



## Florida Gas Transmission Company

P. O. Box 945100 Maitland, Florida 32794-5100 (407) 875-5800

May 30, 1997

**RECEIVED**

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BUREAU OF  
AIR REGULATION

Mr. Clair H. Fancy  
Chief, Bureau of Air Regulation  
Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

This letter is in reference to your telephone conversation with our air quality services consultant, Barry Andrews (ENSR) regarding the urgent situation that Florida Gas Transmission Company has due to vibration problems that are presently occurring with our 5,000 horsepower (hp) reciprocating natural gas compressor engine at Station 19 near Melbourne, Florida.

As discussed, the 5,000 hp compressor engine is the same unit that was the subject of earlier conversations in which a turbine would be used on a temporary basis (approximately one year) to carry the load of the existing engine. We were in the process of making arrangements with the Central District to discuss the permitting requirements to deal with this issue when it came to our attention that something had to be done immediately.

Based on a review of an engine analysis that was conducted on Wednesday, May 28, 1997, we made a decision today that the 5,000 hp engine at Station 19 must be shutdown to prevent engine failure. We are scheduled to shut this engine down at 9:00 a.m. tomorrow, May 31. Although this measure will protect the engine, it is critical that something also be done to compensate for the loss of this unit.

The 5000 hp engine at Station 19 accounts for nearly half of the total compression capacity at this station. A shutdown of this engine at Station 19 without the option of compensation may severally restrict natural gas transmission to Southeast Florida. This may result in severe natural gas shortages and would impact large users of natural gas such as Florida Power and Light and the municipal natural gas distributors.

To alleviate the potential natural gas transmission problems resulting from the immediate shutdown of the 5,000 hp engine, we would like to have the option to partially compensate for the loss of compression by increasing the horsepower of the two other engines at Station 19 and some of the engines at the upstream compression station (Station 18, located near Orlando) and the downstream compression station (Station 20,

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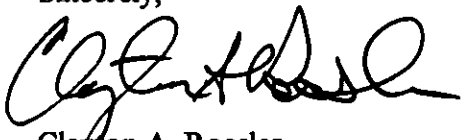
located near Fort Pierce). This increase in horsepower is possible when ambient air temperature is below 80 degrees Fahrenheit, and control limitation are removed from the engine (a procedure known as ambient uprating). Additionally we would like to have the option of increasing the speed of units 1801-1804 at Station 18 and units 2001-2003 at Station 20. The increased speed of these units will not cause any permit exceedances.

This option of boosting horsepower will result in an exceedance of some permit limitations for those engines in which the horsepower is increased. The limitations which could be exceeded include lb./hr emissions limits, heat input and natural gas consumption. It should be noted, however, that the net change in emissions, heat input and natural gas consumption would not increase on a combined basis for Stations 18, 19 and 20, since the 5,000 hp engine accounts for a large part of the overall capacity from these three stations.

This notification is being made in accordance with paragraphs (1), (5) and (6) of Chapter 62-210.700 of FDEP Regulations, which address excess emissions resulting from startup, shutdown, and malfunctions. We are predicting that the option of the up-rating measures may need to be taken for a period of four months to allow sufficient time for a temporary turbine to be authorized and put into operation at Station 19.

We regret that this urgent matter has arisen and appreciate your assistance. Should you have any questions or require additional information, please contact me at (407) 875-5865.

Sincerely,



Clayton A. Roesler  
Division Environmental Specialist

cc: Barry Andrews, ENSR  
Lin Kozlov, Central Florida District  
Isadore Goldman, Southeast District