



**COUNTY ATTORNEY
MIAMI-DADE COUNTY, FLORIDA**

111 N.W. 1 ST., SUITE 2810
MIAMI, FLORIDA 33128-1993
TEL. (305) 375-5151
FAX (305) 375-5634

June 26, 2013

VIA U.S. MAIL

Ms. Ann Cole, Commission Clerk
Office of Commission Clerk
Room 110, Easley Building
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

RECEIVED-FPSC
13 JUL - 1 AM 9:02
COMMISSION
CLERK

Re: Docket No. 130089 – Miami-Dade County’s Responses to Staff’s First Data Request

Dear Ms. Cole:

Enclosed for filing on behalf of Miami-Dade County are an original and five copies of Miami-Dade County’s Responses to Staff’s First Data Request.

Please acknowledge receipt of these documents by stamping the extra copy of this letter “filed” and return same to me.

Thank you for your assistance with this filing.

Sincerely,

Henry N. Gillman
Assistant County Attorney

- c: Floyd R. Self
- Elizabeth Wade, Esq.
- Suzanne Brownless, Esq.

COM _____
AFD _____
APA _____
ECO 3 _____
ENG 1 _____
GCL 1 _____
IDM _____
TEL _____
CLK _____

Re: Docket No. 130089-GU – Joint Petition for approval of natural gas transportation service agreement between Florida City Gas and Miami-Dade County, through Miami-Dade Water and Sewer Department

MIAMI-DADE COUNTY'S RESPONSES TO STAFF'S FIRST DATA REQUEST

Staff DR 1-1: Please refer to the Joint Petition, Exhibit E, Page 5 of 10, response to Question 1, in which Jack Langer states, "Based on its long history of kiln operation, WASD does not expect many emergency shutdowns after both kilns are fully repaired and operating (note recent history of Hialeah kiln)." Also, under Question 1, Jack Langer states "WASD anticipates the lime kilns to be operative for many years to come." Given these statements, why have the petitioners included an "out" clause for the take or pay provision to the 2014 TSA (Joint Petition, Exhibit A, Page 5, Article V, Section 3)?

Miami-Dade Response: Hialeah Plant Lime Kiln has been in active service since 1942 (over 70 years) and the Alexander Orr Plant Lime Kiln since 1982 (over 30 years). Despite the significant funding invested in both kilns within the last few years, the prospect of unanticipated shutdowns remain due to stress and fatigue from a 24-7-365 operation and 2200 degree Fahrenheit operating temperature.

The vast majority of unanticipated shutdowns are of long duration due to difficulty of obtaining replacement materials and finding qualified craftsman installers. For example, the kiln bricks are over 12 inches in depth and must be specially cast of red clay. The lime recalcining pipeline is over 300 feet in length, between eight and ten feet in diameter depending on the plant site, made of steel one and one-half inches thick, and has a tare weight of an estimated 750 tons. The large kiln also contains stainless steel chains inside of the pipeline mounted to the red clay bricks, and must slowly rotate at the correct pitch for lime movement from top to bottom. Achieving that operation requires heavy duty electric motors, heavy duty casted rollers and bearings, and the pipeline be aligned and balanced and set to appropriate micrometer settings.

However, scheduled shutdowns for planned maintenance are not as long in duration as parts can be ordered in advance and operational logistics adjusted accordingly.

This response was prepared by or under the supervision of Joseph Ruiz, Deputy Director, Operations, Miami-Dade Water and Sewer Department.

Staff DR 1-2: Please refer to the Joint Petition, Page 7, and Section 12. What are the potential reasons for extended outages of greater than 90 days for purposes of suspension of the take or pay minimum volumes?

Miami-Dade Response: When fully loaded with used Quicklime, the lime kiln rotating pipeline weighs an estimated 850 tons and must operate 24-7-365 in extreme high temperatures. Should an unexpected shutdown occur, it is probable than the outage will exceed the 90 day period due

Docket No. GU-130089
Miami-Dade County,
Response to First Set of Staff Data Requests
June 26, 2013

to the nature of the repairs. The variables involved in these repairs are as noted in the answer to question number one.

This response was prepared by or under the supervision of Joseph Ruiz, Deputy Director, Operations, Miami-Dade Water and Sewer Department.

Staff DR 1-3: Please refer to the Joint Petition, Page 7, Section 12. What are potential reasons for extended outages of greater than 90 days for which a suspension of the take or pay minimum volumes could not be exercised?

County Response: The potential use of other fuels such as fuel oil or propane to operate the lime kilns. For the record, there are neither other fuel sources on site nor any current plans to pursue any other fuel sources.

