BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

In the Matter of the Application of Suburban Water, Inc., d/b/a Suburban Water Company for Approval of a Purchase Water Adjustment (WPA)) Docket No. 10-SUBW-602-TAR

DIRECT TESTIMONY OF GREGORY L. WILSON

Q. PLEASE INTRODUCE YOURSELF.

A. My name is Gregory L. Wilson. My office is at 13104 S. Homestead Lane, Olathe, Kansas 66061.

Q. PLEASE SUMMARIZE YOUR EDUCATION AND WORK EXPERIENCE.

A. I am a Certified Public Accountant and owner of Twenty-First Century Management Consultants. I have a Master of Public Administration degree and a Bachelor of Science in Business and Accounting degree, both from the University of Kansas. I have 29 years of professional experience in electric and water utility administration and management consulting.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KANSAS CORPORATION COMMISSION ("KCC")?

A. Yes. I have previously testified before the KCC.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony supports Suburban Water Company's ("SWC") proposed purchase water cost adjustment ("PWA") tariff which is attached to SWC's Application in this case as Appendix A. I explain how SWC purchases approximately sixty percent (60%) of the water that it supplies to its retail and wholesale customers from the Kansas Board of Public Utilities

("BPU") and that BPU has recently announced it intends to increase the rate it charges SWC by 30% incrementally over the next five year period starting in 2010. I explain how that announcement has promoted SWC to seek approval from the KCC of a PWA. I explain the purpose of implementing a PWA. I provide examples of other regulated water utilities that have implemented PWAs and the fact that such mechanisms have been approved by other state public utility commissions. Finally, I provide support for the calculation of the amount of the PWA which is attached to the Application as Appendix B.

Q. HAS THE KCC ESTABLISHED A PWA POLICY FOR REGULATED WATER UTILITIES IN THE STATE OF KANSAS?

A. No.

Q. HAS THE KCC ESTABLISHED A GENERAL POLICY REGARDING THE USE OF A PURCHASE WATER ADJUSTMENT FOR THE RECOVERY OF COMMODITY COSTS FOR JURISDICTIONAL NATURAL GAS AND ELECTRIC UTILITIES?

A. Yes, In Docket No. 106,850-U, the KCC established the policy that allows jurisdictional natural gas and electric utilities to implement procedures to recover the increased costs of natural gas and fuel purchased by jurisdictional utilities.

Q. DID THE KCC DISCUSS THE VARIOUS ALTERNATIVES FOR PURCHASE COST ADJUSTMENT CLAUSES IN THAT DOCKET?

A. Yes. Section III, page 8 of Docket 106,850-U describes the KCC's analysis of the various cost recovery alternatives presented in the docket. Each alternative was analyzed and the reason for accepting or rejecting each alternative was discussed by the KCC.

Q. CAN YOU DISCUSS WHICH ALTERNATIVE THE KCC FINALLY APPROVED IN DOCKET NO. 106,850-U?

A. Yes. The KCC heard presentations on four alternative approaches with respect to purchase cost adjustments. In rejecting the first alternative, periodic rate hearings to adjust rates, the KCC found that significant regulatory lag would be introduced; cash requirements increased, and increased regulatory expenses ultimately paid for by the customers would be incurred. The second alternative, less informal filings to change rates, was also rejected. However, the KCC believed that some procedure for informal review by the KCC and its Staff was appropriate. The KCC did not believe that informal filings *per se* were the solution to the purchase cost adjustment problem. The third basic alternative was for the KCC to authorize the use of incentive type automatic adjustment provisions which were intended to encourage efficient operations. This alternative was rejected because of the lack of established and published efficiency standards. The final alternative, and the one the KCC accepted, was to allow for variable automatic adjustment provisions which permit the pass-through of actual costs. The KCC stated:

> With this type of clause, if operating characteristics change, the resulting changes in cost are included in the energy cost adjustment. It eliminates the need for the difficult and costly task of setting standards, and it is most effective in passing on actual cost changes (decreases, as well as increases) to the consumer.

Q. ARE YOU AWARE OF WHETHER OTHER STATE PUBLIC UTILITY COMMISSIONS HAVE APPROVED PURCHASE WATER COST ADJUSTMENTS FOR THE REGULATED WATER UTILITIES LOCATED IN THEIR STATES?

