



Control Number: 49367



Item Number: 57

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**PUC DOCKET NO. 49367
SOAH DOCKET NO. 473 – 19 – 5831.WS**

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| PETITION BY OUT OF DISTRICT | § | BEFORE THE |
| RATEPAYERS APPEALING THE | § | |
| WATER RATES ESTABLISHED BY | § | PUBLIC UTILITY COMMISSION |
| THE EL PASO WATER CONTROL | § | |
| AND IMPROVEMENT DISTRICT NO. 4 | § | OF TEXAS |

**RESPONSE OF EL PASO COUNTY WATER CONTROL AND IMPROVEMENT
DISTRICT NO. 4 TO MESA DEL NORTE RATEPAYERS' MOTION FOR
PARTIAL SUMMARY DECISION AND REQUEST FOR INTERIM RATES**

TO THE HONORABLE ADMINISTRATIVE LAW JUDGE:

COMES NOW Respondent El Paso County Water Control & Improvement District No. 4 (“Fabens District”) and pursuant to 16 Tex. Admin. Code § 22.182(c) files this response to Out-of-District Ratepayers’ Motion for Partial Summary Decision and Request for Interim Rates and would respectfully show as follows:

I. INTRODUCTION

On September 3, 2019, Petitioners, who are certain out-of-district ratepayers of the District residing in the Mesa del Norte subdivision, filed their Out-of-District Ratepayers’ Motion for Partial Summary Decision and Request for Interim Rates (“Motion for Summary Decision and Request for Interim Rates”) in this proceeding.¹

In their motion, Petitioners seek partial summary decision on Issues Nos. 3 and 5 as set forth by the Public Utility Commission of Texas (“Commission”) in its Preliminary Order.² As set forth by Petitioners, Issue No. 3 asks: “Do the retail water and sewer rates being charged by petitioners by the district fulfill the requirements of TWC § 13.043?” Issue No. 5 asks: “What

¹ Docket Item No. 47.

² *Id.* at 2-5.

information was available to the district at the time it made its decision to increase the water and sewer utility service rates?”

Petitioners also seek a decision regarding Issue No. 2 from the Commission’s Preliminary Order which asks: “Should the Commission establish or approve interim rates to be in effect until a final decision is made?” Petitioners request that the Administrative Law Judge (“ALJ”) impose an interim rate for the remainder of this proceeding. More specifically, Petitioners request that the interim rates established be the same as the rates charged to in-district ratepayers.

As described and explained below, Petitioners’ motion for summary decision and request for interim rates should be denied.

II. STANDARDS

Under PUC Procedural Rule 22.182 (Summary Decision), the ALJ “may grant a motion for summary decision on any or all issues to the extent that the pleadings, affidavits, materials obtained by discovery or otherwise, admissions, matters officially noticed in accordance with §22.222 of this title (relating to Official Notice), or evidence of record show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision in its favor, as a matter of law, on the issues expressly set forth in the motion.” 16 TEX. ADMIN CODE § 22.182(a). A motion for summary decision shall be denied where the response of the party opposing such a motions can show “by affidavits, materials obtained by discovery or otherwise, admissions, matters officially noticed, or evidence of record, that there is a genuine issue of material fact for determination at the hearing, or that summary decision is inappropriate as a matter of law.” *Id.* § 22.182(c).

Although this appeal is not currently being heard on its merits, ultimately, in an appeal under Tex. Water Code § 13.043:

the commission shall ensure that every rate made, demanded, or received by any retail public utility or by any two or more retail public utilities jointly is just and reasonable. Rates must not be unreasonably preferential, prejudicial, or discriminatory but must be sufficient, equitable, and consistent in application to each class of customers. The commission shall use a methodology that preserves the financial integrity of the retail public utility.

TEX. WATER CODE § 13.043(j).

In proceedings in which PUC Substantive Rule 24.37 (Interim Rates) applies, “[i]nterim rates may be established by the commission in those cases under the commission's original or appellate jurisdiction where the proposed increase in rates could result in an unreasonable economic hardship on the utility's customers, unjust or unreasonable rates, or failure to set interim rates could result in an unreasonable economic hardship on the utility.” 16 TEX. ADMIN. CODE § 24.37(d). Moreover, under PUC Procedural Rule 22.125, the ALJ, after notice and opportunity for hearing, may grant a contested request for interim relief only on a showing of good cause. *See* 16 TEX. ADMIN. CODE § 22.125(c).

In determining whether good cause exists, the presiding officer shall take into account:

- (1) The utility’s ability to anticipate the need for and obtain final approval of relief prior to the time relief is reasonably needed;
- (2) other remedies available under law;
- (3) changed circumstances;
- (4) the effect of granting the request on the parties and the public interest;
- (5) whether interim relief is necessary to effect uniform system-wide rates; and
- (6) any other relevant factors as determined by the presiding officer.

Id.

III. RATEPAYERS' MOTION SHOULD BE DENIED BECAUSE THE COMMISSION LACKS JURISDICTION OVER THE RATE DECISIONS AT ISSUE

As more fully set forth in the Motion for Full or Partial Summary Decision of El Paso County Water Control and Improvement District No. 4,³ which is currently pending, this proceeding should be dismissed in its entirety because the Commission lacks appellate jurisdiction over the issues that Petitioners' attempt to present because: (1) the petition contains an insufficient number of signature (83 persons) to appeal the District's decision to impose a 5% across-the-board rate increase (which affected all 2,383 of the District's ratepayers) and (2) Petitioners' attempt to appeal the District's decision to adopt its 74.9 percent in-district/out of district rate differential ("In-District/Out of District Rate Differential"), which the District adopted on December 15, 2015, and which became effective on January 1, 2016, was not timely filed. Alternatively, if the effective date of the District's In-District/Out-of-District Rate Differential is not January 1, 2016, but is January 1, 2019, then the entire petition should be dismissed because it contains an insufficient number of signatures. Accordingly, Petitioners' Motion for Summary Decision and Request for Interim Rates should be denied because there is no genuine issue as to any material fact related to the conclusion that the PUC lacks jurisdiction over the issues that Petitioners attempt to present, and summary decision is therefore appropriate as a matter of law.

IV. RESPONSE TO PETITIONERS' MOTION FOR SUMMARY DECISION

If the ALJ fails to adopt the District's jurisdictional arguments mentioned above, the following response to Petitioners' motion for summary decision should then be considered.

³ Docket Item No. 49.

A. Summary decision on Issue No. 3 should be denied.

Petitioners request summary decision with respect to Issue No. 3 from the Commission's Preliminary Order. As stated by Petitioners, Issue No. 3 is as follows:

Do the retail water and sewer rates being charged by petitioners by the district fulfill the requirements of TWC § 13.043(j)?⁴

Petitioners assert that the District "cannot meet its burden to show" that the District's adopted In-District/Out of District Rate Differential "is just and reasonable," and seek summary decision that this differential is "unjust and unreasonable."⁵

Under the statute governing this proceeding, the Commission is to hear this appeal de novo and "shall fix in its final order the rates the governing body should have fixed in the action from which the appeal was taken." TEX. WATER CODE § 13.043(e). The rates fixed by the Commission are to be "just and reasonable," and may not be "unreasonably preferential, prejudicial, or discriminatory." *Id.* § 13.043(j). Moreover, the Commission must "use a methodology that preserves the financial integrity of the retail public utility." TEX. WATER CODE § 13.043(j).

As a threshold matter, Issue No. 3 presents the ultimate question to be decided by the Commission in a rate appeal under Texas Water Code § 13.043, and therefore does not lend itself to summary decision. To the extent that this proceeding goes forward to a hearing on its merits,⁶ the District should be given a full opportunity to further develop and present testimony and other evidence to meet its burden on this issue. Instead, Petitioners are asking the ALJ to pre-empt this proceeding and leapfrog it to its final merits.

⁴ Docket Item No. 47 at 2.

⁵ Docket Item No. 47 at 10.

⁶ As mentioned above, the District's has filed a Motion for Summary Decision seeking dismissal of this proceeding on jurisdictional grounds (*see* Docket Item No. 49) which is currently pending. Also, the parties have agreed to mediate this appeal with mediation scheduled for November 12, 2019. *See* Mediation Status Report and Agreed Modification of Procedural Schedule (Docket Item No. 54). The District hopes and believes that mediation can be successful here.

Moreover, Petitioners have presented no actual evidence on Issue No. 3. Petitioners have not conducted or presented any rate study or analysis. Petitioners have not presented any evidence on what they believe a just and reasonable in-district/out-of-district rate differential should be. Petitioners simply demand that there be **no** in-district/out-of-district rate differential, and do so without evidentiary support.

Petitioners have presented no evidence that the granting of the relief they request – the setting of out-of-district rates at in-district levels – would preserve the financial integrity of the District as required under 13.043(j). The District has retained the services of Mr. Charles Evans Loy of GDS Association, Inc., of Austin, Texas, to serve as its expert witness and rate consultant in connection with this proceeding. Mr. Loy explains and presents testimony on how the granting of Petitioners’ requested interim relief would result in a financial hardship for the district.⁷ He also explains that the revenue losses that would result from the granting of Petitioners’ requested interim relief combined with the high legal and consulting costs forced upon the District in this proceeding by Petitioners could hamper the District’s ability to obtain funding under favorable terms and that existing bond covenants may be strained, thus harming the financial integrity of the District.⁸

Petitioners have presented no actual evidence that the District’s adopted In-District/Out-of-District Rate Differential is unjust, or unreasonably preferential, prejudicial or discriminatory. Rather, Petitioners base their request for summary decision solely on their and their expert witness’ repeated and incorrect assertions that *the District* has “no evidence” to support its In-District/Out-

⁷ Affidavit of Charles Evans Loy (Exhibit A), ¶ 9.

⁸ Exhibit A, ¶ 9.

of-District Rate Differential.⁹ Petitioners base this assertion, in turn, exclusively, on statements made by the District in response to discovery requests that the District does not: (1) allocate or break down final cost between out-of-district and in-district ratepayer, or document how costs are accounted for in the rates charged specifically to MDN ratepayers; (2) allocate or break down the costs of operating and maintaining its facilities between out-of-district and in-district ratepayer; or (3) break down the allocation of debt service between in-district and out-of-district ratepayers.¹⁰

It is not determinative or even relevant to this proceeding that the District indicated in its discovery responses that it did not allocate or break down costs (including operation and maintenance costs and costs of debt service) between out-of-district and in-district customers in having developed its rates in 2015. It is simply not illegal or a violation of the Texas Water Code § 13.043 or any applicable statute for the District to not have allocated or broken down such costs between in-district and out-of-district customers. Not having done so does not make the District's rates *per se* unjust and unreasonable.

As more fully explained in Mr. Loy's affidavit, cities and water districts throughout Texas often impose a rate differential on customers who are outside of the entity's political boundaries.¹¹ The purpose of such differentials is to recover the additional costs of serving outside customers and the lack of tax revenue from those customers.¹² With respect to such cost factors, public entities typically rely on reasonable estimates.¹³ Such costs factors and generic considerations include: (1) higher costs associated with serving customers farther from the entity's core service area;

⁹ Docket Item No. 47 at 2, 3, 5.

¹⁰ Docket Item 47 at 4 (*citing* Ekrut Affidavit, Exhibits B-D).

¹¹ Exhibit A, ¶ 3.

¹² *Id.*

¹³ *Id.*

(2) the higher level of financial responsibility of inside customers for defaults, lawsuits and fines; and (3) the risk that inside customers assume of paying for stranded costs for system capacity built to serve outside customers where outside customers cease to be served by the utility. Well-known reference sources used for developing water and wastewater rates indicate that it is typical to see inside/outside rate differentials from between a factor of 1.0 and 2.0 (zero to 100 percent).¹⁴

Moreover, it is typical and acceptable for a utility such as the District to not separately account for in-district and out-of-district expenses.¹⁵ The tracking of in-district and out-of-district costs, as Petitioners suggest is required, is not required by the District's bond holders, TCEQ, PUC or any other regulatory authority. Such separate tracking of expenses and investment would be expensive, and overly complicated, especially for a small utility such as the District.¹⁶ Most rate differentials are based on reasonable estimations guided by generic issues which may or may not be addressed in the context of a formal rate story.¹⁷

Mr. Loy's affidavit includes a table that identifies some of the public entity utility clients of Chris Ekrut, Petitioners' expert witness, and the inside/outside rate differential employed by each of those clients of Mr. Ekrut.¹⁸ The District's adopted In-District/Out-of-District Rate Differential is within the range of the differentials of Mr. Ekrut's clients set forth on the table.

Chapter 49 the Water Code (which applies to the District) expressly anticipates and allows a water district to serve areas outside of its jurisdictional boundaries with water and sewer services and states that a district is authorized to charge and collect fees for such services that "are

¹⁴ *Id.*

¹⁵ *Id.*, ¶ 4.

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

considered necessary **and may be higher** than those charged for comparable service to users within the district.” TEX. WATER CODE § 49.215(e) (emphasis added). Section 49.215 provides a floor with regard to the fixing of such charges and not a ceiling. *See id.* §49.215(f) (stating that “[t]he rates . . . shall be at least sufficient to meet the expense of operating and maintaining the services and facilities for a water and sanitary sewer system serving areas outside the district and to pay the principal of and interest and redemption price on bonds issued to . . . construct . . . [and] operate . . . the services or facilities”).

Mr. Loy concludes that the District’s adopted In-District/Out-of-District rate differential, as developed in 2015 and implemented beginning in January 2016, is just and reasonable, and not prejudicial, preferential or discriminatory.¹⁹

The District asked Mr. Loy to conduct a new rate analysis – using information that was available to the District in December 2015. Mr. Loy’s analysis determines revenue requirements for inside and outside service areas by applying generally accepted rate-making principles of allocation.²⁰ The preliminary results of Mr. Loy’s analysis determine an overall rate differential factor for the outside District service area customers of 1.81 (or 81 percent).²¹ This calculated differential is greater than the adopted In-District/Out-of-District rate differential which is 74.9 percent. It is Mr. Loy’s opinion that his approach is not unreasonably preferential, prejudicial, or discriminatory to out-of-district customers. If this case proceeds to a hearing on merits, the District anticipates presenting similar evidence.

¹⁹ Exhibit A, ¶ 5.

²⁰ *Id.*, ¶ 6.

²¹ *Id.*

Mr. Loy's statements, conclusions, preliminary results, and estimates, as set forth in his affidavit *clearly* raise a genuine issue of material fact on the question of whether the District's adopted In-District/Out-of-District Rate Differential is just and reasonable (and not unreasonably preferential, prejudicial, or discriminatory), and summary judgment should therefore be denied on this basis.

B. Summary decision on Issue No. 5 should be denied.

Petitioners also request summary decision with respect to Issue No. 5 in the Commission's Preliminary Order. Issue No. 5 is as follows:

What information was available to the district at the time it made its decision to increase the water and sewer utility service rates?²²

Petitioners' request for summary decision on Issue No. 5 is misplaced. Issue No. 5 is not an ultimate or substantive issue to be answered by the Commission in this proceeding. Rather, it is a procedural question meant to be used to define (and potentially limit) the scope of evidence that may be considered by the ALJ and the Commission in deciding this appeal (and ultimately in fixing rates that the governing body should have fixed pursuant to Tex. Water Code § 13.043). *See* TEX. WATER CODE § 13.043(a) ("The . . . commission may consider only the information that was available to the governing body at the time the governing body made its decision and evidence of reasonable expenses incurred in the appeal proceedings"); 16 TEX. ADMIN. CODE § 24.101(e) (same language).

That said, as is the case with respect to Petitioners' request for summary decision on Issue No. 3, the basis of Petitioners' request for summary decision on Issue No. 5 is the District's statements in response to discovery requests, indicating that it did not allocate or break down costs

²² Preliminary Order (Docket Item No. 39) at 3.

of operating and maintaining its facilities and debt service, between out of district and in-district ratepayers when setting rates in 2015. Again, Petitioners appear to argue or insinuate that it is *per se* improper or illegal as a violation of Tex. Water Code § 13.043 for the District to not have conducted its accounting in such a way as to not allocate or break down its costs of operating and maintaining its facilities and debt service between out-of-district and in-district ratepayers when setting rates in 2015, or that rates developed without the benefit of such allocations or breakdowns are *per se* unjust or unreasonable. Petitioners offer no support for this accusation or insinuation. Moreover, on the contrary, and as explained above, to not account for such costs separately is standard among many water and sewer utilities, especially water districts of this size.²³

Accordingly, Petitioners motion for summary decision as to Issue No. 5 should be denied because summary decision on that issue is inappropriate as a matter of law. *See* 16 TEX. ADMIN. CODE § 22.182(c).

V. RESPONSE TO PETITIONERS' REQUEST FOR INTERIM RATES

If the ALJ fails to adopt the District's jurisdictional arguments set forth above,²⁴ the following response to Petitioners' request for interim rates should be considered.

Petitioners ask the ALJ to impose an interim rate for the remainder of this proceeding and that those interim rates for out-of-district ratepayers be the same as the rates that are being charged to in-district ratepayers. This request should be denied for the reasons set forth below.

A. Interim rates are not available in this proceeding.

PUC Substantive Rule § 24.37 allows the Commission to establish interim rates in certain situations. Interim rates may be established in proceedings "after the filing of a statement of intent

²³ *See supra* at 8.