This response was prepared by or under the supervision of Joseph Ruiz, Deputy Director, Operations, Miami-Dade Water and Sewer Department.

Staff DR 1-4: Please refer to the Joint Petition, Exhibit A, Page 5, Section 3, last sentence. If MDWASD advises FCG of a service outage of more than 90 days, thereby suspending the take or pay provisions of the contract, is it correct that the take or pay minimums for service period outages greater than 90 days are adjusted on a pro rata basis for all days of the outage, including the first 90 days?

County Response: The pro-rata basis calculation shall not include the first 90 days of the unexpected outage.

This response was prepared by or under the supervision of Joseph Ruiz, Deputy Director, Operations, Miami-Dade Water and Sewer Department.

Staff DR 1-5: Please refer to the Joint Petition, Page 6, Section 11 and the Joint Petition, Exhibit E, Page 2 of 10. Why did the Orr kiln require over one year to be rebuilt given the high monthly cost of purchasing Quicklime as described by Gregory Hicks (300 tons daily at a price of \$224.81/ton to \$244.68/ton)?

County Response: To clarify the statement of 300 tons daily, that quantity is the total daily amount of Quicklime required for both Hialeah and Alex Orr Water Treatment Plant locations. Therefore, each location requires 150 tons of Quicklime daily. Lime kilns allow each location to reuse approximately 75 tons of the 150 tons required for each day. When one of the water treatment locations experiences a lime kiln outage, the amount of Quicklime purchased daily rises from 75 tons to 150 tons, respectively for each location.

Due to the age of the kilns and the uniqueness of the materials, it is extremely difficult and costly to have replacement parts designed, manufactured, and shipped to South Florida. Ten tractor loads of red bricks were required for the Alexander Orr Project. The red clay bricks needed to re-

Docket No. GU-130089
Miami-Dade County,
Response to First Set of Staff Data Requests
June 26, 2013

line the oval kiln require specialized labor to install the bricks. There are only three lime kilns of this size and magnitude that operate for water treatment in the United States, and two of them are owned and operated by WASD. Re-lining the oval shaped lime kilns is very specialized work and not regularly performed in this part of the country. Installers had to be hired from outside Miami-Dade County and the re-bricking of the 300 foot long pipeline took over three months alone.

Roller bearings, chains, and special insulation for the blowers and venting ducts had to be designed and put out for bid. The chains inside the pipeline have to be installed in sections. The chains took over two months to install. All asbestos insulation had to be specially removed. There are also permits to be pulled and inspections and code to be dealt with. All adjacent electrical feeds were upgraded as required. One year is actually a respectable project completion time for a project of this nature and magnitude.

This response was prepared by or under the supervision of Joseph Ruiz, Deputy Director, Operations, Miami-Dade Water and Sewer Department.

Staff DR 1-6: Please refer to the Joint Petition, Page 6, and Section 10, which states that purchasing lime can be significantly more expensive than producing lime on site in the natural gas power kilns. Has production of lime on-site in the natural gas power kilns at any time since 2003 been more expensive than purchasing lime? Please explain.

County Response: The reuse of Quicklime by natural gas pipeline kilns using natural gas as a fuel source **has not** cost more than purchasing lime since 2003.

WASD requires 300 tons daily of Quicklime to successfully treat potable water demands of over 300 MGD on a 24/7/365 basis. Water Treatment Plant Natural Gas Power Lime Kilns consume approximately 500,000 therms of natural gas each month, which allows WASD to recycle and reuse approximately 150 tons of the daily 300 ton requirement. Using current monthly price of \$.52 cents a therm as a base cost to FOB Water Plant burner tip all inclusive, equates to an estimated \$260,000 cost each month for natural gas.

Assuming the lime kilns are fully operational requires 150 tons of additional Quicklime to be purchased and delivered on a daily basis. WASD therefore must purchase 4,500 tons of Quicklime each month with 2,000 tons of Quicklime delivered by rail at \$224.81 per ton FOB Plant equaling \$449,620, and 2,500 tons of Quicklime delivered by truck at \$244.68 per ton FOB Plant equaling \$611,700. Therefore, the aggregate monthly total of 150 tons purchased daily of Quicklime is \$1,061,320. That means that **one half** of the required Quicklime monthly purchase cost is **\$1,061,320** and the **full monthly** Natural Gas purchase cost is **\$260,000**.

This response was prepared by or under the supervision of Joseph Ruiz, Deputy Director, Operations, Miami-Dade Water and Sewer Department.