A. Yes. Attached as Exhibit GLW-1 is a list of some of the public utility commissions which allow purchase water cost adjustments. Attached as GLW-2 is the Institute of Public Utilities

Regulatory Research and Education ("IPU"), an arm of the National Association of Regulatory Commissions ("NARUC"), glossary of terms used in water utility regulations. Page 3 of the glossary includes the definition of "automatic adjustments" and states "commissions have permitted automatic adjustments for such items as ... purchased water."

Attached as Exhibits GLW-3 and GLW-4 are copies of orders recently issued by the Kentucky Public Service Commission approving a purchase water adjustment filing for a water utility that, like SWC, had just received notice from its wholesale water utility of an increase in its water rates.

Attached as GLW-5 is a document showing how the Public Service Commission of Wisconsin's web-based Purchase Water Adjustment Clause ("PWAC") application process works. It allows water utilities to seek permission to change their PWAC on-line using the Internet. Exhibit GLW-6 is a copy of a letter from the Wisconsin Commission approving a recent PWAC application filed by a water utility using the on-line application process.

Attached as Exhibit GLW-7 are reports and recommendations issued by the staff of the Public Utility Commission of Oregon recommending the Oregon Commission approve revisions to the water utility's purchase water cost adjustment clause.

Attached as Exhibit GLW-8 is a document showing water rates information for New Jersey American Water. The document explains how this water utility's purchase water cost adjustment filed with the New Jersey Board of Public Utilities ("NJBPU") allows the water utility to recover increase in rates for water received from its wholesale provider.

Attached as Exhibit GLW-9 is a press release regarding the NJBPU's approval of Middlesex Water Company's request for implementation of a purchase water adjustment clause in June 2009.

Attached as Exhibit GLW-10 is a copy of the City of Fullerton, California's automatic adjustment clause that allows the city to pass increases and decreases received from its wholesale supplier, Orange County Water District, on to its customers.

Attached as Exhibit GLW-11 is a copy of the City of Burbank, California's automatic adjustment clause (Section 7 of its tariffs).

Attached as Exhibit GLW-12 is a copy of the City of Glendale's water rate information, including an explanation of how its purchase water adjustment charge (page 4 of 5 of exhibit) allows it to recover the costs of purchasing water from the Metropolitan Water District.

Q. WHAT IS THE PURPOSE OF A PWA?

A. To compensate the utility for its varying costs of purchasing or producing water.

Q. WHY IS SWC SEEKING PERMISSION TO IMPLEMENT A PWA AT THIS POINT IN TIME?

A. SWC is a very small water utility. In 2009, it purchased 56% of its water from the BPU. This represented 20% of SWC's 2009 total O&M expenses. Purchased water, as a percentage of total water available for sale, has increased from 15% in 2002 to 56% in 2009. SWC has become increasingly more dependent on purchased water. As a result, purchase water costs have become a major cost item within their operations. SWC and BPU entered into a long-term water purchase contract in 2000. This contract allows BPU to pass on to SWC any rate increases approved by BPU. As explained in the Application, BPU has proposed wholesale water rate increases beginning July 1, 2010 and annually through January 1, 2013. Rate increases will total nearly 30%. A copy of BPU's proposed water rate increase is attached to my testimony as Exhibit GLW-13. SWC basically has two regulatory options available to it in order to recover these cost increases from its customers. It can file a rate case each year

for the next four years or, it can seek approval to implement a PWA.

Q. HOW WILL THE PROPOSED PWA TARIFF WORK?

A. As set forth in the tariff attached as Appendix A to the Application, the cost of purchased water per 1,000 gallons in SWC last rate case (base year) will be subtracted from the BPU's current cost of purchased water. This amount will be adjusted by a water loss factor and a BPU purchased water percentage. Each time BPU increases wholesale water rates, a new PWA will be calculated. BPU proposes to increase water rates on July 1, 2010, January 1, 2011, January 1, 2012, and January 1, 2013. These annual adjustments will be applied to each customer's monthly water usage billing. A separate line item will be added to monthly billings showing the PWA amount. I prepared a calculation of the first PWA, which is attached as Appendix B to the Application.