²⁴ *See supra* at 3.

to change rates under Chapter 13 of the TWC.” 16 TEX. ADMIN. CODE § 24.37(b). Alternatively, “[i]nterim rates may be established by the Commission . . . where *the proposed increase in rates* could result in an unreasonable economic hardship on the utility’s customers, unjust or unreasonable rates, or failure to set interim rates could result in an unreasonable economic hardship on the utility.” *Id.* § 24.37(d) (emphasis added). Here, there was no filing of a statement to change rates under Chapter 13 and no “proposed increase in rates” to be evaluated. The rates that Petitioners complain of here are *adopted* rates, and the decision to adopt those rates was made in December 2015.²⁵ Accordingly, the Interim Rate rule does not apply in this situation.

B. Interim Rates are not justified in this proceeding.

Even if interim rates are possible in this proceeding, the interim rates requested by Petitioners are not appropriate here and cannot be justified under the regulatory standards.

Under PUC Substantive Rule 24.37 that “[i]nterim rates may be established . . . where the proposed increase in rates could result in an unreasonable economic hardship on the utility’s customers, unjust or unreasonable rates, or failure to set interim rates could result in an unreasonable economic hardship on the utility.” 16 TEX. ADMIN. CODE § 24.37(d).

1. Petitioners have presented no evidence that the District’s In-District/Out-of-District Rate Differential is unjust and unreasonable, and evidence presented by the District supports the contrary conclusion.

As set forth above, Petitioners have presented no evidence that the District’s adopted In-District/Out-of-District Rate Differential is unjust or unreasonable. Petitioners have not conducted or presented any rate study or analysis on the issue. Petitioners have not presented any evidence on what they believe a just and reasonable in-district/out-of-district rate differential should be. Petitioners simply request that there be no rate differential and do so without evidentiary support.

²⁵ Docket Item No. 49, Tab A (Affidavit of Jose Ramirez – and attachment).

On the other hand, the District has presented evidence that in-district/out-of-district rate differentials are common, and that municipalities and water districts often use reasonable estimates as opposed to complex and costly separate accounting procedures to determine those differentials. The District has also presented evidence that its adopted In-District/Out-of-District Rate Differential is just and reasonable.²⁶ Petitioners request for interim rates can and should be denied on this basis alone.

2. Any economic hardship has not been shown to be unreasonable under the circumstances.

Petitioners assert that the District's adopted In-District/Out-of-District Rate Differential causes economic hardship for certain out-of-district ratepayers and attach several affidavits that refer to amounts paid for water and sewer services and financial difficulties of the affiants in support of their assertion.²⁷ Although the District is sympathetic to the affiants' situations and concerns, rates paid by these customers are well within what is to be expected from water utilities of this size in rural areas.²⁸ Accordingly, any such hardship is not unreasonable under the circumstances.

C. The "good cause" factors set forth in Procedural Rule 22.125 do not support the granting of interim relief in this situation.

Also potentially relevant here is the standard for whether to grant interim relief as stated PUC Procedural Rule 22.125 (Interim Relief) and, in particular, the "good cause" factors listed in that rule. That rule states in part as follows:

Consideration of request for interim relief. Interim relief may be granted based on the agreement of all parties. The presiding officer may, after notice and opportunity for hearing, grant a contested request for interim relief only on a showing of **good**

²⁶ See *supra* at 9.

²⁷ Docket Item No. 47 at 6-7.

²⁸ Exhibit A, ¶ 7.

cause. In determining whether good cause exists, the presiding officer shall take into account:

- (1) The utility’s ability to anticipate the need for and obtain final approval of relief prior to the time relief is reasonably needed;
- (2) other remedies available under law;
- (3) changed circumstances;
- (4) the effect of granting the request on the parties and the public interest;
- (5) whether interim relief is necessary to effect uniform system-wide rates; and
- (6) any other relevant factors as determined by the presiding officer.²⁹

Petitioners make the blanket and patently incorrect statement that “each of these factors weigh in favor of setting interim rates.³⁰ Factor (1) cannot possibly weigh in favor of Petitioners because, on its face, it applies only when it is the utility that seeks interim relief. Regarding factor (3), which also seems more fitting when a utility seeks interim relief, Petitioners have not mentioned any “changed circumstances.”

With respect to factor (4) – “the effect of granting the request on the parties and the public interest” – Petitioners assert that the granting of their request for interim rates “would only impact the District’s profitability.”³¹ To that end, Petitioners appear to suggest that the District has a high level of cash reserves. *Id.* As stated and explained in detail by Mr. Loy in his affidavit, the District does not have high cash reserves, and needs its current cash reserves to continue funding several ongoing and future system improvements that are required to meet regulatory requirements and which benefit both in-district and out-of-district customers.³² Moreover, and as explained by Mr. Loy in his affidavit, setting interim rates for out-of-district customers at in-district rates could harm the financial integrity of the District.³³

²⁹ 16 TEX. ADMIN. CODE § 22.125 (emphasis added).

³⁰ Docket Item No. 47 at 8.

³¹ *Id.* at 9.

³² Exhibit A, ¶ 8.

³³ *Id.*, ¶ 9.

Also with respect to factor (4), the District cautions that although granting Petitioners' request for interim relief would provide out-of-district ratepayers with an immediate monetary gain, such an action would be against the interests of not only the District and its in-district ratepayers but, in the not-so-long run, the out-of-district ratepayers as well. Under PUC Procedural Rule 22.125, "[i]nterim rates shall be subject to refund or surcharge to the extent the rates ultimately established differ from the interim rates." 16 TEX. ADMIN. CODE § 22.125(e). PUC Substantive Rule 24.37 states that "the retail public utility shall be authorized by the commission to collect the difference, in a reasonable number of monthly installments, from its customers for the amounts by which the rate finally ordered exceeds the interim rates." 16 TEX. ADMIN. CODE 24.37(i). The District believes that if this case proceeds to a final hearing and is decided on its merits, that it will be able prove that its adopted In-District/Out-of-District Rate Differential is just and reasonable (and in all ways proper). If the District is correct in that regard, then granting Petitioners' request for interim rates would subject all out-of-district ratepayers (not only Petitioners) to an additional surcharge on top of a rate increase once final rates are established, in order to make up for a shortfall resulting from the implementation of the interim rates.

Finally, Petitioners present a lecture on how they think the District should interact with a neighboring water district, the Lower Valley Water District (LVWD). Petitioners correctly note that the Mesa del Norte subdivision is within the jurisdictional boundaries of LVWD.³⁴ Although it is not clear what the future will bring and how conditions might change, the District has so far determined that it is not within its best interests, nor those of its taxpayers/customers, to pursue any agreement with LVWD whereby the District and LVWD would "share" the customers within the Mesa del Norte subdivision, with LVWD providing water service to those customers and the

³⁴ Docket Item No. 47 at 8.

District providing sewer service to those same customers. Rather, it has been the District's long-held position that *as soon as* LVWD is ready to provide both water and sewer services to the Mesa del Norte subdivision, the District will convey the water delivery and sewer collection systems to LVWD and cease providing service to that area.

VI. CONCLUSION AND PRAYER

For the reasons stated above, the District requests that the Administrative Law Judge deny Petitioners Motion for Summary Decision and Request for Interim Rates and further requests that the Administrative Law Judge and the Public Utility Commission grant all other relief to which the District is entitled.

Respectfully submitted,

By: 

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**ATTORNEYS FOR EL PASO
COUNTY WATER CONTROL
AND IMPROVEMENT DISTRICT
NO. 4**

CERTIFICATE OF SERVICE

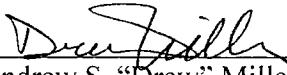
I hereby certify that I have served or will serve a true and correct copy of the foregoing document (including all attachments) via hand delivery, facsimile, electronic mail, overnight mail, U.S. mail and/or Certified Mail/Return-Receipt Requested to counsel for all parties on this 20th day of September, 2019, including:

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Andrew S. "Drew" Miller

STATE OF TEXAS)
)
COUNTY OF TRAVIS)

AFFIDAVIT OF CHARLES EVANS LOY

BEFORE ME, the undersigned authority, on this day personally appeared Charles Evans Loy who, after being duly sworn on his oath, said and deposed as follows:

1. My name is Charles Evans Loy, my business address is 919 Congress Ave, Suite 1110, Austin Texas 78731, United States. I am at least twenty-one years old, of sound mind, capable of making this affidavit, have not been convicted of a felony or a misdemeanor involving moral turpitude, and am fully competent to make this declaration. I declare under penalty of perjury that the foregoing is true and correct.

2. I received the degree of BBA with a concentration in accounting from the University of Texas at Austin. I am a Certified Public Accountant in the State of Texas. I am a Principal at GDS Associates, Inc. (GDS) an engineering and consulting firm with offices in Marietta, Georgia; Austin, Texas; Auburn, Alabama; Orlando, Florida; Manchester, New Hampshire; and Madison, Wisconsin. GDS has approximately 180 employees with backgrounds in engineering, accounting, management, economics, finance, and statistics. GDS provides rate and regulatory consulting services in the electric, natural gas, water, and wastewater industries. In addition, GDS provides a variety of other services in the electric utility industry, including power supply planning, generation support services, financial analysis, load forecasting, and statistical services. Our clients are primarily publicly-owned utilities, municipalities, and government agencies. Prior to joining GDS in June of 2001, I was General Manager of Rates and Regulatory Affairs of AquaSource, Inc., a wholly-owned water and wastewater subsidiary of DQE, Inc., a publicly traded electric utility located in Pittsburgh, PA. My responsibilities included the organization, preparation, and management of various rate filings and proceedings on rate requests and other regulatory matters in the 12 states where AquaSource provided water and wastewater utility service. Prior to joining AquaSource, I was a Manager of Regulatory Affairs for Citizens Utilities Company, Public Services Sector. At Citizens, I was responsible for various regulatory matters, including rate cases for water/wastewater, gas, and electric services in eight states. Prior to joining Citizens, I was a Rate Manager with Southern Union Gas where I prepared rate filings, cost of service studies, and testimony for their various operations in Texas and Oklahoma. My utility regulation experience began with Diversified Utility Consultants as a Senior Analyst, where I assisted in the review and analysis of various gas, electric, and water company rate filings. I have provided expert witness testimony before the following regulatory commissions:

- Pennsylvania Public Utility Commission – Water/Wastewater, Steam
- Public Utilities Commission of Ohio – Water/Wastewater, Gas
- Indiana Regulatory Commission – Water/Wastewater
- Idaho Public Utilities Commission- Water
- Illinois Commerce Commission – Water/Wastewater
- Arizona Corporation Commission – Water/Wastewater, Conservation Rates, Reclaimed Water
- Arkansas Public Utility Commission - Water
- Oklahoma Corporation Commission – Gas
- Public Utilities Commission of the State of Hawaii – Water/Wastewater

Texas Railroad Commission - Gas
Texas Public Utilities Commission – Electric, Water/Wastewater
Texas Commission on Environmental Quality – Water/Wastewater, Conservation Rates
Delaware Public Service Commission – Water, Conservation Rates
New Mexico Public Regulation Commission – Water/Wastewater, Conservation rates
New York Public Service Commission – Water
Public Service Commission of Montana - Gas
Public Service Commission of South Carolina – Water/Wastewater
Connecticut Department of Public Utility Control - Water
New Jersey Board of Public Utilities - Water
El Paso Public Utilities Board – Gas

Included with this Affidavit as Attachment 1 is a true and correct copy of my resume and the list of cases in which I have provided expert testimony.

3. Many cities and municipal water districts throughout Texas and North America impose a rate differential or surcharge on "outside" customers i.e., customers outside of the legal boundaries of the city or district or its service area. The purpose of such rate differentials is to recover the additional costs of serving outside customers and the lack of tax revenue from those customers. Many non-profit, publicly-owned water utilities in Texas charge rate differentials. Typically, the outside cost factors that municipal water utilities have relied upon to establish these differentials are reasonable estimates based on generic rationale. These generic justifications are: 1). Higher costs for customers farther from the core service area. Said another way, typically there is more plant investment on a per customer basis for outside customers compared with inside customers, which results in higher pumping, operation, maintenance, regulatory, etc. costs. For example, in this case, currently, for one foot of water main installed per customer inside the District boundary, there is 1.6 feet of water main installed for an outside customer. The same holds true for the District's wastewater customers, with 1.5 feet of collection main installed outside as compared with inside. 2). Outside customers generally do not have the same level of legal or financial responsibility as the inside customers have for revenue bond default, lawsuits, regulatory fines, etc. 3) There is a distinct possibility inside customers will not be reimbursed for the cost or bond service for the additional system capacity installed to serve the outside customers. Outside customers can choose another provider or even obtain their own water supply (i.e., drill a well). In this case, the District's outside customers may, at some future time, be served by another district, the Lower Valley Water District.

Additionally, two well-known reference sources used for developing water and wastewater rates: The American Water Works Association's M1 Manual and Water and Wastewater Finance and Pricing by George Raftelis, both indicate that it is typical to see outside rate differentials between 1 and 2 (Attachments 2 and 3). In fact, a review of the rate ordinances of many of the municipal clients listed in the retail rate cost of service section of the resume of Petitioners rate consultant Christopher Ekrut have outside rate differentials that range from 1 to 2. Table 1 below provides the outside rate differentials for some of Mr. Ekrut's clients.

Table 1

| Ekrut Texas Clients Outside Rate Differentials | |
|---|------|
| Burnet | 1.15 |
| Waco | 1.15 |
| McGregor | 1.15 |
| Lancaster | 1.15 |
| Portland | 1.25 |
| Seagoville | 1.25 |
| Garland | 1.50 |
| Amarillo | 1.50 |
| Gainesville | 1.50 |
| Grapevine | 2.00 |
| Killeen | 2.00 |

Also attached to this affidavit is a 2019 Water and Wastewater Rate Survey Co-produced by AWWA and Raftelis Consulting that provides service differentials for several cities in Texas as well other states in the USA (Attachment 4).

4. The basis for much of Mr. Ekrut's affidavit and ratepayers' motion for summary decision and interim rates addresses the District's responses to information requests where the District states that it does not account for in-district and out-of-district expenses separately. It is typical and acceptable for a utility such as the District to not account for these expenses separately. The tracking of inside/outside costs, as advocated by Mr. Ekrut, is not required by the District's bond holders, auditors, the TCEQ, PUC or any other regulatory authority. Further, inside/outside tracking of expenses and investment would be expensive and overly complicated; especially for a small utility such as the District. Most municipal rate differentials are typically based on reasonable "back of the envelope" estimations guided by the generic issues discussed above, which may or may not be addressed in the context of a formal rate study. Detailed inside/outside rate studies are rare because they can be costly, and the result is, for the most part, already known - i.e. outside rates will be higher. This is because the M-1 Manual recommends that the "Utility Basis" be used to calculate rates for outside customers as opposed to the "Cash Basis" which is typically used to determine inside rates. The Utility Basis requires the inclusion of both depreciation and a rate of return that typically result in higher rates than inside rates. In fact, some of Mr. Ekrut's clients' water and wastewater rate ordinances list the rate differential separately as "outside customers pay 1.5 of inside rates" or "outside customers pay no less than 2 times inside rates," rather than detail the specific outside rates. Those differentials appear to be derived from estimates rather than specific inside/outside analysis and calculations. Additionally, many of these municipal clients have the same rounded numbers which suggests the differentials are based on reasonable estimates not detailed rate studies and accounting that separates inside and outside costs.

At the time that the District's rates in question were established, there was information available to the District to develop a more precise rate differential, however, doing so would have required a rate consultant to conduct a formal "inside/outside" study. Regardless, such a study was not needed for the reasons addressed above. In addition, the District had been charging a rate differential for many years prior to 2015 with no protest or challenge and the added cost for a formal inside/outside study would have been difficult to justify. Thus, a reasonable estimate was made.

5. I conclude that the District's existing rates and rate differential as developed in 2015 are just and reasonable and not prejudicial, preferential or discriminatory. The main focus of the 2015 rate study was on how to fund the significant cost of planned capital improvements that were required in order to provide adequate service and meet regulatory requirements for the upcoming five-year period (2016-2020). In addition, the rates would need to continue cover increases in operating expenses and to provide funds to make reoccurring and needed repairs and meet TCEQ reporting requirements and standards. No detailed inside/outside cost of service study was performed at that time because one was not needed, the outcome was known, and it would double the cost of the rate study. The study needed only to take into consideration the prioritization of the capital improvements, how they were to be funded, and the timing of those projects. Given the size of the increase and the uncertainty of its impact, rate design and rate structures were maintained in order to avoid any unintended possible rate impacts to customers. The prudent thing at the time was to apply the projected increases to the current customer class revenue distribution and rate structures since those distributions and structures had been successfully meeting the District's revenue requirements in the past. An outside rate differential of 1.5 had previously been in effect for several years. Due to the amount of capital improvements anticipated for the outside group, it was determined that it would be fair and reasonable to increase the outside rate differential to 1.75. The District's reasonable estimate establishing a 1.75 outside rate differential comes very close to the preliminary results of my analysis discussed below.

6. I have conducted a preliminary inside/outside analysis given the limited time available. I used the data available at the time rates were approved by the District Board and other information as appropriate. My study determines revenue requirements for inside and outside service areas by applying generally accepted rate making principles of allocation. The preliminary results determine an overall rate differential factor for the outside District service area customers of 1.81 as summarized in Table 2 below, which displays 10 lines of data recapping the calculation of the outside differential factor. Line 1 of Table 3 reflects the allocation of 2016 budgeted O&M expenses based on inside/outside water usage, meter equivalences and customer counts. Line 2 allocates the planned capital outflows using the same allocation factors as applied on Line 1. Line 3 distributes budgeted debt service based on the inside/outside distribution and allocation of plants balances. Line 4 appropriately credits or reduces the inside costs for the tax revenues paid by the inside customers. As discussed earlier, the outside customers do not pay any taxes to the District. Line 5 assigns the estimated debt service according to the planned capital expenditures for outside water and wastewater service area. Line 6 totals the District's cost of service by inside and outside customers. As anticipated, the inside customers incur much more of the cost of service than outside customers at approximately 6 times. The customer numbers on Line 7 are used in the Line 8 cost per inside/outside customer computation. The Line 7 numbers are combination of the inside/outside water and sewer customers. Line 9 shows the outside cost of service differential in

dollars as compared to inside customers. Finally, Line 10 computes the outside differential factor by dividing the outside cost per customer by the inside cost per customer.

