

State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices Or To Other Than The Addressee		
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
From: _____	Date: _____	
Reply Optional [ ]	Reply Required [ ]	Info. Only [ ]
Date Due: _____	Date Due: _____	

ST. JOHNS RIVER DISTRICT

TO: Bill Thomas  
THROUGH: A. Senkevich *JN/AS.*  
THROUGH: T. Hunnicutt *JH.*  
FROM: C. Collins *cmc*  
DATE: September 7, 1983  
SUBJECT: Osceola County - AP  
Kissimmee Utilities - Combustion Turbine

DER  
SEP 09 1983  
BAQM

A request for a construction permit regarding Kissimmee Utilities Combustion Turbine was sent to you under separate cover on September 7, 1983. Their original permit has expired and our attorney's inform us that they must reapply.

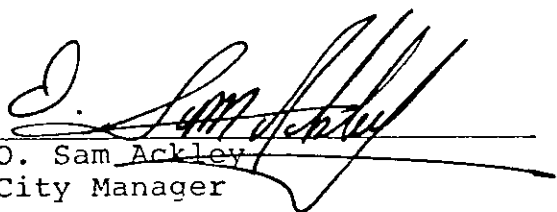
CMC:es

MEMORANDUM

DATE: July 31, 1983  
TO: James C. Welsh, Electric Utilities Director  
FROM: O. Sam Ackley, City Manager  
SUBJECT: Signature Authorization

COPY:

The purpose of this memorandum is to authorize you to act in my behalf in requesting operation permits for the generating units at the Kissimmee Power Plant. Your signature on permit applications will be binding with the City management.

  
O. Sam Ackley  
City Manager

/pf



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:

$$NO_x = (NO_{xOBS}) \left( \frac{P_{Pref.}}{P_{OBS}} \right)^{0.5} e^{19(H_{OBS} - 0.00633)} \left( \frac{288^\circ K}{T_{amb.}} \right)^{1.53}$$

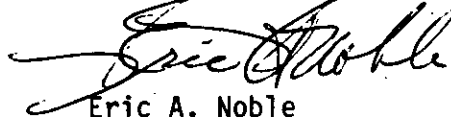
Also, as we discussed, the allowance for fuel  $NO_x$  in the standard must be based on the amount of bound nitrogen actually present in the fuel being burned in the gas turbine. There is no bound nitrogen in natural gas (the primary fuel for the Kissimee Utility gas turbine) and only a negligible amount 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 60.331(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,

A handwritten signature in cursive script that reads "Eric A. Noble". The signature is written in black ink and is positioned above the typed name.

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