Q. HOW DOES SWC PROPOSE TO REPORT TO THE KCC THE PWA CALCULATIONS?

A. SWC will submit monthly reports to the KCC showing water sales and PWA charges. As is the case with the natural gas and electric utilities that have approved purchase cost adjustment clauses, the costs recovered through the PWA will be subject to periodic audits by the KCC Staff.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

VERIFICATION OF GREGORY L. WILSON

STATE OF KANSAS)
)ss:
COUNTY OF FRANKLIN)

Gregory L. Wilson, being first duly sworn upon his oath, deposes and says that he is a Certified Public Accountant and owner of Twenty-First Century Management Consultants; that he has read and is familiar with the foregoing direct testimony; and that the statements contained therein are true and correct.

Gregory L. Wilson

SUBSCRIBED AND SWORN to before me this 3 day of June, 2010.

NOTARY PUBLIC – State of Kansas
RONDA ROSSMAN
My Appt. Expires 5/25/2014

Notary Public

Appointment/Commission Expires:

AQUA America

Exhibit GLW-1

Commissions Which Allow Commodity Cost Adjustment Clauses

- Connecticut
- Delaware
- Florida
- Illinois
- Indiana
- Missouri
- New Jersey (PWAC and PSTAC)
- New York
- Ohio
- Pennsylvania
- Texas

RESEARCH NOTE

INSTITUTE OF PUBLIC UTILITIES REGULATORY RESEARCH AND EDUCATION ■ MICHIGAN STATE UNIVERSITY

GLOSSARY OF TERMS USED IN WATER UTILITY REGULATION[1]

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JANUARY 2010 • ipu.msu.edu

A

abandonment. Retirement of a utility plant on the books without its physical removal from its installed location. NARUC(a)

ABMs. Aggregators, brokers, and marketers.

above the line. Expenses incurred in operating a utility that are charged to the ratepayer. They are written above a line drawn on the income statement, separating them from costs paid by investors. See also **below the line.** NARUC(a)

absorption costing. See **full costing.**

accelerated depreciation. An accounting method allowing a company to write off asset more quickly in early years, with progressively smaller increments in later years. NAWC(b) The three principal methods of accelerated depreciation are sum of the year's digits, double declining balance, and units of production. AWWA(c)

access. Ability of user to enter a given network. NAWC(c)

access charge. Charge levied on interexchange carriers and local subscribers to compensate local exchange carriers for use of local exchange facilities. Funds collected from access charges are used to offset fixed (non-traffic-sensitive) costs incurred by local telephone companies. There are three major categories of access charges: special access, subscriber line charges, and switched access. NAWC(c)

account payable. A liability representing an amount owned to a creditor, usually arising from purchase of merchandise or materials and supplies. NAWC(b)

account receivable. A claim against a debtor usually arising from sales or services rendered. NAWC(b)

accounts. Accounts prescribed in the NARUC Uniform System of Accounts for Water Utilities. NARUC(b)

account water. All water for which an account exists, the water is metered, and the account is billed. This concept is preferable to "accounted-for water." See also, **authorized water uses** and **non-account water.** AWWA(e)

accrual. A recording on the books of expenses incurred or of income earned for a period, to reflect the matching of income and expenses to the fullest extent possible, independent of the dates on which cash settlements of such items are made. NAWC(b)

accrual basis. The basis of accounting under which revenues are recorded when earned and expenditures are recorded when they become liabilities for benefits received, notwithstanding that receipt of the revenue or payments of the expenditures may take place, in whole or in part, in another accounting period. See also **cash basis.** AWWA(b)

accrued depredation. The monetary difference between the original cost of an article and its remaining value. NARUC(a)

accumulated deferred income tax. Balance sheet accounts representing the net balances arising from charges to income. Deferred income taxes are those

[1] This glossary was originally published as part of *Sourcebook of Regulatory Techniques for Water Utilities,* prepared by Janice A. Beecher (NAWC, 2006).

reductions in income taxes resulting from the use of deductions which will not be fully reflected in the determination of book net income until subsequent periods. Most commonly, they arise from accelerated depreciation for tax purposes instead of straight-line or other non-liberalized depreciation methods used for book purposes (i. e., normalization for ratemaking purposes). Accumulated deferred income taxes are those deferred income taxes that accumulate period to period from these postponements. NAWC(b)

accumulated deferred investment tax credit. The net unamortized balance of investment tax credits spread over the average useful life of the related property, or some other shorter period. This balance sheet account is built up by charges against income in the years in which such credits are realized and is reduced subsequently through credits to income. NAWC(b)