Table 2

| Line No. | Cost of Service | Total Inside | Total Outside |
|----------|---|---------------------|---------------------|
| | (a) | (b) | (c) |
| 1 | Operating & Maintenance | \$1,188,167 | \$161,833 |
| 2 | Capital Outlays | \$90,312 | \$9,688 |
| 3 | Debt Service Excl. Outside Projects | \$528,925 | \$71,834 |
| 4 | Less: Tax Revenues | (\$167,512) | \$0 |
| 5 | Plus: Outside Projects (Interest + Principal) | \$0 | \$31,512 |
| 6 | Total | <u>\$1,639,892</u> | <u>\$274,867</u> |
| 7 | Total Customers (Water + Wastewater) | <u>4,098</u> | <u>380</u> |
| 8 | Cost per Customer | <u>\$400</u> | <u>\$723</u> |
| 9 | Outside Differential \$ | | <u>\$323</u> |
| 10 | Outside/Inside Differential Factor | | <u>1.81</u> |

The Table 2 preliminary results were developed using the Cash Basis approach. The documents and information used to develop the analysis are as follows:

- The 2015/2016 Audited Financial Statements of El Paso WCID No. 4
- The 2016 O&M and capital budgets
- The portions of the capital budgets related to outside operations
- A breakdown of inside/outside meter seizes, usage and customer counts for the years 2015 and 2016.
- The presentation made by the rate consultant to the District Board regarding the proposed rate increases for 2016-2020.
- The inside/outside distribution of water mains and wastewater collection mains by length and size.
- The water and wastewater rates implemented from 2016-2019.
- The 2015/2016 trial balances from the District General Ledger
- The 2015/2016 Depreciation Schedules

I believe that the approach described above is not unreasonably preferential, prejudicial or discriminatory to the outside rate payers.

7. The District's rates are far from being the highest in the state and are in line with rates typical of small rural communities around the state. PUC reports indicate there are about 4,019 water and wastewater utilities in the state of Texas. Many of these are owned by one of the 1,216 incorporated Texas municipalities. The Texas Municipal League conducts an annual survey of their municipal members' water and sewer rates. I conducted an analysis of 563 of the cities that provide both water and sewer with usage of 5,000 gallons (very close to the annual averages

of District customers). I determined that 31 or 5.5% of the utilities have combined monthly bills greater than \$110. My analysis reflects “inside” rates only and by applying an assumed statewide average outside differential factor of 1.25 would add another 64 cities with combined service rates greater than \$110. This analysis only includes municipalities and excludes the other “non-municipal” non-profit water and sewer providers in the state, such as water control and improvement districts. Based on this review, is reasonable to assume there could be as many as 220 utilities that have combined bills (assuming 5,000 gallons of usage) of over \$110 per month. The cities of Megargel, Worthem and Buffalo Gap have similar demographics of the Fabens area and some of the highest combined bills in the state or \$164.00, \$160.08 and \$157.85 respectively. All three of these cities are rural in nature and have low customer counts. Thus, the higher bills for the District’s outside ratepayers are not unique. Many rural communities are dealing with the high costs of water and sewer charges brought on by federal and state regulations given a limited number of customers to cover the increased revenue requirements. These communities, like Fabens, are struggling to fairly distribute the costs between their inside and outside customers. As discussed above, estimated rate differentials help distribute the costs and risk factors between taxpayers and non-taxpayers. A rural area may have lower real estate prices than what is to be found in more populated areas, but the tradeoff may be a higher cost for water and sewer service due to low customer counts compared to the level of infrastructure investment required to provide service.

8. Ratepayers’ motion for summary decision and for interim rates suggests that the District has high cash reserves, but this is not the case. The District’s 2018 Statement of Cash Flows indicates that the District increased its cash position by only \$16,414 in 2018. If this amount is adjusted by removing the one-time restricted grant income of \$1,450,585 and the tax revenues provided by the inside rate payers of \$222,331; there would be a significant *negative* change in cash of \$1,656,502 as seen in Table 3 below.

Table 3

| <i>2018 Audited Financial Statements - Statement of Cash Flows</i> | |
|---|-----------------------------|
| 2018 Net Increase In Cash | \$16,414 |
| Less: Grant Income | (\$1,450,585) |
| Less: Tax Payments from Inside Rate Payers | <u>(\$222,331)</u> |
| Change In Cash Without Grant Income and Tax Revenue | <u>(\$1,656,502)</u> |

The adjusted change in cash shown above reflects the fact that the District has disbursed most of its cash for construction projects during 2018 and needs its current cash reserves to continue funding several ongoing and future system improvements that benefit both inside and outside customers. These improvement projects include three major water projects that were started in 2018 and which will continue through 2019. The I-10 tank and booster station were completed recently in March of 2019. A reverse osmosis system is currently under construction in order to meet TCEQ’s total dissolved solids requirements as well as provide all customers (inside and outside) with high quality water. The recently completed Walker well and the new Cypress well will be in production in December of 2019. Future capital water improvement projects include: The installation of a water collection line from the CC Camp Well to the Walker Street Water Distribution Site. Work performed and required materials for this project will be funded by the

District. Another water project is the construction for replacing two District wells, the CC Camp Well on K Street and the Golf Course Well on 4th Street. Future capital sewer improvement projects include: Replacement of a ten-inch sewer force main, replacement of the Ikard & Hampton lift stations, and the refurbishing of all manholes within the district. The District is seeking to secure funding from USDA-RD for needed future capital water and wastewater improvement.

9. The Ratepayers' assert that setting interim rates at in-district rates will not hurt the District's ability to meet its revenue requirement – only its profitability. Setting interim rates at in-district rates would be a hardship for the District. As explained above, the District needs its cash to fund ongoing and future projects and is currently seeking additional funding. If interim rates are set at in-district levels, the District will have no alternative but to raise additional money by increasing rates or taxes or a combination of both. During 2018 there would have been a "Change in net position" (operating loss) of negative \$219 thousand if not for the \$1.45 million in grant revenue. Billing records for 2018 indicate the inside customers provided over \$2 million in revenue and the outside customers provide about \$582 thousand in revenue to fund the revenue requirement. This does not reflect the additional \$328 thousand in tax revenue provided by the inside customers. If interim rates were implemented as requested by the ratepayers, I estimate that the District's operating loss will increase by approximately \$21 thousand each month until this proceeding is completed which could result in a minimum loss of \$210 thousand at best, and more if this proceeding last longer than 11 months. In addition, this projection does not include the funds that will be spent to litigate this case. Legal and consulting costs spent responding to threats of litigation as well as this litigation are estimated to be around \$84 thousand as of the date of the filing of this affidavit. This cost, in conjunction with the sudden reduction in revenue due to a required implementation of interim rates, could hamper the Districts ability to obtain funding under favorable terms and existing bond covenants may be strained. Said another way, a hurried implementation of interim rates could harm the financial integrity of the District. One possibility would be to recover the litigation expenses from the outside customers because it was outside customers who have initiated this costly proceeding. Assuming a three-year recovery period, the above estimate to date of \$84 thousand will result in approximately \$5.18 per water customer and \$5.18 per wastewater customer per month for three years. Litigation costs should be expected to increase significantly if this case proceeds to a hearing on the merits.

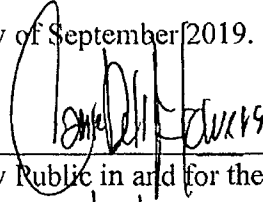
10. It is my belief that the outside ratepayers' efforts would be more reasonably directed at the Lower Valley Water District (LVWD) which assesses and collects taxes from them while providing no services whatsoever. By challenging rate practices that have been an industry norm for many years will only increase the District's costs and increase the strain on the relationship between the District's inside and outside customers. Regardless of the outcome of this proceeding, whether it is successfully mediated or proceeds to a hearing on the merits, the fact is that the Petitioners problems are the result of the lack of a commitment by LVWD to serve an area within its jurisdictional boundaries. Perhaps LVWD should provide the tax payments from the Mesa del Norte subdivision to the District. This would lower the District's outside rate differential and serve as an incentive to the LVWD to fulfill its long-standing responsibility to provide both water and wastewater service to this area.

FURTHER AFFIANT SAYETH NOT.



Charles Evans Loy, Affiant

Sworn to and subscribed before me on this 20th day of September 2019.



Notary Public in and for the State of Texas

05/03/2022

My Commission Expires



EDUCATION: BBA Accounting, University of Texas at Austin
Certified Public Accountant, Texas

PROFESSIONAL MEMBERSHIPS:

American Water Works Association
National Association of Water Companies
Water Environment Federation
Texas Society of Certified Public Accountants
American Gas Association
American Public Gas Association
Texas Gas Association

EXPERIENCE:

Mr. Loy has over 25 years' of experience helping organizations meet challenges arising in both regulated and competitive environments within in the utility industry.

2001-Present GDS Associates, Inc.: Principal – Mr. Loy started with GDS in June of 2001. His focus is on regulatory accounting and finance. He is experienced in water, wastewater, natural gas, and electric regulatory and accounting matters. Mr. Loy assisted a number of water, wastewater and gas distribution clients with rate case filings before various regulatory authorities in a number of states. He has assisted with the financial analysis of wholesale purchase power and retail aggregation projects as a result of the deregulation of the electric industry in Texas. He has conducted analysis and developed recommendations regarding the Southwest Power Administration's rate increase on behalf of member clients. He has participated in a number of natural gas and electric projects involving rate increases, acquisition analysis and other special projects.

1999-2001 AquaSource Inc.: General Manager Rates and Regulatory Affairs - AquaSource Inc., a wholly owned subsidiary of DQE Inc and parent of Duquesne Light. AquaSource was formed in 1997 to take advantage of the consolidation in the water and wastewater industries and spent three years and more than \$400 million acquiring water and wastewater companies. Mr. Loy's duties included directing the compilation and filing of rate cases, acquisition analyses and related filings, regulatory commission/governmental relations in the twelve states in which AquaSource operates. Additionally, he supervised a professional staff located throughout the country and assisted in business development, developer contract negotiations and other special projects. His appointment came in the middle of AquaSource's aggressive acquisition phase. Accordingly, his first year was spent primarily working to clean up a very chaotic regulatory situation.

1993-1999 Citizens Utilities Company: Manager, Regulatory Affairs – Mr. Loy served as Project Manager of numerous multiple-company water and wastewater rate case filings, in Ohio, Illinois, Pennsylvania and Arizona. In those cases, he prepared and presented testimony, developed revenue requirement calculations, generated revenue and expense pro forma adjustments, performed working capital lead/lag studies, and evaluated rate design/cost of service issues. He proposed surcharge mechanisms for purchased water, a reverse osmosis process, and contract waste treatment. Additionally, Mr. Loy designed and directed the development of the multiple company revenue requirement models that generated filing schedules. In the fall of 1997, Citizens promoted Mr. Loy to Manager Regulatory Affairs. In the new position, he supervised the staff responsible for all regulatory activity involving gas, electric and water/wastewater in ten states. He was a key member of a team that negotiated a multimillion dollar water and wastewater agreement with a major developer in Phoenix on behalf of Citizens.

1989-1993 Southern Union Gas Company: Rate Manager – Mr. Loy joined Southern Union as Sr. Internal Auditor. In that capacity, he contributed to multiple projects pertaining to the upcoming merger with a large publicly traded corporation. These projects included supervising audits of gas purchases, accounts receivable, accounts payable and oil and gas holdings. He was promoted to Rate Manager reporting to the Vice President of Regulatory Affairs. In that capacity, he supervised a team of four directing the preparation and implementation of 16 rate increase applications before various municipal and state regulatory bodies, and led negotiating sessions with elected and municipal officials. In addition to improving efficiency, he developed several rate mechanisms that resulted in increased earnings. One such efficiency was the Weather Normalization Adjustment Clause (WNAC). By eliminating weather-sensitive fluctuations, the WNAC increased earnings as much as 12%. He also developed a Cost of Service Adjustment Clause (CSAC) which was established in several smaller municipal jurisdictions. The CSAC allowed annual rate increases without the time and expense of major rate filings. Also, Mr. Loy performed analysis and due diligence for numerous municipal and private acquisitions.

1987-1989 Diversified Utility Consultants, Inc.: Sr. Accounting Analyst - Diversified Utility Consultants (DUC) is a consulting firm which represents consumers' interests in rate case proceedings. The firm's clients include municipalities and various state-supported consumer agencies. As a Sr. Accounting Analyst, Mr. Loy worked on seven electric rate cases, two gas rate cases and one water rate case.

Prior to 1987 Mr. Loy spent summers in college rough necking, both offshore and onshore, on oil and gas drilling rigs. His first job after college was in the oil & gas industry where he started in accounts receivable and specialized in collecting past due accounts. He was in the Joint Interest Auditing Department where he reviewed drilling costs and negotiated refunds for the company and its joint interest owners.

Regulatory Experience:

Mr. Loy has presented testimony and/or participated in cases before the following regulatory bodies:

- Pennsylvania Public Utility Commission – Water/Wastewater, Steam
- Public Utilities Commission of Ohio – Water/Wastewater, Gas
- Indiana Regulatory Commission – Water/Wastewater
- Idaho Public Utilities Commission- Water
- Illinois Commerce Commission – Water/Wastewater
- Arizona Corporation Commission – Water/Wastewater, Conservation Rates, Reclaimed Water
- Arkansas Public Utility Commission - Water
- Oklahoma Corporation Commission - Gas
- Texas Railroad Commission - Gas
- Texas Public Utilities Commission – Electric, Water/Wastewater/Electric
- Texas Commission on Environmental Quality – Water/Wastewater, Conservation Rates
- Delaware Public Service Commission – Water, Conservation Rates
- New Mexico Public Regulation Commission – Water/Wastewater, Conservation rates
- New York Public Service Commission – Water
- Public Service Commission of Montana - Gas
- Public Service Commission of South Carolina – Water/Wastewater
- Connecticut Department of Public Utility Control - Water
- New Jersey Board of Public Utilities - Water
- El Paso Public Utilities Board – Gas

**WATER/WASTEWATER/GAS/ELECTRIC EXPERIENCE
LIST OF TESTIMONY, EXPERT PROCEEDINGS, AND ENGAGEMENTS BY
CHARLES E. LOY, CPA**

GAS UTILITY RATES AND REGULATION EXPERIENCE

Railroad Commission of Texas

GUD Docket 10190

Prepared filing and testimony of behalf of Hughes Natural Gas 2012 rate increase for the environs of the City of Magnolia.

GUD Docket 10083

Prepared filing and testimony of behalf of Hughes Natural Gas 2011 rate increase for the incorporated area of the City of Magnolia and environs.

GUD Docket 9731

Prepared filing and testimony of behalf of Hughes Natural Gas 2007 rate increase for the environs of the City of Magnolia.

GUD Docket 9488-9512

Prepared filing and testimony of behalf of West Texas Gas 2004 rate increase for the environs of cities served.

GUD Docket 8033

Filed testimony on behalf of Southern Union Gas Company's 1991 appeal for a rate increase in South Jefferson County.

GUD Docket 7878

Filed testimony and prepared the rate filing on behalf of Southern Union Gas Company's 1991 request for a rate increase in the Austin environs.

GUD Docket 6968

Assisted in the analysis of Southern Union Gas Company's 1987 appeal for a rate increase on the behalf of the City of Austin

Public Service Commission of Montana

Docket D2017.9.80

Filed testimony and prepared the cost of service and rate design, developed and explained the proposed Gas Infrastructure Reliability Clause (GIRC) and addressed the negative acquisition adjustment in the Energy West Montana's 2017/2018 rate filing.

Public Utility Commission of Ohio

Case Nos. 18-1720-GA-AIR; 18-1721-GA-ATA; 18-1722-GA-AAM

Filed testimony and prepared the cost of service and rate design, developed and explained the proposed Gas Infrastructure Clause in Northeast Ohio's 2018/2019 rate filing.

Oklahoma Corporation Commission

Docket No. 001345

Presented testimony and prepared the rate filing on behalf of Southern Union Gas Company's 1992 rate request.

Pennsylvania Public Utility Commission

Docket No. 2013-2386293

Assisted the University of Pennsylvania with the analysis of Veolia Energy Philadelphia Inc.'s 2013 steam rate case.

Docket No. 2009-2111011

Assisted the University of Pennsylvania with the analysis of Trigen-Philadelphia Energy Corp's 2009 steam rate case.

Federal Energy Regulatory Commission

Docket No. RP09-791-000

Assist municipal customers of MoGas analyze issues in FERC 2009 gas transportation rate case.

City of Austin

- Presented testimony and prepared filing as well as conducted settlement negotiations associated with Southern Union's 1993 rate request.
- Presented testimony and prepared filing on behalf of Southern Union Gas Company's 1991 rate request.
- Assisted in the analysis of Southern Union Gas Company's 1987 rate request on behalf of the City of Austin.

City of El Paso Public Service Board

- Presented testimony and prepared filing as well as participated in the settlement negotiations of Southern Union's 1993 rate request.
- Presented testimony and prepared filing on behalf of Southern Union Gas Company 1991 rate request.

City of El Paso Public Service Board-cont.

