outages are scheduled during non-peak load periods such as the spring or fall.

The Unit 1 particulate control system receives regular preventive maintenance. The following preventive maintenance procedures are performed on a monthly basis.

- Inspection of insulator compartment heaters/blowers. Service as needed.
- Observation of operation of all rapper and transformer/rectifier controls.

The following preventive maintenance procedures are performed on a daily basis.

- Inspection of system controls. Minor adjustments as needed.

Should these procedures indicate repairs are necessary, maintenance job requests are initiated. All records are maintained for a minimum of two years.