accumulated depreciation. See **depreciation reserve.** NAWC(b)

acquisition adjustment. The difference between the price paid to acquire a facility or a system and the depreciated original cost of the facility or system. Contributions included in the transfer will affect the recorded adjustment. See also **plant acquisition adjustment.** DHS

actually issued. As applied to securities issued or assumed by the utility, those which have been sold to bona fide purchasers for a valuable consideration, those issued as dividends on stock, and those which have been issued in accordance with contractual requirements direct to trustees of sinking funds. NARUC(b)

actually outstanding. As applied to securities issued or assumed by the utility, means those that have been actually issued and are neither retired nor held by or for the utility provided, however, that securities held by trustees shall be considered as actually outstanding. NARUC(b)

advocate, consumer. A state-appointed office that represents consumer interests (usually residential interests) in public utility and related judicial proceedings.

ad valorem tax. A state or local tax based on the assessed value of the real or personal property. AWWA(b)

advance for construction. Advance made by or on behalf of customers or others for the purpose of construction, which is to be refunded either wholly or in part. When applicants are refunded the entire amount to which they are entitled according to the agreement or rule under which the advance was made, the balance, if any, remaining in this account shall be credited to contribution in aid of construction AWWA(b)

aggregation. Consolidation of the demand needs of a group of customers in order to exercise purchasing power on utility markets. NAWC(c)

aggregators. For electricity, brokers for sales of bulk power from generators to a group of electricity customers. NAWC(c)

allowance for funds used during construction (AFUDC). A percentage amount added to **construction work in progress (CWIP)** to compensate the utility for funds used to finance new plant under construction prior to its inclusion in rate base. NARUC(a) NAWC(b)

amortization. The gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. NARUC(b)

ancillary charge. A separate charge for an ancillary service that is not included in costs for general water service. These ancillary services often must be performed by the utility and benefit only the individual customer using them and have no system-wide benefit. AWWA(b)

annualization. The process of adjusting a utility company's annual historical information to reflect a full 12-month period for known changes reasonably expected to continue into the future. Annualization adjustments are routinely made in the development of a utility company's total cost of service. NAWC(a)

annual report to shareholders. A report for stockholders and other interested parties prepared once a year, includes a balance sheet, an income statement, a statement of cash flows, a reconciliation of changes in owners' equity accounts, a summary of significant accounting principles, other explanatory notes, the auditor's report, and perhaps comments from management about the year's events. NAWC(b)

assets. Items of value owned by or owed to a business. Represents either a property right or value acquired, or an expenditure made which has created a property right or is properly applicable to the future. NAWC(b)

associated companies. Companies or persons that, directly or indirectly, through one or more intermediaries, control, are controlled by, or are under common control with, the accounting company. NARUC(b)

attributable costing. A cost accounting method in which the cost of providing any service is the costs that could be escaped over time if that service were eliminated and capacity was adjusted accordingly. The assignment of some indirect fixed overhead is required to implement this costing method and it is a longer-run concept than direct costing.

audit, financial. A methodical examination and review of a utility company's books with Intent to verily the appropriateness of the company's revenues and expenses.

audit, water. A thorough accounting of all water into and out of a utility as well as an in-depth record and field examination of the distribution system that carries the water, with the intent to determine the operational efficiency of the system and identify sources of water loss and revenue loss. AWWA(e)

authorized water uses. All water uses known and approved or authorized by the utility. These uses include all metered uses and reliable estimates of all other approved uses such as public, fire, system, operation, and paid-for uses. AWWA(e)

automatic adjustment clause. Allows a utility to increase or decrease its rates to cover costs of specific items without a formal hearing before a commission. The utility can automatically change its rates only when the price it pays for those specified items goes up or down. Fuel adjustment clauses are an example. NARUC(a)

automatic adjustments. Rate adjustments allowed automatically without a formal rate proceeding but subject to a reconciliation proceeding. Commissions have permitted automatic adjustments for such items as purchased power, purchased water, taxes, and SDWA-compliance related laboratory expenses. Also known as pass throughs.