- Presented testimony and prepared the filing on behalf of Southern Union Gas Company 1990 request.

City of Port Arthur

- Presented testimony and prepared filing on behalf of Southern Union Gas Company's 1991 rate request.
- Participated in Southern Union Gas Company's 1990 rate request.

City of Monahans

- Presented testimony and prepared filing on behalf of Southern Unions Gas Company's 1992 rate request.
- Assisted in the analysis of Southern Union Gas Company's 1989 rate request on the behalf of the City of Monahans.

City of Borger

- Prepared testimony and prepared the filing on behalf of Southern Union Gas Company's 1992 rate request.
- Participated in Southern Union Gas Company's 1989 rate request on the behalf of the City of Borger.

City of Galveston

- Presented testimony and prepared the filing on behalf of Southern Union Gas Company's 1992 rate request.

Other Gas Related Engagements

City of Laurens, South Carolina

Developed cost of service and rate design study 2018

Lower Valley Energy Distribution Cooperative – Afton, Wyoming

Developed cost of service and rate design study 2017/2018

City of Clinton, South Carolina

Developed cost of service and rate design study 2016/2017

City of Alexandria, Louisiana

Financial review, allocated cost of service and rate study for the gas system 2012/2013

City of George West, Texas

Gas utility rate study 2011/2012

EPCOR

Report and analysis of Gas IOU's and their regulation in the State of Texas

Mitchell County Utility

Assist with divestiture of gas utility assets

Hughes Natural Gas

Ongoing assistance with GRIP filings

Markwest Energy Partners

Ongoing transportation rates and regulatory consulting

Consolidated Asset Management Services (CAMS)

Ongoing assistance regarding RRC Transmission pipeline issues

Alamo Transmission

Assisted with initial tariff development and related cost of service

Dynamic Energy Concepts Incorporated

Assisted with the review of gas contracts, tariffs, analyzed usage data and assessed procurement practices for a number of US Veteran Hospitals across the country.

WATER UTILITY RATES AND REGULATION EXPERIENCE

Arizona Corporation Commission

Docket No. WS-01303A-006-0403

Presented testimony, prepared the Cost of Service study and rate design on behalf of Arizona-American Sun City and Sun City West Wastewater rate request.

Arizona Corporation Commission-cont.

Docket No. WS-01303A-06-0403

Presented testimony, prepared the Cost of Service study and rate design on behalf of Arizona-American Anthem/Aqua Fria Water and Wastewater rate request.

Docket No. WS-01303A-06-0014

Presented testimony, prepared the Cost of Service study, rate design, and assisted with the preparation of the revenue requirements on behalf of Arizona-American Mohave Water and Wastewater rate request.

Docket No. W-01656A-98-0577, SW-02334A-98-0577

Presented testimony for approval of a Central Arizona Project Water utilization plan, the implementation of a Groundwater Savings Fee and the recovery of deferred project costs.

Docket WS-02334A-98-0569

Presented a filing for the approval of an agreement relating to a wastewater plant de-nitrification project with the Sun City Recreation Centers and Del Webb Corporation.

Docket U-3454-97-599

Prepared and presented a filing for the approval of a CCN to provide water and wastewater services to Del Webb's Anthem project and the approval of two related agreements.

Docket No. E-1032-95-417 ET AL.

Presented testimony and prepared the rate filing on behalf of Citizens Utilities Maricopa County water properties 1995 rate request.

Arkansas Public Service Commission

Docket No. 09-130-U

Presented pro forma adjustments to revenues and prepared the Cost of Service study and rate design on behalf of United Water Arkansas's 2009 rate request.

Docket No. 06-160-U

Presented testimony, prepared the Cost of Service study and rate design on behalf of United Water Arkansas's 2006 rate request.

Docket No. 03-161-U

Presented testimony, prepared the Cost of Service study, rate design, and assisted with the preparation of the revenue requirements on behalf of United Water Arkansas's 2003 rate request.

Connecticut Department of Public Utility Control

Docket No. 07-05-44

Prepared the rate filing and supporting testimony on behalf of United Water Connecticut's 2007 water rate request.

Public Service Commission of South Carolina

Docket No. 2014-346-WS

Represented ratepayers in Daufuskie Island Utility Company's 2014 Request for Increase for Water and Sewer Rates and in the Rehearing or Supreme Court Remand in 2017. Filed Testimony in both proceedings.

Public Service Commission of Delaware

PSC Docket No. 16-0163

Presented testimony, prepared the Revenue Requirements Schedules, Cost of Service study and rate design on behalf of SUEZ Water Delaware's 2016 rate request

PSC Docket No. 09-60

Presented testimony, prepared the Cost of Service study and rate design on behalf of United Water Delaware's 2009 rate request.

PSC Docket No. 06-174

Presented testimony, prepared the Cost of Service study, rate design, revenue normalization and cash working capital requirements on behalf of United Water Delaware's 2006 rate request.

Idaho Public Utilities Commission

Case No. UWI-W-09-01

Presented testimony, prepared revenue and expense pro forma adjustments, and proposed rate design on behalf of United Water Idaho, Inc. 2010 rate request.

Indiana Utility Regulatory Commission

Cause No. 41842

Prepared the filing and presented testimony for the Petition of Utility Center Inc. for the recovery of Distribution System Improvement Charges -2001

Cause No. 41559

Prepared the filing and presented testimony for a Certificate of Territorial Authority to render Sewage service.- 2000

Cause No. 41968

Directed the preparation of Utility Center Inc.' request for authority to increase its rates and charges for water and sewer service. -2000

Illinois Commerce Commission

Docket No. 94-0481

Presented testimony and prepared the filing on behalf of Citizens Utilities Company of Illinois 1994 rate request.

Docket No. 95-0633

Presented testimony on behalf of Citizens Utilities Company of Illinois in Tudor Park Apartments vs. Citizens Utilities of Illinois.- 1995

Docket No. 97-0372

Presented testimony on behalf of Citizens Utilities of Illinois in the Application for Consent to and Approval of a Contract with Affiliated Interests. 1997

State Board of New Jersey Public Utilities

BPU Docket No. WRO702125

Prepared and presented testimony on the determination of the cash working capital requirements on behalf of United Water New Jerseys 2007 rate request.

New Mexico Public Regulation Commission

Case No. 18-00124-UT

Presented testimony and assisted with the preparation of the water rate filing on behalf of EPCOR Water New Mexico Clovis District 2018/2019 Rate Request

Case No. 11-00196-UT

Presented testimony and assisted with the preparation of the water rate filing on behalf of New Mexico American Water Company Clovis District 2011 Rate Request

Case No. 09-00156-UT

Presented testimony and prepared the water rate filing on behalf of New Mexico American Water Company Edgewood District 2009 Rate Request

Case No. 07-00435-UT

Presented testimony and prepared the water and wastewater rate filing on behalf of New Mexico Utilities Inc. 2007 Rate Request

Case No. 08-00134-UT

Presented testimony and prepared the water rate filing on behalf of New Mexico –American Water Co. 2008 Rate Request

New York Public Service Commission

Presented testimony, prepared the Cost of Service study and rate design on behalf of United Water New Rochelle's 2010 rate request.

Public Utilities Commission of Ohio

Docket No. 98-178-WS-AIR

Presented testimony and prepared the filing on behalf of Citizens Utilities Company of Ohio 1998 rate request.

Docket No. 94-1237

Presented testimony and prepared the filing on behalf of Citizens Utilities Company of Ohio 1994 rate request.

Pennsylvania Public Utility Commission

Docket No. R-2009-2122887

Presented testimony, prepared the Cost of Service study and rate design on behalf of United Water Pennsylvania's 2009 rate request.

Docket No. R-00051186

Assisted with analysis/filing preparation of United Water Pennsylvania, Inc. 2005 Rate Case.

Docket No. R-00953300

Presented testimony on behalf of Citizens Utilities Company of Pennsylvania 1995 rate request.

Public Utility Commission of Texas

Docket 47680

Application of a 2018 Sewer Rate Tariff Change of Bolivar Utility Services

Assisted with the preparation of the application and filed supporting testimony.

Public Utility Commission of Texas-cont.

Docket 43242

Application for a 2014 Water Rate Tariff Change of Wiedenfeld Water Works
Prepared the application and filed testimony

Docket 44911

Application for a 2015 Sewer Rate Tariff Change of Bolivar Utility Services
Assisted in the preparation of the application

Docket 44809

Application for a 2015 Water/Sewer Rate Tariff Change of Quadvest LP
Prepared the application and filed testimony

Docket 47680

Application for a 2018 Sewer Rate Tariff Change of Bolivar Utility Services
Assisted in the preparation of the application and filed testimony

Texas Commission of Environmental Quality

SOAH Docket 582-14-3415

Application for a 2013 Water Rate/Tariff Change of Canyon Lake Water Service Company
Prepared the application and filed testimony on behalf of Canyon Lake WSC.

SOAH Docket No. 582-14-3384

Application for a 2013 Water and Sewer Rate/Tariff Change of SWWC Inc.
Prepared application on behalf of SWWC, Inc.

SOAH 582-14-3381

Application for a 2013 Water and Sewer Rate/Tariff Change of Monarch Utilities LP
Prepared application on behalf of SWWC, Inc.

SOAH Docket No. 582-12-0224

STM Application of Monarch Utilities I, L.P. to Transfer Water and Sewer Facilities and Certificates of Convenience and Necessity – provided assistance

Application 37531-R

Application for a Water Rate/Tariff Change of Quadvest L.P. Prepared application on behalf of Quadvest L.P.
Prepared application on behalf of Quadvest L.P.

Applications 37507-R and 37508-R

Application for a Water and Sewer Rate/Tariff Change of Ranch Utilities, Inc. Prepared application on behalf of Ranch Utilities, Inc.

Application 37317-R

Application for a Water Rate/Tariff Change of Wiedenfeld Water Works, Inc. Prepared application on behalf of Wiedenfeld Water Works, Inc.

Texas Commission of Environmental Quality-cont.

Applications 37234-R and 37235-R

Application for a Water and Sewer Rate/Tariff Change of Aqua Texas, Inc. North and Southwest Regions
Prepared application on behalf of Aqua Texas, Inc.

SOAH Docket No, 582-12-0224

Application for a Water and Sewer Rate/Tariff Change of Monarch Utilities LP
Prepared application on behalf of SWWC, Inc.

SOAH Docket No. 582-11-1468

Application for a 2010 Water Rate/Tariff Change of Canyon Lake Water Service Company
Prepared the application and filed testimony on behalf of Canyon Lake WSC.

SOAH Docket No. 582-11-1458

Application for a Water and Sewer Rate/Tariff Change of Aqua Texas, Inc. Southeast Region
Prepared application on behalf of Aqua Texas, Inc.

Docket No. 0580-UCR

Application for a 2009 Water Rate/Tariff Change of Canyon Lake Water Service Company
Prepared the application on behalf of Canyon Lake WSC.

Docket No. 35850-R

Application for a 2007 Water Rate/Tariff Change of Canyon Lake Water Service Company
Prepared the application on behalf of Canyon Lake WSC.

Docket No. 33763-R

Application for a 2007 Water and Sewer Rate/Tariff Change of Midway, Inc. For the City of Oak Point Service area. Filing initially made with the City of Oak Point.

Docket Nos. 35748-R & 35747-R

Application for a Water and Sewer Rate/Tariff Change of Monarch Utilities LP
Prepared the application on behalf of Monarch.

Docket No. 2006-0072-UCR

Application for a Water and Sewer Rate/Tariff Change of Aqua Texas, Inc
Prepared application and presented testimony on behalf of Aqua Texas, Inc.

Docket No. 2007-0478-UCR

Application for a Water and Sewer Rate/Tariff Change of Texas American Water Inc.
Prepared the application on behalf of Texas American Water.

Docket No. 2005-0114-UCR

Application for a Water and Sewer Rate/Tariff Change of Aqua Texas, Inc
Presented Testimony on behalf of Aqua Texas, Inc.

Docket No. 2004-2029-UCR

Application for a Water and Sewer Rate/Tariff Change of Walker Water Works, Inc.
Prepared the application on behalf of Texas American Water.

Texas Commission of Environmental Quality-cont.

Application Nos. 34658-R & 34659-R
Application for a Water and Sewer Rate/Tariff Change of Southwest Utilities, Inc.
Prepared the application on behalf of Texas American Water.

Docket Nos. 2000-1074-UCR, 2000-1075-UCR, 2000-1366 UCR through 2000-1369 UCR
Assisted in the preparation and presentation of the Aqua Source 2000 rate increase

Application No. 7371-R (Texas Water Commission)
Assisted in the analysis of Southern Utilities 1988 rate request on the behalf of Southern Utilities customers.

Other Water Related Engagements and Expert Proceedings

The Landings Association – Savannah, Georgia

Assist with the annual review of water and sewer rate adjustments proposed by Utilities Inc of Georgia according to Settlement Agreement

The City of Hutto, Texas

Independent Assessment of Proposed Acquisition of Groundwater Supply by the City of Hutto

Woodland Oaks Utilities, Conroe Texas

Assist with the Texas PUC Transition

City of Laurens, South Carolina

Developed cost of service and rate design study 2018

City of Clinton, South Carolina

Developed cost of service and rate design study 2016/2017

City of Alexandria, Louisiana

Financial review, allocated cost of service and rate study for the gas system 2012/2013

Town of Providence Village, Texas

Developed Expert Witness Report for Denton County Court Cause No. 2011-60876-393
Analysis of Agreements between Mustang SUD and Providence Village WCID

City of Page, Arizona

Developed retail water and wastewater rate model, recommended retail water and wastewater rates and provided results and recommendations in a written report and presentation to the City of Page Council

Mitchell County Utility, Texas

Assist with divestiture of water utility assets

City of Longview, Texas

Ongoing assistance with development of annual formulary wholesale water and wastewater rates.

Other Water Related Engagements and Expert Proceedings-cont.

Aqua Texas, Inc.

Calculations and updates of Regional Uniform CIAC Fees

Dripping Springs WSC, Hays County WCID 1&2

Review and analysis of West Travis County Public Utility Agency wholesale rate cost of service and rate increase 2012.

SWWC Inc.

- Decertification analysis and valuation of the CCN for Crosswinds development area.
- Decertification analysis and valuation of the CCN for TXI development area.
- Decertification analysis and valuation of the CCN for Tower Terrace/Kilgore Tract development area.
- Decertification analysis and valuation of the CCN for Villages at Warner Ranch development area.
- Long term forecast of all components of the revenue requirements of all Texas utilities

Crystal Clear WSC

Decertification analysis and valuation of the CCN for Texas GLO development area around New Braunfels Texas

Woodbine Development Corp.

Analysis and assistance with LCRA Windmill Ranch wholesale wastewater services contract renegotiations.

Rebecca Creek MUD

Before and after rate comparison, analysis and forecast regarding the merger proposed by Canyon Lake Water Supply Company.

Global Water Resources

Expert witness before American Arbitration Association regarding the financial standing and regulatory status of Global Water.

Corix Utilities

Assistance with bid preparation and analysis regarding the LCRA retail water and wastewater divestiture.

Golden State Water Company

Assistance with bid concerning divestiture of SWWC Inc.

United Water Management and Services

Developed report regarding Texas IOU regulation for internal assessment of the Texas water regulatory status.

Other Water Related Engagements and Expert Proceedings-cont.

Austin Apartment Association

Represented the Multi-Family water and wastewater classes in the City of Austin's Public Involvement Committee to review the 2017 water and wastewater rate study.

Greater Austin Water Forum

Assisted industrial class water users with analysis and participation in the City of Austin 2008 Cost of Service Study.

New Mexico Utilities

Review/analysis and critique report on Albuquerque Bernalillo County Water Utility Authority's Cost of Service Wholesale Wastewater Rate Model

Hays County Water Control & Improvement District No. 1 and No. 2

Developed 2015/2016 retail water and wastewater rate model, recommended retail water and wastewater rates and provided results and recommendations in a written report and presentation to the Boards of each utility.

ELECTRIC UTILITY RATES AND REGULATION EXPERIENCE

Public Utility Commission of Texas

Docket No. 48002

Prepared the 2017/2018 Application for Interim Update of Wholesale Transmission Rates and testimony for Guadalupe Valley Electric COOP

Docket No. 46710

Prepared the 2016/2017 Application for Interim Update of Wholesale Transmission Rates and testimony for Guadalupe Valley Electric COOP.

Docket No, 45414

Prepared a cash working capital study and testimony on behalf of Sharyland Utilities L.P.'s 2016 Rate Application to establish retail distribution rates.

Docket No. 43731

Prepared a cash working capital study and testimony on behalf of Cross Texas Transmission LLC 2015 Rate Application to establish rates.

Docket No. 41474

Prepared a cash working capital study and testimony on behalf of Sharyland Utilities L.P.'s 2013 Rate Application to establish retail distribution rates.

Docket No. 31250

Presented testimony and rate filing on behalf of Rio Grande Electrical Cooperatives 2005 Change in rates for wholesale transmission service.

Public Utility Commission of Texas -cont.

Docket No. 8702

Assisted in the analysis of Gulf States Utilities 1987 rate request.

Docket 8646

Assisted in the analysis of Central Power & Light's 1988 rate request.

Docket 7661

Assisted in the analysis of the City of Fredericksburg's proposed amendment to Certificate of Convenience.

Docket 7510

Assisted in the analysis of West Texas Utilities Company's 1987 rate request.

Federal Energy Regulatory Commission

Docket No. ER88-202-0000

Assisted in the analysis of the Maine Yankee Atomic Power Plant Decommissioning.

Docket No. ER88-224-0000

Assisted in the analysis of the Carolina Power & Light Company Atomic Power Plant Decommissioning.

