M E M O R A N D U M

DATE:June 1, 1998

TO:Terri Carlock

Robert Smith

Stephanie Miller

Scott Woodbury

Working File

FROM:George Fink

SUBJECT:McGuire Estates Rate Case No.  MCG-W-98-1

Given below is the rate design analysis for the subject case.  The McGuire Estates Water Company (Company) has proposed that the base rate fee be increased from $11.13 to $17.00 per month.  In addition, the Company requested the commodity fee be increased from $0.47 per 1000 gallons (over 10,000 gallons) to $0.65 per 1000 gallons (over 10,000 gallons).

The owners of the Company, Harold and Pauline Lundy, have indicated that they would prefer that the base rate be increased more significantly versus the commodity rate.  In addition they expressed a desire that an even dollar amount be set for the base rate.  Comments were received from two Company customers.  In both cases the customers expressed concern that this water system would be connected to a planned adjacent mobile home park, which is owned by the Lundy’s.  In our discussions with the Lundy’s and inspection of the site, it was determined that there are no actions being taken to connect the McGuire Estate system to this planned park at this time.

The test year used in the rate design is 1997.  The revenue and expense figures used in this analysis are based on the findings of Bob Smith, given in his May 15, 1998 memorandum.  He determined that the revenue requirement for the Company is $16,085, 20.83% greater than the actual 1997 revenues.  Based on this assessment and the application information submitted by the company there is agreement that an increase in customer rates is required at this time.

The assumptions used in this rate design include: 63 hook-ups in the water system; a 10,000 gallons per month consumption allowance; and, retaining of the current metered and unmetered customer rate structure.  Modification of the rate design to a flat rate was not considered to be necessary since all parties appear to be satisfied with the current structure.  In addition, an overage volume of 9,972,000 gallons per year was used in the rate design.  This value is the average for the last three years, as reported by the Company: 1995 - 10,621,760 gallons; 1996 - 10,791,000 gallons; and, 1997 - 8,502,980 gallons.

Given the above assumptions several rate designs were considered, as listed in Attachment 1.  The Company’s proposed rate adjustment (Column A) would result in excessive operating income, an estimated $3,248.  If the Company’s proposed base rate ($17.00 per month) is applied the commodity rate would need to be reduced approximately $0.14 to $0.33 (Column B).

Maintaining the commodity rate at $0.47, the base service rate would need to be increased to $15.10 per month (Column C), an increase of 35.7% increase over the existing rate.    This rate design would reflect the desires of the Company, that is 71% of the revenue requirement is obtained from base service revenues.  It would also more closely approach a flat rate design (i.e., less variability between winter and summer billings).  The billings to the non-metered customers under this option are expected to increase approximately by 35.7% ($3.97 per month) during the winter season and 18.0% ($3.97 per month) during the summer season (Attachment 2), thereby resulting in the net increase per bill being roughly constant throughout the year.  This rate design is also expected to result in minimal revenue variability attributable to changes in water consumption.  Revenue is expected to vary no more than ±5% from the revenue required using this rate design (Attachment 1, Columns F and G).

Two rate designs that would increase both the base and commodity service rates were also considered.  In one case the base service rate would increase to $14.20 per month which is a 27.6% increase over the existing rate.  The commodity rate would be increased to $0.54 per 1000 gallons (over 10,000 gallons) which is an increase of 14.9% over the existing commodity rate.  This rate design parallels the request of the Company, that is the base revenue should yield approximately 66% of the expected total revenue.  It also offers the customer a smaller increase in the base service fee and is expected to yield a more equitable winter season bill.  This rate design is also expected to result in minimal revenue variability attributable to changes in water consumption (±5%; Attachment 1, Columns H and I).  Under this rate design the billings to the non-metered customers are expected to increase approximately by 27.6% ($3.07 per month) during the winter season and 21.3% ($4.70 per month) during the summer season (Attachment 2).

Given in Column E of Attachment 1 is a rate design option that would increase the base service rate to $13.50 per month which is a 21.3% increase over the existing rate.  The commodity rate would be increased to $0.59 per 1000 gallons (over 10,000 gallons) which is a 25.5% over the existing commodity rate.  This rate design will reduce the amount of revenue attributable to base revenue (i.e., increases the percentage of required revenue attributable to commodity revenues), which goes against what the Company has requested.   This alternative rate design does offer the customer a smaller increase in the base service fee, however, it also may result in more revenue variability attributable to changes in water consumption (>5%; Attachment 1, Columns J and K).  Under this rate design the billings to the non-metered customers are expected to increase approximately by 21.3% ($2.37 per month) during the winter season and 23.4% ($5.16 per month) during the summer season (Attachment 2), thereby placing a larger percentage of the rate increase on summer season billings.

I recommend that the base service charge be set at $14.20 per month and the commodity charge be set at $0.54 per 1000 gallons (above 10,000 gallons).    This rate design achieves the goal of the Company by having a larger percentage of total revenue from the base service fees.  This rate structure spreads the rate increase on both base service and commodity fees, but is not expected to cause an excessive increase in summer billings.  Further, this rate design is not expected to cause revenue to vary more than ±5% from the revenue required given the variability in water usage.

Attachment 2

Estimated Impacts of Rate Designs on Customer Billings

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Est. Winter Bill | Change from Test Yr. | Est.  Summer Bill | Change from Test Yr. |
| $$$ | Percent | $$$ | Percent |
| Option 1: $15.10/mth. & $0.47/1000 gal. | $15.10 | $3.97 | 35.67% | $26.02 | $3.97 | 18.02% |
| Option 2: $14.20/mth. & $0.54/1000 gal. | $14.20 | $3.07 | 27.58% | $26.75 | $4.70 | 21.31% |
| Option 3: $13.50/mth. & $0.59/1000 gal. | $13.50 | $2.37 | 21.29% | $27.21 | $5.16 | 23.41% |

Given Test Year Rates: $11.13/month and $0.47/1,000 gallons; assume overage of 9,972,000 gallons used over 6 month period (summer season) by 50 unmetered customers.