availability charge. A limited-use dedicated-capacity charge made by a water utility to a property owner between the time when water service is made available to the property and the time when the property connects to the utility's facilities and starts using the service. See also **demand-contract charge**. AWWA(b)

average-and-excess method. A method for allocating demand costs by which total demand costs are multiplied by the stern's load factor to arrive at a cost and can be attributed to average use and allocated to each customer class in pro portion to their annual consumption. The remaining costs are generally allocated to each class on the basis of the noncoincident-demand method. See also **base-extra capacity method** and **commodity-demand method**. NRRI

average demand. The demand on, or output of, a utility system over any interval of time. NARUC(a)

average incremental cost. For a specified time period, the addition to total cost resulting from an increase in capacity divided by the incremental output provided. See also **incremental cost** and **marginal cost**. NRRI

average load. The total production for the period divided by the hours in the period. DM5

average service life. Used in determining depreciation, the average expected life of all the units in a group of assets. NARUC(a)

average variable pricing. A pricing structure in which the price per unit varies according to actual expenditures during the billing period. It does not affect use and should be used only where costs vary significantly between billing periods. AWWA(d)

avoided cost. The cost an electric utility would otherwise incur to generate power if it did not purchase electricity from another source. Also the basis of the rate that must be paid to qualifying facilities (QFs) for purchased power under PURPA. NAWC(c)

B

balance sheet. Statement of financial position that shows total assets equaling total liabilities plus owners' equity. NAWC(b)

base costs. Costs that tend to vary with the total quantity of water used plus those operation and maintenance expenses and capital costs associated with service to customers under average load conditions, without the elements of cost incurred to meet water use variations and resulting peaks in demand. AWWA(a)

base-extra capacity method. An average-and-excess method by which costs of service are separated into four primary cost components: (1) base costs, (2) extra

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

PURCHASED WATER ADJUSTMENT FILING OF CHRISTIAN COUNTY WATER DISTRICT	)))	CASE NO. 2010-00114

O R D E R

On March 15, 2010, Christian County Water District ("Christian County") applied for approval to adjust its rates pursuant to the purchased water adjustment procedure.[1]

The Commission, having reviewed the record and being sufficiently advised, finds that:

1. Christian County purchases water from Hopkinsville Water Environment Authority ("Hopkinsville") and Lake Barkley Water District.

2. On September 3, 2009, Hopkinsville notified the Commission in writing of its intent to increase its wholesale water service rate to Christian County effective October 5, 2009. Finding further investigation of the proposed adjustment was necessary, the Commission suspended the proposed adjustment until March 5, 2010 and initiated an investigation into the reasonableness of the proposed rate.[2]

3. On February 25, 2010, Hopkinsville notified the Commission and Christian County of its intent to place the proposed wholesale rates into effect on March 5, 2010.

4. Hopkinsville's proposed adjustment is reflected in Table 1 below.

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[1] KRS 278.015; 807 KAR 5:068.

[2] Case No. 2009-00373, Proposed Adjustment of the Wholesale Rates of Hopkinsville Environmental Water Authority (Ky. PSC Sep. 28, 2009).

TABLE 1		
	Existing Rate	**Adjusted Rate**
First 3,000 cubic feet	$2.89 per 100 cubic foot	$2.96 per 100 cubic foot
Next 3,000 cubic feet	$2.53 per 100 cubic foot	$2.59 per 100 cubit foot
Over 6,000 cubic feet	$1.83 per 100 cubic foot	$1.88 per 100 cubic foot

5. On March 4, 2010, Christian County's Board of Commissioners voted to adjust Christian County's rates for water service to reflect the increased cost of purchased water and to make the adjustment effectively immediately.

6. During the 12 months ending January 31, 2010, Christian County purchased a total of 393,287,883 gallons of water from Hopkinsville and sold 370,399,999 gallons. The increase in the cost of purchased water is $27,517.89, resulting in a purchased water adjustment of $0.08 per 1,000 gallons.

7. When calculating the purchased water adjustment, Christian County overstated the level of water purchases for the 12-month period ending January 31, 2010. This overstatement resulted in an incorrect calculation of purchased water costs.