City of Bryan

- Developed and programmed data management system for the city electric department.

City of Fredericksburg

- Organized and performed an electric rate survey of Central Texas.
- Assisted in a load and rate design study.

City of Austin

- Assisted in the analysis of the City Electric Utility Department's 1989 rate request.

Other Electric Related Engagements

Dynamic Energy Concepts Incorporated

Assisted with the review of electric contracts, tariffs, analyzed usage data and assessed procurement practices for a number of US Veteran Hospitals across the country

H.E. Butt Grocery Company

Electricity procurement assistance and analysis of supply alternatives

Martin Marietta Materials

Electricity procurement assistance and analysis of supply alternatives

C.H. Guenther & Son, Inc.

Electricity procurement assistance and analysis of supply alternatives

Van Tuyl, Inc.

Electricity procurement assistance and analysis of supply alternatives

Other Electric Related Engagements-cont

Northeast Texas Electrical Cooperative

- Ongoing review/analysis of Southwest Power Administration's annual Integrated Power Repayment Studies and resulting rates.
- Ongoing review/analysis of Southwest Electric Power Company's annual formulary wholesale rate adjustments.

Tex-La Electric Cooperative

- Ongoing review/analysis of Southwest Power Administration's annual Integrated Power Repayment Studies and resulting rates.
- Ongoing review/analysis of Southwest Electric Power Company's annual formulary wholesale rate adjustments

Sam Rayburn G&T Electrical Cooperative

- Ongoing review/analysis of Southwest Power Administration's annual Integrated Power Repayment Studies and resulting rates.
- Ongoing review/analysis of Southwest Power Administration's annual Robert D. Willis Power Repayment Studies and resulting rates.

East Texas Electrical Cooperative

- Ongoing review/analysis of Southwest Electric Power Company's annual formulary wholesale rate adjustments
- Ongoing review/analysis of Southwest Power Administration's annual Robert D. Willis Power Repayment Studies and resulting rates.

M1

Principles of Water Rates, Fees, and Charges

Seventh Edition



**American Water Works
Association**

Manual of Water Supply Practices—M1, Seventh Edition

Principles of Water Rates, Fees, and Charges

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OUTSIDE RETAIL RATE METHODOLOGIES

Generally accepted methods for establishing revenue requirements, including the cash-needs approach, the utility-basis approach, and the hybrid approach, along with the rate differential approach, may be used in the situation where a utility serves outside customers on a retail basis. Please refer to section II and chapter VI.1 for a more detailed discussion of these approaches.

Rate Differential Approach

For many years, some utilities have simply applied a multiplier to the retail rate schedule for inside customers to establish the rates applicable to outside customers (e.g., inside customer rate \times 1.5 multiplier = outside customer rate). By definition, the use of arbitrary multipliers to determine outside customer rates does not conform to cost-based rate-making practices. However, it is possible to establish a rate differential based on cost-based principles and cost allocations that fairly reflect the relationship between the parties. The application of multipliers in determining outside customer rates is therefore not, in and of itself, indicative of the use of a non-cost-based rate-setting approach. However, in many cases, cost-based principles are not used to establish these multipliers, which leaves the utility potentially open to a legal challenge over the cost justification for outside customer rates.

Justifications often cited for using a “multiplier” approach to establish rate differentials between inside and outside customers are historical precedent, simplicity, and cost savings. From a public policy perspective, such rate differentials may encourage or incentivize annexation or advance other public policy objectives. These rate differentials may easily conform to local government budgeting practice, convey a mutually acceptable benefit to utility system owners by outside customers, and avoid requirements for extensive record keeping and rate calculations. However, several jurisdictions have adopted legislation that limits rate differentials applicable to outside customers without a cost-of-service justification and that precedent and simplified rate-making, as well as unclear contract terms, do not insulate parties from possible legal challenges.

Utilities can minimize the potential risk for legal challenges and improve the defensibility of their outside rate differential by periodically completing a cost-of-service analysis using the utility-basis or hybrid approach to validate the multiplier that is being used to establish the rates for outside customers. This periodic validation of the multiplier provides a balance between the simplicity and cost savings associated with this approach and the rigor and technical complexity of the utility-basis or hybrid approach. It also helps to demonstrate the cost justification for the multiplier that is employed.

Table VI.2-1 provides an example of how a rate multiplier would be calculated for an outside customer class, where the providing utility is a city. The cost of service for inside and outside customers is first calculated, for example, as shown in Tables III.2-5 and III.2-6 under the base-extra capacity method and commodity-demand methods, respectively. This information can then be used to calculate an average unit rate for each customer class by dividing the total cost of service by the annual billed usage, as shown in Table VI.2-1. The average rate for outside customer classes can then be compared to the average rate for the corresponding inside customer classes, and a rate multiplier can be calculated. As shown in Table VI.2-1, the average rate for the outside residential customer class is approximately 1.16 times and 1.18 times the average rate for the inside residential class under the base-extra capacity method and commodity-demand method, respectively. This method of calculating the multiplier for outside retail customers typically results in multipliers in the range of 1.0 to 2.0.

Water and Wastewater Finance and Pricing

A Comprehensive Guide

Third Edition

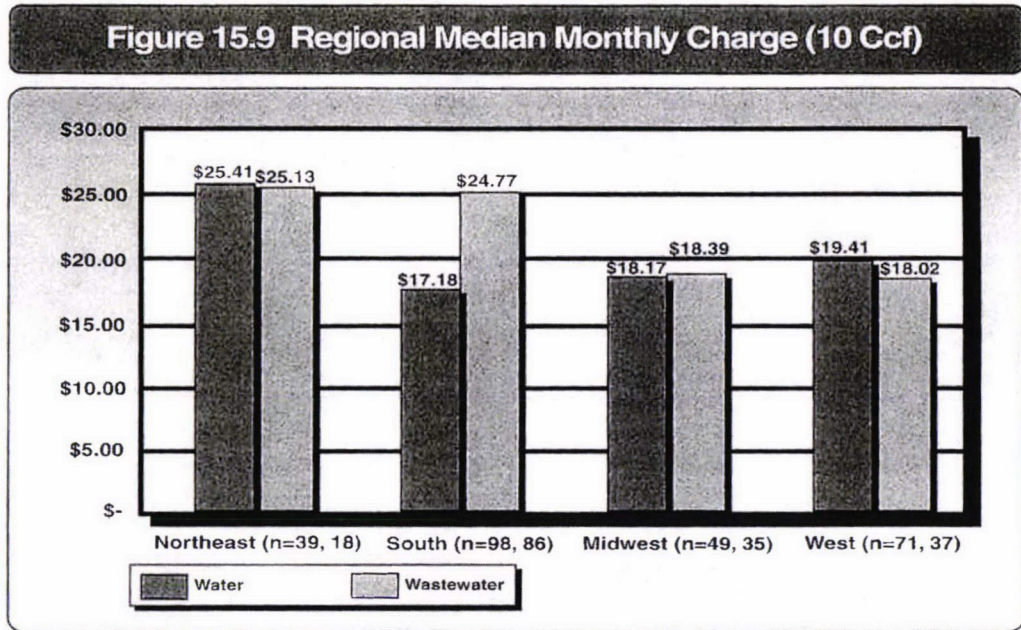
George A. Raftelis



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15.4.2.4 Outside-City Differentials

Many municipal utilities charge a higher rate to retail customers that are located outside of the city limits. The rationale for this is that the customers within city limits are the owners of the system and entitled to a fair rate of return on their infrastructure investment. Some states require that the differential be based on a reasonable rate of return under the utility approach. Other states have no specific requirements and differentials are established simply as a matter of utility policy as passed by the utility's ruling body. Approximately 44% of the responding water utilities and 35% of the responding wastewater utilities indicated that they have an outside-city differential. The outside-city differentials range from 5% to 200%.

15.4.3 RATE STRUCTURES

Improvements in billing system technology have allowed utilities to implement fairly complex rate structures in order to achieve specific pricing objectives. While the majority of utilities continue to use relatively simple rate structures, the survey results described in the following sections indicate that more utilities are considering alternative rate structures.

15.4.3.1 Water Rate Structures

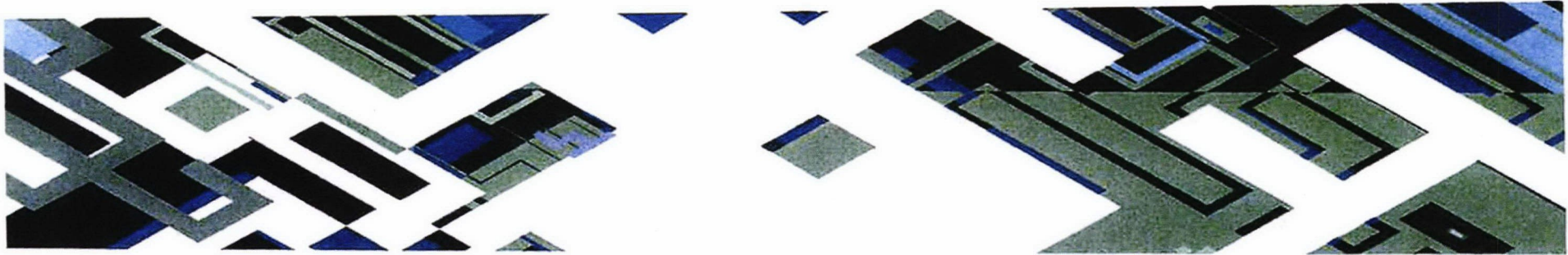
For those communities with block rate structures for residential water service, the most common number of blocks is 3, with the average number of decreasing blocks being 4.1 while the average number of increasing blocks is 3.7. A comparison of communities using various block rate structures for residential water service in the current and previous surveys shows a shift away from declining block rates. The comparison is summarized in Table 15.2.

15.4.3.2 Wastewater Rate Structures

The two most typical methods for billing residential wastewater charges are percentage of water use (57%) and water usage with a cap (20%). A summary of the frequency of the use of methodologies appears in Figure 15.10.

Group B
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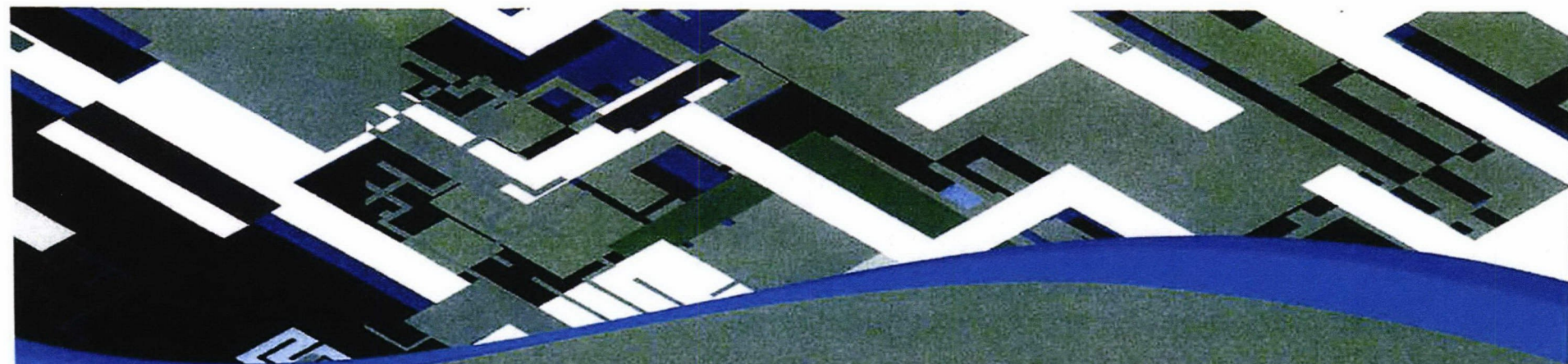
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2019

WATER AND WASTEWATER RATE SURVEY

2018 RATES AND CHARGES DATA FROM 42 STATES



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American
Water Works
Association



RAFTELIS

The data compiled for this rate survey can be used extensively for comparative analysis. Because of the site-specific nature of rate development and implementation, users are cautioned not to broadly generalize the findings. However, this does not preclude the use of the survey database for gaining insights into current rates and charges as well as other aspects of utility performance metrics, such as gallons of water sold, gallons of wastewater treated, billing frequency, and prevalence of miscellaneous charges.

The survey includes 248 responses from utilities in the United States and Canada, some of them combined utilities that provide both water and wastewater service. In total, 234 water utilities and 108 wastewater utilities supplied data for this survey.

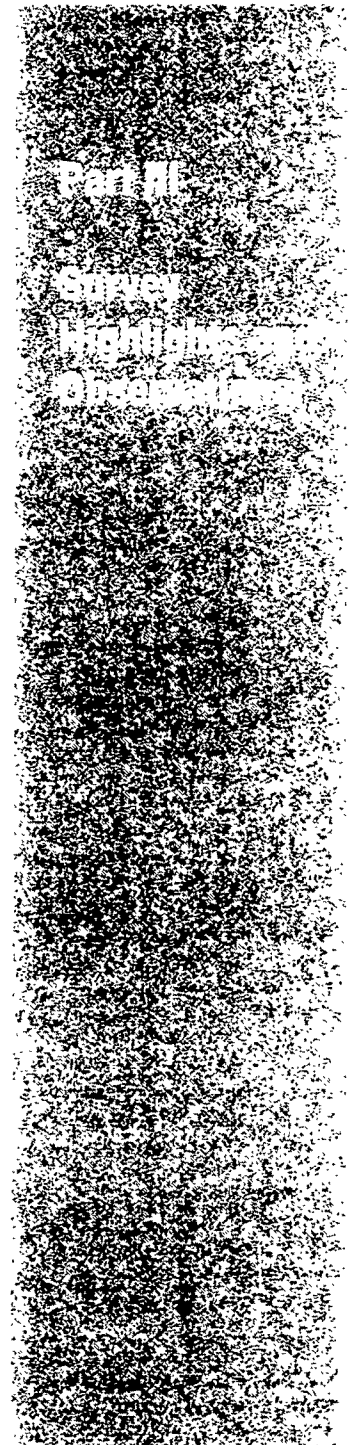
Several analyses that are likely to be useful to the water and wastewater industry have been conducted with the survey data. The median, which is the midpoint of the data with half the responses above and half the responses below, generally provides a better representation of the total population than the average because it is less likely to be skewed by outliers. However, averages still provide value and are provided in some instances. Data and analyses have been grouped into the following 12 primary areas:

- General Utility Information
- Rate Comparisons
- Rate Structures
- Fixed Charges
- Other Charges
- Billing
- Conservation Efforts

- Operations
- Capital
- Income Statement
- Balance Sheet
- Affordability

Many of the analyses refer to charts, which appear at the end of this survey. Some of the more interesting survey facts and findings from the 2018 survey are:

- Water and wastewater charges increased by 7.2% and 7.5%, respectively, for residential customers using 1,000 cubic feet (cf) of water a month between January 1, 2016 and January 1, 2018. During the same period, the Consumer Price Index (CPI) for all urban customers increased by 4.6%.
- Between 1996 and 2018, water and wastewater charges for residential customers using 1,000 cf per month have increased by 5.09% and 5.64% annually, respectively, which is greater than the annual CPI increase of 2.10%.
- Midsized utilities (Group B) have the lowest water rates, and smaller utilities (Group C) have the lowest wastewater rates, when considering residential monthly bills at 1,000 cf.
- Median water charges are highest in the West and median wastewater charges are highest in the Northeast. Median water and wastewater charges are lowest in the Midwest.



Even with the charge increases, water and wastewater charges remain affordable as defined by the U.S. Environmental Protection Agency.^{1,2}

General Utility Information

General utility information provides insight into the size and type of utilities that participated in the rate survey. It is important to understand the sample group from which data are gathered when conducting any type of comparative analysis.

Ownership

The majority of the water and wastewater utilities that responded are municipal utilities. Chart 1 (Water Ownership) and Chart 2 (Wastewater Ownership) show the ownership classification for the water and wastewater respondents.

Service Population

The survey includes utilities that serve populations ranging from less than 1,000 to more than 9,500,000. Chart 3 (Median Service Population) shows the population by group (as defined in Part I of this report). It is interesting to note that the responding U.S. water utilities serve approximately 27% of the U.S. population and the participating wastewater utilities serve approximately 16% of the U.S. population.

Accounts

The median number of accounts of the respondents is summarized by group in Chart 4 (Median Number of Accounts). The median service population per account is 3.83 and 4.12 for water and wastewater, respectively. The median gallons per day of water sold or wastewater treated per account (including residential, commercial, and industrial accounts) is 447 and 419, respectively.

¹ *Combined Sewer Overflows: Guidance for Financial Capability Assessment and Schedule Development*, USEPA, Publication 832-B-97-004, February, 1997, available for download at <http://cfpub.epa.gov/hqpdscso/guidedocs.cfm>

² *Announcement of Small System Compliance Technology Lists for Existing National Primary Drinking Water Regulations and Findings Concerning Variance Technologies*, USEPA, Publication FRL-6137-3, August, 1998

Rate Comparisons

The rate comparisons described below are the focus of the survey. These comparisons provide an overview of the pricing trends within the water and wastewater industry.

Increases in Water and Wastewater Charges from 2016 Survey

Between January 2016 and January 2018, the CPI for all urban consumers increased by 4.6%, or 2.3% annually. Comparing the data of utilities that participated in both the 2016 and the 2018 surveys, which covers roughly the same period, the average monthly water bill for a typical customer using 1,000 cubic feet (cf) (7,480 gallons) increased 7.2%, or 3.6% annually. Similarly, comparing the data of wastewater utilities that participated in both the 2016 and the 2018 surveys, the average monthly wastewater bill for a typical customer with 1,000 cf (7,480 gallons) of usage increased 7.5%, or 3.7% annually.

