KISSIMMEE ELECTRIC
CONSTRUCTION FUNDS, SERIES 1982
P.O. BOX 1608
KISSIMMEE, FL 32741

1190

9/1/1983

63-27/631

PAY One Thousand Dollars 00/100 -- $ 1,000.00

EXCHANGE BANK & TRUST COMPANY OF FLORIDA
TAMPA, FLORIDA 33601

TO THE ORDER OF
Department of Environmental Regulation
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803

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RUDCO 026

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

Nº 33694

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from ______________________ Date ______________

Address ______________________ Dollars $ ______________

Applicant Name & Address ______________________

Source of Revenue ______________________

Revenue Code ______________ Application Number ______________

By ______________

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

APR 28 1983

DER
MAY 02 1983
BAQM

Ms. Teresa M. Heron
Department of Environmental Regulation
State of Florida
2600 Blair Stone Road
Tallahassee, Florida 32301

Dear Ms. Heron:

As you requested in our phone conversation of April 26, 1983, I am sending you this letter to confirm the correct ISO adjustment equation for the new source performance standard for stationary gas turbines. The equation as it appears in the Federal Register of September 10, 1979, (44 FR 52800) is incorrect. The correct equation is as follows:

$$NO_x = (NO_{x_{OBS}}) \left(\frac{Pref.}{P_{OBS}}\right)^{0.5} e^{19(H_{OBS} - 0.00633)} \left(\frac{288°K}{Tamb.}\right)^{1.53}$$

Also, as we discussed, the allowance for fuel NO_x in the standard must be based on the amount of bound nitrogen actually present in the fuel being burned in the gas turbine. There is no bound nitrogen in natural gas (the primary fuel for the Kissimee Utility gas turbine) and only a negligible amount in most #2 distillate (the emergency fuel). Thus, for most (if not all) of this gas turbine operating time, a fuel NO_x allowance will be inappropriate and allowable NO_x emissions will be 79 ppmv. However, the permit does require the fuel nitrogen to be measured (p.4 of 5), so the allowance for it can be applied when appropriate. It should be noted that the plant must file a report whenever the plant burns fuel with a nitrogen level giving a higher fuel NO_x allowance than that provided during compliance tests.

You commented that the proposed standards allowed only the gas turbine heat rate to be used in determining allowable NO_x emissions, but that this limitation does not appear in the promulgated standards (Part 60, Subpart GG). The limitation is defined in Part 60, Subpart GG as follows:

1. The standard is defined by the formula in 60.332(a)(1), when y = manufacturer heat rate ... for the affected facility.

2. The affected facility is, per 60.330, all stationary gas turbines.

3. And, in 30.331(a) "Stationary gas turbine" means any ... gas turbine portion of a combined cycle steam/electric generating system .... portability.

If you have any further questions, please contact me at (919) 541-5596, or call Doug Bell at (919) 541-5578.

Sincerely yours,

Eric A. Noble
Industrial Studies Branch
Emission Standards and
Engineering Division