8. The correct calculation of the purchased water adjustment is reflected in Appendix A.

9. A purchased water adjustment of $0.08 per 1,000 gallons is fair, just, and reasonable and should be approved.

IT IS THEREFORE ORDERED that:

1. Christian County's proposed rates are denied.

2. The purchased water adjustment of $0.08 per 1,000 gallons as calculated in Appendix A is approved.

3. The rates in Appendix B are approved for water service that Christian County renders on and after March 5, 2010.

4. Within 20 days of the date of this Order, Christian County shall file revised tariff sheets with the Commission reflecting the rates set forth in Appendix B.[3]

By the Commission

ENTERED
APR 13 2010
KENTUCKY PUBLIC
SERVICE COMMISSION

ATTEST:

Executive Director

[3] Christian County has proposed that the adjustment be subject to refund. We find that such action is unnecessary. Should the Commission approve a wholesale rate for Hopkinsville that is lower than its proposed wholesale rate, KRS 278.190 authorizes the Commission to require Hopkinsville to refund to Christian County any amounts collected in excess of the rate found reasonable. Furthermore, 807 KAR 5:068, Section 2(4), provides a mechanism for passing such refund on to Christian County's customers.

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2010-00114 DATED APR 13 2010

	New Rate	Base Rate
Christian County Water		
Purchases in gallons	393,287,883	393,287,883
Volumetric rate	$2.89 0-3000 CF	$2.96 0-3000 CF
	$2.53 3001-6000 CF	$2.59 3001-6000 CF
	$1.83 Over 6001 CF	$1.88 Over 6001 CF

Increased water cost $27,517.89

Increased water cost	$ 27,517.89
Divided by gallons sold	370,399,999
Purchased water adjustment factor	$0.08 per 1,000 gallons

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2010-00114 DATED APR 13 2010

The following rates and charges are prescribed for the customers in the area served by Christian County Water District. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of the Commission prior to the effective date of this Order.

Monthly Water Rates

5/8" X ¾" Meter			
First	0 gallons	$ 16.08	Minimum Bill
Over	0 gallons	5.73	per 1,000 gallons
1" Meter			
First	5,000 gallons	$ 44.65	Minimum Bill
Over	5,000 gallons	5.73	per 1,000 gallons
1 1/2" Meter			
First	10,000 gallons	$ 73.30	Minimum Bill
Over	10,000 gallons	5.73	per 1,000 gallons
2" Meter			
First	50,000 gallons	$ 302.50	Minimum Bill
Over	50,000 gallons	5.73	per 1,000 gallons
4" Meter			
First	100,000 gallons	$ 589.00	Minimum Bill
Over	100,000 gallons	5.73	per 1,000 gallons

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

PURCHASED WATER ADJUSTMENT FILING OF FARMDALE WATER DISTRICT	)))	CASE NO. 2009-00220

O R D E R

On June 16, 2009, Farmdale Water District ("Farmdale") applied for approval to adjust its rates pursuant to the purchased water adjustment procedure.[1] On June 26, 2009, the Commission notified Farmdale that it would also consider Farmdale's authorization to make adjustments in the amounts charged to Farmdale's customers as a result of Farmdale's receipt of a refund from the Frankfort Electric and Water Plant Board ("Plant Board") and based on 807 KAR 5:068, Section 2(4).

KRS 278.015 permits a water district "to increase its rates commensurate with the wholesale supplier." After a water district files the appropriate documents with the Commission, we must "approve the filing or establish revised rates by order no later than thirty (30) days" pursuant to that statute. This Order shall serve to establish revised rates based on the purchased water adjustment, but additional information is necessary in order to calculate the refund owed to Farmdale's customers. An Order authorizing Farmdale's refund to its customers based on 807 KAR 5:068, Section 2(4), shall be issued at a later date.

[1] KRS 278.015; 807 KAR 5:068.

The Commission, having reviewed the record and being sufficiently advised, finds that:

1. Farmdale purchases water from the Plant Board.

2. The Plant Board reduced its wholesale rate to Farmdale per Commission Order in Case No. 2009-00250,[2] effective April 6, 2009, from $1.822 per 1,000 gallons to $1.704 per 1,000 gallons.

3. Farmdale proposed a purchased water adjustment factor of $0.26 per 1,000 gallons. Farmdale failed to follow the method for calculating a purchased water adjustment factor as set out in 807 KAR 5:068.

4. The base rate, as defined by 807 KAR 5:068, Section 1, to be used in this case shall be $1.822 per 1,000 gallons. The changed rate to be used in this case shall be $1.704 per 1,000 gallons.

5. During the 12 months ended April 30, 2009, Farmdale purchased 219,954,000 gallons of water from Frankfort, and it sold 176,430,000 gallons. The decrease in the cost of purchased water is $25,954.57, resulting in a purchased water adjustment factor of $-0.15 per 1,000 gallons.