Similar analyses have been conducted as a part of the previous rate studies. Chart 5 shows the biennial changes to charges over the time period between 1998 and 2018. Chart 6 shows the annualized charge increases compared to the CPI between 2004 and 2018. It is interesting to note that the water and wastewater charge increases, 5.09% and 5.64%, respectively, have significantly outpaced annualized inflationary increases, 2.10%.

Comparison of Charges among Survey Groups

In the 2016 Rate Survey, the median monthly water charges a 1,000 cf were lower for the larger Groups A and B utilities than the smaller Group C utilities, primarily reflecting the benefits of economies of scale. However, wastewater charges increased with the size of the utility.

In the 2018 Rate Survey, this same pattern holds for water and wastewater rates. Several large utilities have implemented significant rate increases due to regulatory and combined sewer overflow requirements, which have negated the savings associated with economies of scale. For wastewater, Group A utilities' median charges were significantly higher than either Group B or Group C utilities at higher usage levels. Overall, Group B utilities appear to have the lowest rates, as was the case in the 2016 Rate Survey.

Chart 7 (Median Monthly Charges 10 Ccf) shows the median water and wastewater charges by group for an average residential customer (1,000 cf per month). Chart 8 (Median Monthly Charges 10 Ccf) shows the median water and wastewater charges by geographic area for a typical residential customer (1,000 cf per month). Based on comparison of typical residential customer (1,000 cf per month) median charges, water and wastewater rates are highest in the Northeast. The lowest water rates are in the Midwest, and the lowest wastewater rates are in the West.

Outside-City Differentials

Many municipal utilities charge higher rates to retail customers located outside of the city limits. The rationale for this is that customers within the city limits are owners of the system and entitled to a fair rate of return on their infrastructure investment. Some states, such as Georgia, Indiana, and Rhode Island, require that the differential be based on a reasonable calculation of the rate under the utility approach. Other states allow differentials that are simply considered utility policy as approved by the utility's ruling body. Approximately 31% of responding water utilities and 22% of responding wastewater utilities indicated that they have an outside-city differential. The outside-city differentials vary greatly, reaching as high as 200%.

Rate Structures

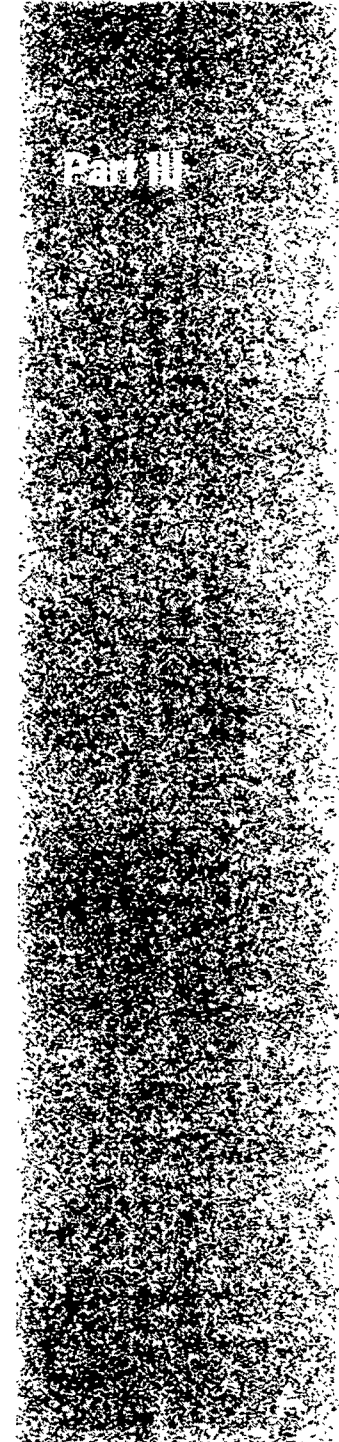
Improvements in billing system technology have allowed utilities to implement more complex rate structures in order to achieve specific pricing objectives. While the majority of utilities continue to use relatively simple rate structures, the survey results described herein indicate that utilities are considering alternative rate structures.

Water Rate Structures

For communities with block rate structures for residential water service, the most common number of blocks is 3 or 4. Table III-1 shows that communities using various block rate structures for residential water service in the current and recent surveys are shifting away from decreasing block rates and toward increasing block rates.

Wastewater Rate Structures

The two most typical methods for billing residential wastewater charges are the percentage of water use (33%) and the percentage of water use with a cap (23%). A summary of the frequency of the use of these methodologies appears in Chart 9 (Residential Wastewater Billing Methods). The majority of utilities that base charges on water usage or nonseasonal water usage assume 100% of the water consumed is discharged. However, some utilities have undertaken studies to better approximate the measured volume of water that is actually discharged to the sewer system.



Base or minimum monthly charge for a residential customer with a 5/8-in. (or 3/4-in.) meter and an industrial customer with a 4-in. meter. The water volume allowance included in this charge is also shown (in gallons).

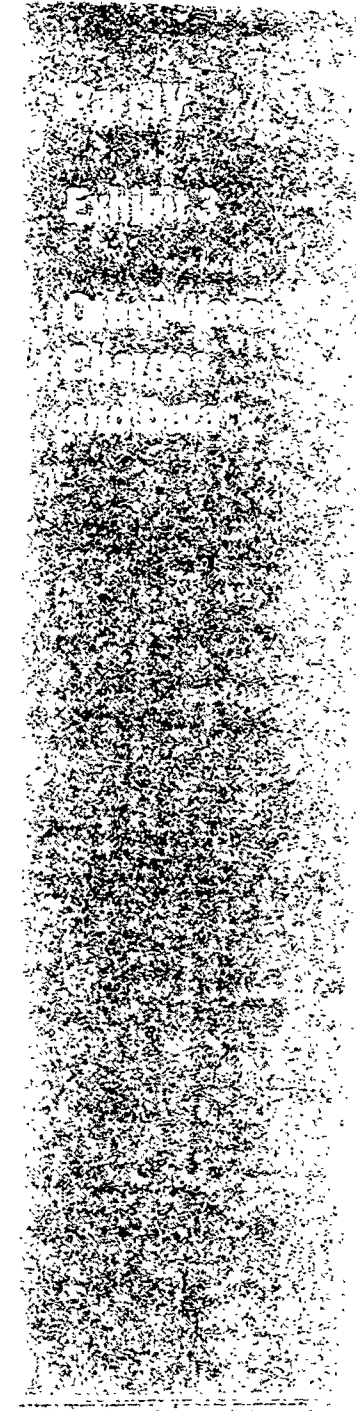
Typical charges for new residential customers to connect to the existing water system. These charges may vary under some circumstances.

Charges for recovering capital to finance trunk facilities. Assumes a customer with a 5/8-in. (or 3/4-in.) meter, 100-ft frontage, and anticipated average use of 1,000 cf (7,480 gal) per month.

Indicates whether the water system provides service outside of municipal (or district) boundaries.

Percentage above inside customer rates paid by retail outside customers. For example, 100% indicates that retail outside customers pay twice as much as retail inside customers

Total annual revenues, operating and nonoperating, and total annual operating expenses for 2018 or the most recent reporting year.



| | Monthly Service/Minimum Charge | | | | | | | Income Statement (d) | | | |
|-------------------------------|--------------------------------|----------------------------|---------------------|----------------------------|--|--|--|---|------------------------|----------------------------------|-----------|
| | 5/8-inch (Residential) | | 4-inch (Industrial) | | Residential Connection Charge or Tap Fee (b) | Residential System Development Charges (b) | Outside Water | | Total Revenues (\$000) | Total Operating Expenses (\$000) | |
| | Charge | Allowance (in gallons) (a) | Charge | Allowance (in gallons) (a) | | | Service Charge Differential (% more) (c) | Volume Charge Differential (% more) (c) | | | |
| Summary Statistics (e) | | | | | | | | | | | |
| ALL SYSTEMS | | | | | | | | | | | |
| Average | \$14.75 | 3,307 | \$242.43 | 22,779 | \$2,212 | \$3,903 | -- | 47% | 43% | \$86,155 | \$50,389 |
| Median | \$12.19 | 2,000 | \$163.06 | 2,926 | \$900 | \$2,400 | -- | 40% | 33% | \$38,989 | \$25,167 |
| Number of Systems | 224 | 55 | 210 | 45 | 151 | 148 | -- | 68 | 73 | 139 | 134 |
| GROUP A SYSTEMS | | | | | | | | | | | |
| Average | \$11.29 | 2,959 | \$251.48 | 4,605 | \$1,724 | \$3,252 | -- | 30% | 35% | \$304,301 | \$169,912 |
| Median | \$9.67 | 2,959 | \$132.68 | 4,605 | \$900 | \$2,117 | -- | 25% | 25% | \$204,443 | \$107,964 |
| Number of Systems | 35 | 2 | 35 | 2 | 25 | 24 | -- | 10 | 11 | 26 | 25 |
| GROUP B SYSTEMS | | | | | | | | | | | |
| Average | \$11.57 | 1,644 | \$210.22 | 22,236 | \$1,328 | \$3,576 | -- | 41% | 42% | \$66,214 | \$40,872 |
| Median | \$10.50 | 1,496 | \$185.97 | 2,000 | \$591 | \$1,801 | -- | 35% | 35% | \$62,343 | \$37,871 |
| Number of Systems | 51 | 8 | 50 | 8 | 38 | 40 | -- | 16 | 19 | 42 | 41 |
| GROUP C SYSTEMS | | | | | | | | | | | |
| Average | \$16.82 | 3,618 | \$252.78 | 23,942 | \$2,732 | \$4,244 | -- | 53% | 46% | \$18,066 | \$12,184 |
| Median | \$13.63 | 2,000 | \$163.75 | 2,992 | \$990 | \$2,802 | -- | 50% | 39% | \$11,327 | \$7,519 |
| Number of Systems | 138 | 45 | 125 | 35 | 88 | 84 | -- | 42 | 43 | 71 | 68 |

(a) The allowance has been converted to gallons for those utilities reporting an allowance in cubic feet (or 100 cubic feet) and the average and median only include those utilities with a minimum

(b) Only reported charges were included in the median and average calculations. If a utility reported no charge, it was not included in the calculations

(c) If a utility reported a differential of zero, it was excluded in the median and average calculations

(d) Income Statement is only for those utilities that provided water only data. Some combined data appears in Exhibit 3, but is not included in the average and median calculations

(e) The number of systems indicates the size of the sample for which data was provided

| City, State ^(a) | Monthly Service/Minimum Charge | | | | Residential Connection Charge or Tap Fee | Residential System Development Charges | Outside Water | | | Income Statement (c) | |
|----------------------------|--------------------------------|----------------------------|---------------------|----------------------------|--|--|------------------|-------------------------------|----------------------------------|------------------------|----------------------------------|
| | 5/8-inch (Residential) | | 4-inch (Industrial) | | | | Service | Service Differential (% more) | Volumetric Differential (% more) | Total Revenues (\$000) | Total Operating Expenses (\$000) |
| | Charge | Allowance (in gallons) (b) | Charge | Allowance (in gallons) (b) | | | | | | | |
| GROUP A SYSTEMS | | | | | | | | | | | |
| New York City, NY (c) | \$14.90 | 2,926 | \$14.90 | 2,926 | \$458 | -- | Wholesale | -- | -- | \$3,999,608 | \$1,492,311 |
| Chicago, IL | \$0.00 | -- | \$0.00 | -- | \$1,780 | -- | Retail | -- | -- | \$772,507 | \$402,227 |
| Detroit, MI | n/a | -- | n/a | -- | -- | -- | No | -- | -- | \$381,256 | \$101,731 |
| Los Angeles, CA | \$0.00 | -- | \$0.00 | -- | -- | -- | Retail | -- | -- | \$1,289,000 | \$701,000 |
| Dallas, TX (c) | \$5.33 | -- | \$126.62 | -- | \$3,420 | \$3,420 | Wholesale | -- | -- | \$632,469 | \$325,231 |
| Miami, FL | \$3.20 | -- | \$123.76 | -- | -- | -- | No | -- | -- | \$338,306 | \$166,533 |
| San Antonio, TX | \$12.97 | -- | \$297.20 | -- | -- | \$4,745 | Retail-Wholesale | 30% | 30% | \$410,446 | \$202,437 |
| San Francisco, CA | \$9.87 | -- | \$132.68 | -- | -- | \$1,346 | Retail-Wholesale | -- | -- | \$546,908 | \$348,585 |
| Suffolk County, NY | \$8.09 | -- | \$48.97 | 6,284 | \$1,850 | -- | Wholesale | -- | -- | \$201,693 | \$131,619 |
| Denver, CO | \$11.86 | -- | \$135.26 | -- | \$3,030 | \$10,030 | Retail-Wholesale | 0% | 56% | \$308,641 | \$193,641 |
| Fairfax, VA | \$4.07 | -- | \$45.95 | -- | \$1,260 | \$4,150 | No | -- | -- | \$205,062 | \$90,806 |
| Fort Worth, TX (c) | \$12.10 | -- | \$339.80 | -- | \$890 | \$1,365 | Retail-Wholesale | 25% | 25% | \$425,615 | \$165,973 |
| San Diego, CA | \$23.92 | -- | \$194.38 | -- | \$111 | \$3,047 | Retail-Wholesale | 0% | 0% | \$506,258 | \$402,459 |
| Louisville, KY | \$11.18 | -- | \$335.40 | -- | \$900 | -- | Retail-Wholesale | 0% | 0% | \$184,701 | \$76,056 |
| Oakland, CA | \$22.60 | -- | \$293.70 | -- | \$6,193 | \$17,530 | No | -- | -- | \$474,864 | \$243,850 |
| Philadelphia, PA (c) | \$6.61 | -- | \$67.61 | -- | -- | -- | Retail-Wholesale | 0% | 0% | \$723,575 | \$413,339 |
| Seattle, WA | \$16.16 | -- | \$150.40 | -- | \$2,558 | \$1,063 | Retail-Wholesale | 14% | 14% | \$276,941 | \$150,883 |
| Baltimore, MD | \$13.10 | -- | \$633.25 | -- | -- | -- | n/r | -- | -- | \$176,440 | \$111,855 |
| Austin, TX (c) | \$8.50 | -- | \$357.25 | -- | \$53 | \$5,657 | Retail-Wholesale | 0% | 0% | \$603,643 | \$259,730 |
| Birmingham, AL | \$25.93 | -- | \$467.59 | -- | \$610 | \$1,000 | Retail | 0% | 0% | \$170,680 | \$87,918 |
| Jacksonville, FL (c) | \$12.60 | -- | \$315.00 | -- | \$812 | \$2,035 | Retail | 0% | 0% | \$457,908 | \$141,445 |
| Columbus, OH (c) | \$34.01 | -- | \$83.30 | -- | -- | \$2,200 | Retail-Wholesale | 30% | 30% | \$203,423 | \$120,015 |
| Indianapolis, IN | \$8.68 | -- | \$520.46 | -- | -- | \$1,200 | Wholesale | -- | -- | \$203,823 | \$74,547 |
| El Paso, TX (c) | \$6.63 | 2,992 | \$63.60 | -- | \$3,300 | \$845 | Wholesale | 15% | 15% | \$159,794 | \$83,953 |
| Memphis, TN | \$7.76 | -- | \$370.53 | -- | \$587 | \$500 | Retail-Wholesale | 39% | 56% | \$104,089 | \$81,353 |
| Cincinnati, OH | \$5.85 | -- | \$116.69 | -- | \$3,053 | \$3,053 | Retail-Wholesale | -- | -- | \$159,008 | n/r |
| Tulsa, OK (c) | \$6.19 | -- | \$75.14 | -- | \$20 | -- | Retail-Wholesale | 100% | 100% | \$123,475 | \$58,721 |
| San Jose, CA | n/a | -- | n/a | -- | -- | -- | No | -- | -- | \$241,225 | \$158,120 |
| Charlotte, NC | \$7.19 | -- | \$99.05 | -- | \$2,206 | -- | Retail-Wholesale | 0% | 0% | \$177,693 | \$76,421 |
| Portland, OR | \$13.61 | -- | \$40.82 | -- | \$5,385 | \$2,577 | Retail-Wholesale | -- | -- | \$181,183 | \$87,994 |
| Oklahoma City, OK (c) | \$15.04 | -- | \$272.68 | -- | -- | \$1,000 | Retail-Wholesale | 11% | 24% | \$251,746 | \$119,972 |
| Omaha, NE | \$17.29 | -- | \$744.90 | -- | \$383 | \$1,282 | Retail-Wholesale | -- | -- | \$123,699 | \$78,605 |
| Milwaukee, WI | \$5.99 | -- | \$65.21 | -- | \$289 | -- | Retail-Wholesale | 25% | 25% | \$93,177 | \$61,864 |
| Coachella, CA | \$6.92 | -- | \$82.58 | -- | -- | \$3,707 | Retail | 0% | 0% | \$96,059 | \$68,050 |
| Tucson, AZ | \$13.53 | -- | \$261.53 | -- | \$394 | \$1,511 | Retail | 0% | 0% | \$213,614 | \$107,954 |
| Albuquerque, NM (c) | \$15.91 | -- | \$1,657.68 | -- | \$3,151 | \$3,151 | No | -- | -- | \$226,657 | \$117,121 |
| Orlando, FL | \$7.50 | -- | \$68.00 | -- | \$410 | \$1,837 | Retail | 11% | 11% | \$74,555 | \$41,272 |
| GROUP B SYSTEMS | | | | | | | | | | | |
| Henderson, NV | \$12.70 | -- | \$238.55 | -- | \$365 | \$1,600 | No | -- | -- | \$73,946 | \$61,900 |
| Concord, CA | \$18.78 | -- | \$469.59 | -- | \$25 | \$20,442 | No | -- | -- | \$132,588 | \$81,324 |
| Toledo, OH | \$16.62 | 667 | \$151.71 | 6,000 | \$1,800 | -- | Retail-Wholesale | 75% | 75% | \$82,070 | \$71,033 |
| Nashville, TN (c) | \$3.13 | 1,496 | \$650.65 | 1,496 | \$430 | \$250 | Wholesale | -- | -- | \$219,964 | \$112,654 |