6. The purchased water adjustment factor of $-0.15 per 1,000 gallons is fair, just, and reasonable and should be approved.

7. Farmdale proposed an effective date of June 1, 2009.

8. The Plant Board refunded $5,806.12 to Farmdale for charges as a result of the Plant Board placing its proposed rates into effect prior to resolution of the case

[2] Case No. 2008-00250, *Proposed Adjustment of the Wholesale Water Service Rates of Frankfort Electric and Water Plant Board* (Ky. PSC Apr. 6, 2009).

pursuant to KRS 278.190, but additional information is needed to calculate the accurate refund factor used by Farmdale.

9. Farmdale has stated that it refunded customers $0.10 per 1,000 gallons on bills sent out in May 2009 and will refund customers an additional $0.10 per 1,000 gallons on bills to be sent out in July 2009.

10. Farmdale has not yet received Commission authority to make adjustments to its customers' bills under 807 KAR 5:068, Section 2(4).

IT IS HEREBY ORDERED that:

1. The rates proposed by Farmdale are denied.

2. The purchased water adjustment factor of $-0.15 per 1,000 gallons, as calculated in Appendix A, is approved.

3. The rates in Appendix B, attached hereto and incorporated herein, are fair, just, and reasonable and are approved for services on or after June 1, 2009.

4. Within 20 days of the date of this Order, Farmdale shall file with the Commission revised tariff sheets showing the rates approved herein.

5. Farmdale shall not make any further adjustments or refunds to its customers' bills until it has received authority by future Order of this Commission.

By the Commission

ENTERED
JUL 15 2009
KENTUCKY PUBLIC
SERVICE COMMISSION

ATTEST:

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2009-00220 DATED JUL 15 2009

	Changed Rate	Base Rate
Frankfort		
Purchases in gallons	219,954,000	219,954,000
Volumetric rate	$ 1.704 /1,000	$ 1.822/1,000
	$374,801.62	$400,756.19

Decreased water cost $ 25,954.57

Decreased water cost	$25,954.57
Divided by gallons sold	176,430,000
Purchased water adjustment factor	$-0.15 per 1,000 gallons

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2009-00220 DATED JUL 15 2009

The following rates and charges are prescribed for the customers in the area served by Farmdale Water District. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of the Commission prior to the effective date of this Order.

Monthly Water Rates

Residential and Commercial Consumers			
5/8" Meter			
First	2,000 gallons	$9.00	Minimum Bill
Next	3,000 gallons	3.00	per 1,000 gallons
Next	5,000 gallons	2.50	per 1,000 gallons
Over	10,000 gallons	2.30	per 1,000 gallons
1" Meter			
First	7,000 gallons	$23.00	Minimum Bill
Next	3,000 gallons	2.50	per 1,000 gallons
Next	140,000 gallons	2.30	per 1,000 gallons
Over	150,000 gallons	2.05	per 1,000 gallons
Commercial Consumers (Stewart Home)			
First	7,000 gallons	$23.00	Minimum Bill
Next	3,000 gallons	2.50	per 1,000 gallons
Next	140,000 gallons	2.30	per 1,000 gallons
Over	150,000 gallons	2.05	per 1,000 gallons
Industrial Consumers/Trailer Parks			
First	7,000 gallons	$23.00	Minimum Bill
Next	3,000 gallons	2.50	per 1,000 gallons
Next	140,000 gallons	2.30	per 1,000 gallons
Over	150,000 gallons	2.05	per 1,000 gallons

Exhibit GLW-5

Public Service Commission of Wisconsin

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PSC Home

Electricity Natural Gas Telecom Water Consumers

About Us Library In the News Initiatives & Reports File With Us

PWAC - Purchased Water Adjustment Clause Application

3029W (4/15/01)

(Filling this form out is in accordance with s. 196.26(1) Wis. Stats.)
Personally identifiable information collected will not be used for any other purpose.

Our web-based Purchased Water Adjustment Clause application offers you the ability to file for a water adjustment based on a rate increase from your wholesale supplier. This application is designed to provide you with a flexible method for submitting PWAC information in an efficient and timely manner.