| City, State ^(A) | Monthly Service/Minimum Charge | | | | Residential Connection Charge or Tap Fee | Residential System Development Charges | Outside Water | | | Income Statement (c) | |
|----------------------------|--------------------------------|----------------------------|---------------------|----------------------------|--|--|------------------|-------------------------------|----------------------------------|------------------------|----------------------------------|
| | 5/8-inch (Residential) | | 4-inch (Industrial) | | | | Service | Service Differential (% more) | Volumetric Differential (% more) | Total Revenues (\$000) | Total Operating Expenses (\$000) |
| | Charge | Allowance (in gallons) (b) | Charge | Allowance (in gallons) (b) | | | | | | | |
| Corpus Christi, TX | \$12.70 | 2,000 | \$202.80 | 2,000 | \$445 | - | Retail-Wholesale | 20% | 61% | \$161,612 | \$67,389 |
| Gwinnett County, GA (c) | \$7.50 | -- | \$210.00 | -- | \$50 | \$1,128 | Retail-Wholesale | 0% | 0% | \$190,153 | \$132,246 |
| Orange County, FL (c) | \$7.13 | -- | \$95.77 | -- | \$140 | \$1,791 | No | -- | -- | \$189,403 | \$127,920 |
| Sacramento, CO | \$29.52 | -- | \$264.23 | -- | \$2,102 | \$3,062 | Retail-Wholesale | 0% | 0% | \$112,364 | \$66,223 |
| Riverside, CA | \$13.99 | -- | \$237.57 | -- | \$1,305 | \$7,150 | Retail | 50% | 50% | \$64,543 | \$37,871 |
| Cobb County, GA | \$7.00 | -- | \$69.60 | -- | \$1,650 | \$1,650 | Retail | -- | -- | n/r | n/r |
| Richmond, VA | n/r | -- | n/r | -- | -- | -- | n/r | -- | -- | \$81,505 | \$39,048 |
| Greenville, SC | \$4.52 | -- | \$112.83 | -- | \$100 | \$1,320 | Retail-Wholesale | 50% | 50% | \$68,532 | \$31,771 |
| Tacoma, WA | \$22.05 | -- | \$551.25 | -- | \$2,335 | \$1,485 | Retail-Wholesale | 20% | 20% | \$98,978 | \$53,828 |
| Charleston, SC (c) | \$12.60 | 1,496 | \$125.00 | 1,496 | \$500 | \$3,401 | Retail-Wholesale | 58% | 91% | \$143,095 | \$65,159 |
| Lenexa, KS | \$11.45 | -- | \$238.50 | -- | \$705 | \$4,855 | n/r | -- | -- | \$120,569 | \$52,927 |
| Monroe County, NY | \$6.39 | -- | \$18.96 | -- | \$2,500 | -- | Retail-Wholesale | 0% | 10% | \$67,440 | \$42,883 |
| Little Rock, AR | \$7.85 | 1,496 | \$118.85 | 1,496 | -- | \$150 | Retail-Wholesale | 31% | 60% | \$62,605 | \$43,440 |
| Minneapolis, MN | \$4.00 | -- | \$100.00 | -- | \$213 | -- | Retail-Wholesale | 0% | 4% | \$83,476 | \$50,462 |
| Pinellas County, FL | \$6.57 | -- | n/r | -- | \$352 | -- | n/r | -- | -- | \$90,178 | \$70,782 |
| Gilbert, AZ | \$14.63 | -- | \$178.40 | -- | \$6,286 | \$6,286 | No | -- | -- | \$37,941 | \$56,211 |
| Des Moines, IA | \$6.00 | -- | \$75.00 | -- | \$295 | \$420 | Retail-Wholesale | 0% | 0% | \$72,593 | \$53,718 |
| Aurora, CO | \$12.44 | -- | \$117.80 | -- | -- | \$15,159 | n/r | -- | -- | \$120,306 | \$58,237 |
| Raleigh, NC (c) | \$7.65 | -- | \$149.35 | -- | \$3,154 | \$1,373 | Retail-Wholesale | 92% | 100% | \$242,981 | \$102,195 |
| North Las Vegas, NV | \$10.50 | -- | \$240.60 | -- | \$1,420 | \$1,795 | Retail | 0% | 0% | \$62,801 | \$34,728 |
| Wichita, KS (c) | \$13.81 | -- | \$51.12 | -- | \$850 | \$1,520 | Retail-Wholesale | 60% | 60% | \$139,285 | \$69,222 |
| New Orleans, LA (c) | \$7.18 | -- | \$95.67 | -- | -- | -- | No | -- | -- | \$248,701 | \$175,737 |
| New Haven, CT | \$19.14 | -- | \$297.80 | -- | \$550 | -- | No | -- | -- | \$127,072 | \$63,997 |
| Covina, CA | \$13.11 | -- | \$327.62 | -- | -- | \$41 | n/r | -- | -- | \$76,656 | \$55,254 |
| Sonoma County, CA | n/a | -- | n/a | -- | -- | -- | n/r | -- | -- | \$34,898 | \$28,384 |
| Mobile, AL (c) | \$10.11 | 2,500 | \$395.85 | 126,000 | -- | \$1,590 | Retail-Wholesale | 0% | 0% | \$103,635 | \$59,550 |
| Newport News, VA | \$13.00 | -- | \$208.00 | -- | \$1,200 | \$2,520 | Retail-Wholesale | 0% | 0% | \$93,627 | \$47,761 |
| Saint Paul, MN | \$7.50 | -- | \$150.00 | -- | -- | -- | Retail-Wholesale | 20% | 20% | \$63,425 | \$39,779 |
| Kern County, CA | n/a | -- | n/a | -- | -- | -- | Wholesale | -- | -- | \$7,242 | n/r |
| Wyoming, MI | \$7.52 | -- | \$165.69 | -- | \$1,750 | \$1,308 | Wholesale | -- | -- | \$18,162 | \$12,635 |
| Cheslerfield County, VA | \$10.18 | -- | \$193.54 | -- | \$5,500 | \$5,500 | No | -- | -- | \$48,146 | \$28,210 |
| Alameda County, CA | \$24.92 | -- | \$430.06 | -- | \$7,715 | \$7,175 | Retail | 0% | 15% | \$107,972 | \$77,848 |
| Onondaga County, NY | \$10.00 | -- | \$250.00 | -- | \$750 | \$750 | No | -- | -- | \$44,629 | \$30,731 |
| Henrico County, VA (c) | \$7.10 | -- | \$125.43 | -- | -- | \$4,635 | Wholesale | -- | -- | \$124,530 | \$47,773 |
| Virginia Beach, VA (c) | \$4.41 | -- | \$59.01 | -- | \$493 | \$2,267 | No | -- | -- | \$132,870 | \$76,814 |
| Bellevue, WA | n/a | -- | n/a | -- | -- | \$6,005 | No | -- | -- | \$38,989 | \$30,422 |
| Peoria, AZ | \$15.88 | -- | \$111.71 | -- | -- | \$5,207 | No | -- | -- | \$42,586 | \$24,603 |
| Greensboro, NC | n/r | -- | n/r | -- | -- | -- | n/r | -- | -- | n/r | n/r |
| Lewisville, TX | n/a | -- | n/a | -- | -- | -- | n/r | -- | -- | \$42,234 | \$15,954 |
| Lynnwood, WA | \$15.56 | 1,495 | \$325.62 | 37,403 | \$334 | \$1,806 | Retail-Wholesale | 33% | 33% | \$40,141 | \$30,504 |
| Lakewood Ranch, FL | n/a | -- | n/a | -- | -- | -- | No | -- | -- | \$31,656 | \$14,833 |
| Woodbridge, VA (c) | \$5.45 | -- | \$136.25 | -- | -- | \$4,600 | n/r | -- | -- | \$45,820 | \$45,783 |
| Okatie, SC | \$8.00 | -- | \$12.00 | -- | \$200 | \$1,200 | No | -- | -- | \$37,029 | \$16,979 |
| Columbus, GA (c) | \$6.52 | -- | \$45.52 | -- | \$1,200 | \$30 | n/r | -- | -- | \$68,747 | \$38,506 |
| Fort Wayne, IN | \$11.71 | -- | \$475.71 | -- | -- | -- | Retail-Wholesale | 15% | 15% | \$48,115 | \$25,007 |

| City, State ^(a) | Monthly Service/Minimum Charge | | | | Residential Connection Charge or Tap Fee | Residential System Development Charges | Outside Water | | | Income Statement (c) | |
|----------------------------|--------------------------------|----------------------------|---------------------|----------------------------|--|--|------------------|-------------------------------|----------------------------------|------------------------|----------------------------------|
| | 5/8-inch (Residential) | | 4-inch (Industrial) | | | | Service | Service Differential (% more) | Volumetric Differential (% more) | Total Revenues (\$000) | Total Operating Expenses (\$000) |
| | Charge | Allowance (in gallons) (b) | Charge | Allowance (in gallons) (b) | | | | | | | |
| Knoxville, TN | \$17.00 | -- | \$250.00 | -- | - | - | Retail | 8% | 14% | \$39,500 | \$25,913 |
| Halifax, NS | \$10.00 | - | \$203.07 | -- | \$42 | \$141 | No | - | - | \$43,600 | \$24,400 |
| Beaverton, OR | \$13.95 | -- | \$139.98 | - | \$2,615 | \$7,358 | n/r | - | -- | \$56,570 | \$30,943 |
| Ontario, CA (c) | \$23.85 | - | \$419.00 | - | \$233 | -- | No | - | -- | \$60,043 | \$36,604 |
| Eugene, OR | \$22.08 | - | \$318.99 | -- | - | \$3,338 | Wholesale | -- | -- | \$40,155 | \$18,847 |
| Akron, OH | \$4.00 | -- | \$4.00 | - | - | -- | Retail | 35% | 35% | \$34,579 | \$27,762 |
| Pueblo, CO | \$11.91 | 2,000 | \$114.86 | 2,000 | \$151 | \$4,898 | Retail | 50% | 51% | \$36,964 | \$24,955 |
| Loudoun County, VA (c) | \$11.15 | - | \$229.90 | - | \$80 | \$6,766 | Retail | 0% | 0% | \$98,372 | \$50,863 |
| Lakeland, FL | \$9.25 | -- | \$327.82 | -- | \$632 | \$1,050 | Retail | 35% | 35% | \$33,728 | \$16,232 |
| GROUP C SYSTEMS | | | | | | | | | | | |
| Arlington County, VA (c) | \$0.00 | - | \$0.00 | - | \$3,200 | -- | No | - | - | \$110,219 | \$74,900 |
| Corte Madera, CA | \$23.29 | -- | \$381.21 | - | \$7,040 | - | No | - | -- | \$70,536 | \$58,852 |
| Fort Collins, CO | \$17.87 | -- | \$442.75 | - | - | -- | Retail-Wholesale | 0% | 0% | \$31,803 | \$18,444 |
| Lansing, MI | \$12.20 | - | \$500.55 | -- | \$1,000 | - | Retail-Wholesale | 0% | 0% | \$41,760 | \$27,414 |
| Thornton, CO | \$5.64 | - | \$156.96 | -- | - | \$24,770 | Retail | 50% | 50% | \$50,890 | \$27,430 |
| Round Rock, TX (c) | \$16.04 | -- | \$326.01 | -- | \$25 | \$4,025 | Retail-Wholesale | 100% | 100% | \$69,845 | \$29,646 |
| Lehigh County, PA (c) | \$9.28 | -- | \$121.03 | - | \$670 | \$1,402 | Wholesale | -- | -- | \$32,896 | \$16,872 |
| Portland, ME | \$9.11 | 748 | \$92.63 | 748 | - | -- | Retail | 15% | 15% | \$23,627 | \$15,723 |
| Valley Center, CA | \$42.80 | -- | \$265.27 | - | - | \$4,644 | No | -- | -- | \$42,346 | \$38,523 |
| Erie, PA | \$7.98 | -- | \$143.31 | - | \$4,000 | \$575 | Wholesale | -- | -- | \$39,455 | \$18,912 |
| Calabasas, CA | \$25.43 | - | \$500.02 | -- | \$13,567 | \$13,567 | Retail | 0% | 0% | \$37,886 | \$31,278 |
| Encinitas, CA | \$30.08 | -- | \$577.17 | -- | -- | -- | Retail | - | -- | \$55,006 | \$41,180 |
| Georgetown, TX (c) | \$15.50 | -- | \$383.50 | -- | - | - | Retail | 20% | 0% | \$55,534 | \$29,193 |
| Chesapeake, VA (c) | \$22.41 | 2,244 | \$313.62 | 2,244 | \$3,108 | \$3,258 | No | - | -- | \$77,116 | \$43,586 |
| Denton, TX | \$16.00 | - | \$218.90 | - | \$2,405 | \$20 | Wholesale | 15% | 64% | \$41,469 | \$42,340 |
| Chula Vista, CA | \$13.91 | -- | \$147.81 | - | - | \$5,778 | No | - | -- | \$50,442 | \$46,109 |
| Marion County, FL | \$12.75 | - | \$318.42 | - | - | \$1,659 | Retail | 0% | -- | n/r | n/r |
| Bowling Green, KY (c) | \$5.73 | -- | \$5.73 | -- | \$980 | -- | Retail-Wholesale | 40% | 40% | n/r | n/r |
| Santa Rosa, CA | \$11.89 | -- | \$248.24 | - | -- | \$5,267 | Retail | 0% | 0% | \$45,235 | \$29,433 |
| Arvada, CO | \$2.92 | -- | \$24.58 | -- | \$19,275 | \$19,275 | Retail | 100% | 100% | \$22,522 | \$17,997 |
| Asheville, NC | \$7.14 | -- | \$907.45 | -- | \$55 | \$2,303 | Retail-Wholesale | 0% | 0% | \$36,895 | \$18,823 |
| Carrollton, TX (c) | \$12.98 | 2,000 | \$128.01 | 2,000 | \$55 | \$560 | No | - | -- | \$40,036 | \$29,334 |
| Rialto, CA | \$22.21 | -- | \$128.56 | -- | \$7,009 | \$7,009 | n/r | 50% | 50% | \$31,344 | \$20,446 |
| Palm Dale, CA | \$36.23 | -- | \$495.27 | -- | \$2,700 | \$10,106 | Retail | 0% | 0% | \$32,797 | \$23,007 |
| Manchester, NH | \$8.43 | - | \$63.13 | - | -- | \$3,512 | Retail-Wholesale | 15% | 15% | \$17,696 | \$11,275 |
| Boulder, CO | \$12.18 | - | \$304.65 | -- | - | - | Retail | 50% | 0% | \$33,091 | \$25,427 |
| Olathe, KS (c) | \$12.85 | -- | \$321.36 | -- | - | \$44 | Wholesale | -- | - | n/r | n/r |
| St. Louis, MO | \$7.95 | -- | \$84.85 | - | \$150 | - | Wholesale | -- | -- | n/r | n/r |
| Canton, OH | \$4.27 | 2,992 | \$266.45 | 122,157 | \$904 | -- | Retail | 150% | 150% | \$18,516 | \$13,895 |
| Holland, OH | \$10.36 | -- | \$210.14 | -- | \$660 | \$5,354 | Retail-Wholesale | 0% | 0% | \$10,098 | \$4,542 |
| Naperville, OH (c) | \$6.43 | - | \$104.18 | - | -- | \$945 | Retail | 10% | 10% | \$51,072 | \$45,942 |
| Pittsburgh, PA (c) | \$23.25 | 1,000 | \$924.52 | 70,000 | \$178 | - | Wholesale | - | - | \$202,996 | \$157,220 |
| Bend, OR | \$22.91 | -- | \$103.35 | - | \$590 | \$5,220 | Retail | 50% | 50% | \$20,118 | \$10,758 |

| City, State ^(a) | Monthly Service/Minimum Charge | | | | Residential Connection Charge or Tap Fee | Residential System Development Charges | Outside Water | | | Income Statement (c) | |
|----------------------------|--------------------------------|----------------------------|---------------------|----------------------------|--|--|------------------|-------------------------------|----------------------------------|------------------------|----------------------------------|
| | 5/8-inch (Residential) | | 4-inch (Industrial) | | | | Service | Service Differential (% more) | Volumetric Differential (% more) | Total Revenues (\$000) | Total Operating Expenses (\$000) |
| | Charge | Allowance (in gallons) (b) | Charge | Allowance (in gallons) (b) | | | | | | | |
| Ann Arbor, MI | \$3.75 | -- | \$102.67 | -- | -- | \$5,274 | Retail | -- | -- | \$28,707 | \$16,697 |
| Kenosha, WI | \$9.14 | -- | \$74.16 | -- | -- | -- | Retail-Wholesale | 0% | 0% | \$16,412 | \$7,866 |
| Lima, OH | \$10.37 | 2,244 | \$258.13 | 2,244 | -- | -- | Retail | 50% | 50% | \$17,349 | \$10,414 |
| Jonesboro, AR | \$5.85 | 1,000 | \$72.21 | 1,000 | \$500 | \$500 | Retail | 20% | 20% | \$10,277 | \$5,984 |
| Longmont, CO | \$6.00 | -- | \$108.66 | -- | -- | \$8,070 | Retail-Wholesale | 50% | 50% | n/r | n/r |
| North Wales, PA (c) | \$4.00 | -- | \$104.00 | -- | -- | \$3,051 | No | -- | -- | \$22,870 | \$8,660 |
| Delaware, OH | \$11.85 | 1,500 | n/r | -- | \$800 | \$4,600 | Retail | 0% | 0% | \$35,342 | \$15,830 |
| Owensboro, KY | \$7.00 | -- | \$191.00 | -- | \$850 | -- | Retail-Wholesale | 57% | 49% | \$11,697 | \$7,450 |
| Napa, CA | \$14.30 | -- | \$129.23 | -- | \$7,978 | \$6,296 | Retail-Wholesale | 0% | 44% | n/r | n/r |
| Aurora, IL (c) | \$8.18 | -- | \$8.18 | -- | -- | -- | Retail | 100% | 100% | \$34,344 | \$22,753 |
| Manitowoc, WI | \$8.14 | -- | \$125.87 | -- | -- | -- | Retail-Wholesale | 0% | 0% | \$7,093 | \$4,817 |
| Yuma, AZ | \$17.47 | -- | \$91.88 | -- | -- | \$5,080 | Retail | 33% | 33% | \$23,946 | \$11,437 |
| Douglasville, GA | \$11.14 | -- | \$313.14 | -- | \$1,250 | \$1,975 | No | -- | -- | \$28,382 | \$8,951 |
| Johnson City, TN | \$4.63 | -- | \$4.63 | -- | \$750 | -- | Retail | 100% | 100% | n/r | n/r |
| Palo Alto, CA | \$16.77 | -- | \$372.31 | -- | \$5,561 | \$5,000 | No | -- | -- | \$42,678 | \$33,078 |
| Tucson, AZ (Metro) | \$29.60 | 3,000 | \$811.25 | 3,000 | \$2,372 | \$2,372 | Retail | 0% | 0% | \$40,351 | \$10,055 |
| Lafourche Parish, LA | \$7.43 | 2,000 | \$107.66 | 2,000 | \$560 | -- | Retail | 0% | 0% | n/r | n/r |
| Bucks County, PA | \$25.00 | -- | \$59.51 | -- | \$2,625 | -- | No | -- | -- | \$20,457 | \$10,358 |
| Hanover County, VA | \$4.93 | -- | \$123.02 | -- | -- | \$5,962 | Retail | 0% | 0% | n/r | n/r |
| Mount Pleasant, SC (c) | \$8.40 | -- | \$139.65 | -- | -- | \$2,285 | Retail | -- | -- | \$45,300 | \$22,775 |
| North Richland Hills, TX | \$40.58 | 2,000 | \$241.68 | 12,000 | -- | -- | Retail | 0% | -- | \$27,982 | \$18,489 |
| Welcome, NC | \$12.75 | 2,000 | \$384.00 | 75,000 | \$1,700 | -- | n/r | -- | -- | \$17,851 | \$9,088 |
| Gadsden, AL (c) | \$12.03 | 2,244 | \$1,633.24 | 2,244 | \$750 | -- | Wholesale | -- | -- | \$17,795 | \$14,330 |
| Eagan, MN | \$3.60 | -- | \$3.60 | -- | \$290 | -- | n/r | -- | -- | \$5,419 | \$1,309 |
| Battle Creek, MI | \$12.82 | -- | \$249.56 | -- | \$2,670 | \$2,670 | Retail-Wholesale | -- | -- | n/r | n/r |
| Griffin, GA | \$15.05 | 2,000 | \$221.26 | -- | \$1,085 | -- | Wholesale | 0% | -- | n/r | n/r |
| San Marcos, TX | \$22.06 | -- | \$176.46 | -- | -- | \$2,285 | Retail | 25% | 25% | n/r | n/r |
| Okaloosa County, FL (c) | \$10.20 | -- | \$167.24 | -- | \$800 | -- | No | -- | -- | \$36,314 | \$19,917 |
| Conway, AR | \$9.79 | 1,000 | \$136.97 | 1,000 | -- | -- | Retail | 50% | 50% | \$11,327 | \$5,794 |
| Auburn, AL | \$14.58 | 3,000 | \$315.18 | 80,000 | \$1,200 | \$1,200 | No | -- | -- | \$11,027 | \$7,864 |
| Dare County, NC (c) | \$38.20 | 1,000 | \$172.98 | 1,000 | \$340 | \$2,405 | No | -- | -- | \$13,284 | \$8,733 |
| Frankfort, KY | \$8.30 | -- | \$207.50 | -- | \$759 | -- | Retail | 0% | 24% | \$12,242 | \$3,523 |
| Ames, IA | \$10.98 | -- | \$692.88 | -- | -- | -- | Retail-Wholesale | 100% | 15% | n/r | n/r |
| Grants Pass, OR | \$17.77 | -- | \$381.18 | -- | -- | \$2,934 | No | -- | -- | n/r | n/r |
| Carboro, NC (c) | \$14.70 | 1,000 | \$323.58 | -- | -- | -- | No | -- | -- | \$38,982 | \$21,866 |
| Newton County, GA | \$11.72 | -- | \$122.42 | -- | \$755 | \$2,200 | n/r | -- | -- | n/r | n/r |
| Paducah, KY | \$7.19 | 1,500 | \$459.01 | 150,000 | \$1,100 | -- | Retail-Wholesale | 0% | 0% | \$10,979 | \$7,577 |
| Roanoke Rapids, NC (c) | \$9.25 | 2,000 | \$9.25 | 2,000 | \$850 | \$300 | Retail | 87% | 39% | \$8,202 | \$5,470 |
| St. Cloud, FL | \$13.79 | -- | \$229.88 | -- | \$380 | \$2,965 | Retail | 25% | 25% | n/r | n/r |
| Austin, MN | \$15.50 | -- | \$135.20 | -- | -- | \$2,400 | No | -- | -- | n/r | n/r |
| Grand Junction, CO | \$19.00 | 3,000 | \$19.00 | 3,000 | \$1,000 | \$300 | Retail | 40% | 5% | n/r | n/r |
| Mesquite, NV | \$35.00 | 2,000 | \$1,126.00 | -- | \$250 | \$5,900 | No | -- | -- | \$10,522 | \$5,498 |
| Clarksville, AR | \$7.50 | -- | n/r | -- | -- | -- | Wholesale | 0% | 7% | \$5,088 | \$1,606 |
| Kenmore, VA (c) | \$15.10 | -- | \$346.25 | -- | \$2,500 | \$3,500 | No | -- | -- | \$17,112 | \$12,142 |
| Suffolk, VA (c) | \$6.55 | -- | \$163.75 | -- | \$1,100 | \$5,520 | Wholesale | -- | -- | \$49,515 | \$21,945 |

| City, State ^(a) | Monthly Service/Minimum Charge | | | | Residential Connection Charge or Tap Fee | Residential System Development Charges | Outside Water | | | Income Statement (c) | |
|----------------------------|--------------------------------|----------------------------|---------------------|----------------------------|--|--|------------------|-------------------------------|----------------------------------|------------------------|----------------------------------|
| | 5/8-inch (Residential) | | 4-inch (Industrial) | | | | Service | Service Differential (% more) | Volumetric Differential (% more) | Total Revenues (\$000) | Total Operating Expenses (\$000) |
| | Charge | Allowance (in gallons) (b) | Charge | Allowance (in gallons) (b) | | | | | | | |
| Georgetown County, SC | \$16 12 | 2,500 | \$16 12 | 2,500 | \$638 | \$990 | No | - | \$7,308 | \$7,308 | |
| Alcoa TN (c) | \$15 50 | 2,000 | \$343 20 | 2,000 | \$930 | - | Retail-Wholesale | 50% | \$11,280 | n/r | |
| Michigan City, IN | \$6 45 | - | \$67 65 | - | \$1,585 | - | Retail-Wholesale | 0% | \$7,783 | \$5,372 | |
| Hardin County KY | \$5 92 | - | \$148 09 | - | \$1,150 | - | n/r | - | \$4,338 | \$2,956 | |
| Laramie WY | \$21 83 | - | \$332 41 | - | \$5,832 | - | Retail-Wholesale | 25% | n/r | n/r | |
| South Lake Tahoe CA | \$44 73 | - | \$745 46 | - | - | \$6,832 | No | - | n/r | n/r | |
| Newton IA | \$10 90 | 1,496 | \$47 38 | - | \$142 | \$429 | Retail | 25% | n/r | n/r | |
| St Cloud, FL (c) | \$13 79 | - | \$229 88 | - | \$255 | \$7,964 | Retail-Wholesale | 25% | n/r | n/r | |
| Pflugerville, TX | \$15 50 | - | \$387 50 | - | \$250 | \$4 241 | Retail-Wholesale | 0% | \$14,899 | \$9,306 | |
| Menomonee Falls, WI | \$3 84 | - | n/a | - | - | \$2 957 | Retail | 0% | \$6 919 | \$3 679 | |
| Brookfield, WI | \$4 86 | - | \$68 84 | - | - | - | Retail | 25% | \$7 834 | \$4,400 | |
| La Crescenta CA | \$25 28 | - | \$398 20 | - | - | - | Retail | 40% | n/r | n/r | |
| Louisville CO | \$18 43 | 5,000 | \$162 37 | - | \$30,500 | \$30,500 | Retail | 100% | n/r | n/r | |
| Fairbanks, AK | \$23 26 | - | \$259 60 | - | \$90 | - | Retail-Wholesale | 0% | \$8 824 | \$6,365 | |
| Bermuda Dunes CA | \$14 67 | - | \$274 49 | - | - | \$525 | n/r | - | n/r | n/r | |
| Newark, DE | \$0 00 | - | \$0 00 | - | - | - | Retail | 0% | n/r | n/r | |
| Henry County, VA (c) | \$30 00 | 4,000 | \$45 00 | 4 000 | \$1,750 | \$1 750 | Wholesale | - | \$13,376 | \$7 100 | |
| Powdersville SC | \$19 06 | 2,000 | \$118 00 | 19,000 | \$1,000 | \$1,308 | No | 0% | n/r | n/r | |
| Mundelein, IL (c) | \$27 84 | 4,488 | \$27 84 | 4,488 | \$180 | \$780 | Retail | 50% | \$9,856 | \$7 364 | |
| Corbin, KY | \$4 95 | - | \$148 50 | - | \$500 | - | Retail-Wholesale | 109% | n/r | n/r | |
| Williamsburg, VA | \$10 60 | 2,000 | \$10 60 | - | \$800 | \$5 000 | Retail | 20% | n/r | n/r | |
| Squamish, BC | n/r | - | n/r | - | - | - | n/r | - | n/r | n/r | |
| Lincoln County, TN | \$22 81 | - | \$22 81 | - | \$2,100 | \$500 | Retail | 0% | \$5,202 | \$3,313 | |
| Marshall MO | \$12 00 | - | \$45 00 | - | \$250 | \$250 | Retail-Wholesale | 0% | \$4,000 | \$1 808 | |
| Venice, FL | \$21 32 | - | \$532 98 | - | \$833 | \$833 | No | - | n/r | n/r | |
| Elk River, MN | \$8 86 | - | \$56 73 | - | \$3 528 | \$3,528 | No | - | \$2 587 | \$1,614 | |
| Milford MA | \$11 41 | - | \$113 54 | - | - | \$2,200 | Wholesale | - | \$6,612 | \$3 231 | |
| Brattleboro VT | \$11 16 | - | \$922 68 | - | \$1,000 | \$75 | Retail-Wholesale | 0% | \$2,040 | n/r | |
| Mukilteo, WA | \$27 06 | - | \$757 50 | - | - | \$5,954 | No | - | \$4,409 | \$2,738 | |
| Rio Linda, CA | \$42 33 | 2,244 | \$619 87 | 2,244 | \$13 500 | \$13 500 | No | - | \$2,616 | \$2,100 | |
| Big Bear Lake, CA | \$45 60 | 2,992 | \$292 88 | 2,992 | - | \$9 215 | Retail | 0% | \$11 652 | \$5,614 | |
| Pueblo CO | \$21 50 | - | \$367 40 | - | \$11,738 | \$36 | No | - | \$2 590 | n/r | |
| Howard, WI | \$21 76 | - | \$253 00 | - | - | \$294 | Retail | 0% | \$255 | \$3,747 | |
| Dracut MA | \$25 55 | 3,119 | \$125 65 | 3,119 | - | \$7,839 | Retail | 0% | n/r | n/r | |
| Clinton TN | \$9 30 | 1,500 | \$9 30 | - | \$450 | - | Retail | 50% | \$2 193 | \$1,941 | |
| Werton WV | \$11 76 | 1,000 | \$294 00 | 1,000 | \$350 | \$350 | Wholesale | - | \$3,827 | \$3 201 | |
| Fair Oaks Ranch, TX | \$52 49 | 6,000 | \$120 43 | 6,000 | \$400 | \$5,400 | No | - | \$3,900 | \$2,214 | |
| Wareham, MA | \$15 37 | 4,990 | \$15 37 | 4,990 | - | \$904 | Retail | 0% | \$3 896 | \$2,864 | |
| Johnson City, NY | \$13 33 | 2,491 | \$13 33 | 2,491 | - | - | Retail | 25% | n/r | n/r | |
| Franklin County NC (c) | \$30 00 | 2,000 | n/r | - | \$ 100 | \$2 250 | n/r | - | n/r | n/r | |
| Lompoc, CA | \$17 04 | - | \$125 98 | - | \$8,792 | \$3,178 | Retail | 0% | \$1,661 | \$1,325 | |
| Hickory Hills, IL (c) | \$38 10 | 4,000 | \$46 25 | 5,000 | \$1,950 | - | No | - | \$3,060 | \$3,160 | |
| Oskaloosa, IA | \$13 46 | 1,496 | \$43 46 | 1,496 | - | - | Retail | 0% | n/r | n/r | |
| Lacey WA | \$35 52 | - | n/a | - | \$730 | \$3,000 | No | - | n/r | n/r | |
| Portland, OR | \$15 76 | - | \$221 52 | - | \$3,447 | \$1 344 | No | - | \$2 955 | \$2,466 | |

| City, State ^(a) | Monthly Service/Minimum Charge | | | | Residential Connection Charge or Tap Fee | Residential System Development Charges | Outside Water | | | Income Statement (c) | |
|----------------------------|--------------------------------|----------------------------|---------------------|----------------------------|--|--|------------------|-------------------------------|----------------------------------|------------------------|----------------------------------|
| | 5/8-inch (Residential) | | 4-inch (Industrial) | | | | Service | Service Differential (% more) | Volumetric Differential (% more) | Total Revenues (\$000) | Total Operating Expenses (\$000) |
| | Charge | Allowance (in gallons) (b) | Charge | Allowance (in gallons) (b) | | | | | | | |
| Exeter, ON | \$20.23 | -- | \$77.87 | -- | \$2,500 | -- | Retail | 0% | 0% | \$3,846 | \$2,500 |
| Paulsboro, NJ | \$25.00 | 60,000 | \$100.00 | 240,000 | \$1,500 | \$1,500 | No | -- | -- | n/r | n/r |
| Lenox, MA | \$5.83 | -- | n/r | -- | -- | -- | No | -- | -- | n/r | n/r |
| Fayette, TX | \$32.00 | -- | n/a | -- | \$50 | \$2,400 | No | -- | -- | n/r | n/r |
| Beifton, SC (c) | \$11.90 | 2,000 | \$11.90 | 2,000 | \$650 | \$650 | Retail | 100% | -- | n/r | n/r |
| Scotts Valley, CA | \$34.46 | -- | \$580.20 | -- | \$21,417 | \$21,252 | Retail | 0% | 0% | \$5,422 | n/r |
| Los Gatos, Ca | \$100.00 | -- | n/a | -- | -- | -- | No | -- | -- | \$28 | \$18 |
| Running Springs, CA | \$33.30 | -- | n/a | -- | \$5,382 | \$5,382 | No | -- | -- | \$1,967 | \$1,598 |
| Arcade, NY | \$10.67 | -- | \$372.04 | -- | \$650 | -- | Retail-Wholesale | 62% | 70% | n/r | n/r |
| Auburn, NE | \$16.90 | -- | n/a | -- | \$850 | -- | Retail-Wholesale | -- | -- | n/r | n/r |
| Reese, MI | \$6.96 | -- | n/a | -- | -- | -- | No | -- | -- | \$536 | \$462 |
| Hart County, GA | \$19.00 | 1,000 | \$215.00 | -- | -- | -- | No | -- | -- | \$1,922 | \$946 |
| Tontitown, AR | \$18.80 | -- | \$1,152.90 | -- | \$950 | -- | Retail | 30% | 29% | n/r | n/r |
| Stickney Township, IL (c) | \$5.00 | -- | n/r | -- | \$1,200 | \$56 | No | -- | -- | \$543 | n/r |
| Clarksville, VA | \$30.00 | 3,000 | \$30.00 | 3,000 | \$1,000 | \$2,000 | Retail | 100% | 100% | n/r | n/r |
| Angwin, CA | \$9.00 | -- | n/r | -- | -- | -- | No | -- | -- | n/r | n/r |

- (a) The primary city served by the responding utility is listed. The name of the responding utility appears in Exhibit 1.
(b) The allowance has been converted to gallons for those utilities reporting an allowance in cubic feet (or 100 cubic feet).
(c) Income Statement data is combined water and wastewater.