Items to note:

- A utility must request the Public Service Commission of Wisconsin (PSCW) to authorize a PWAC change within 90 days of a change in its wholesale supplier's rates or forfeit all adjustments to its rates under the PWAC until the time of its next rate case.
- You will not be able to use this program if you purchase water from two or more wholesalers.
- **You have 14 days to complete this application. After 14 calendar days, your application may be deleted.**
- When providing information, remember to check the accuracy of your information.
- If you need to supply additional information, you can fax the materials to "Attention PSCW Water Staff" at (608) 266-3957.

To begin the PWAC application process logon to our system by entering your email address.

Email Address:

Continue

If you have any questions about the content of the application, please contact David Prochaska by e-mail at David.Prochaska@wisconsin.gov or by phone at (608) 266-5739.

Public Service Commission of Wisconsin

Eric Callisto, Chairperson
Mark Meyer, Commissioner
Lauren Azar, Commissioner

610 North Whitney Way
P.O. Box 7854
Madison, WI 53707-7854

January 14, 2010

Ms. Sandy Wilke, Clerk-Treasurer
Village of Maple Bluff Municipal Water Utility
18 Oxford Place
Madison, WI 53704

Re: Purchased Water Adjustment Clause (PWAC) 3340-AN-21

Dear Ms. Wilke:

Thank you for the request on your behalf dated January 11, 2010, for a PWAC rate change effective January 18, 2010.

We have made the new rates in Schedules Fd-1 and Mg-1 effective for service rendered on and after January 18, 2010, as requested. The new rates have been placed on file as Amendment 21. A copy is enclosed for your records.

The utility is required to notify each customer of this change in rates in accordance with Wis. Admin. Code § PSC 185.33(1)(f).

The utility's current rates and rules must be available for public inspection and review at the utility's office(s) and all bill payment stations pursuant to Wis. Admin. Code § PSC 185.22.

The utility should mark the old rates and rules as superseded and keep them in a separate file. Pursuant to Wis. Admin. Code § PSC 185.19, the utility must keep a file of its previous rates and rules permanently.

If you have any questions, please e-mail me at David.Prochaska@wisconsin.gov or call me at (608) 266-5739.

Sincerely,

David L. Prochaska

David L. Prochaska
Public Utility Rate Analyst
Division of Water, Compliance and Consumer Affairs

DLP:pr:w:\tariff\3340-AN-21 PWAC

Enclosures

RATE FILE

Sheet No. 1 of 1
Schedule No. Fd-1
Amendment No. 21

Public Service Commission of Wisconsin

Village of Maple Bluff Municipal Water Utility

Public Fire Protection Service

Under Wis. Stat. § 196.03(3)(b), the Village of Maple Bluff has chosen to have the utility bill the retail general service customers for public fire protection service.

This service shall include the use of hydrants for fire protection service only and such quantities of water as may be demanded for the purpose of extinguishing fires within the service area. This service shall also include water used for testing equipment and training personnel. For all other purposes, the metered or other rates set forth, or as may be filed with the Public Service Commission, shall apply.

Semiannual Public Fire Protection Service Charges:

⅝ -inch meter - $	75.71	3 -inch meter - $	1,132.66
¾ -inch meter - $	75.71	4 -inch meter - $	1,887.38
1 -inch meter - $	189.54	6 -inch meter - $	3,774.73
1¼ -inch meter - $	279.75	8 -inch meter - $	6,040.01
1½ -inch meter - $	377.95	10 -inch meter - $	9,060.02
2 -inch meter - $	604.02	12 -inch meter - $	12,080.00

Customers who are provided service under Schedules Mg-1, Ug-1, Mgt-1, or Mz-1, shall also be subject to the charges in this schedule.

Billing: Same as Schedule Mg-1.

RATE FILE

Sheet No. 1 of 1
Schedule No. Mg-1
Amendment No. 21

Public Service Commission of Wisconsin

Village of Maple Bluff Municipal Water Utility

General Service - Metered

Semiannual Service Charges:

⅝ -inch meter - $	34.09	3 -inch meter - $	247.92
¾ -inch meter - $	34.09	4 -inch meter - $	309.90
1 -inch meter - $	68.19	6 -inch meter - $	433.86
1¼ -inch meter - $	92.98	8 -inch meter - $	588.81
1½ -inch meter - $	123.96	10 -inch meter - $	774.75
2 -inch meter - $	185.95	12 -inch meter - $	960.68

Plus Volume Charges:

First 50,000 cubic feet used semiannually - $3.11 per 100 cubic feet
Over 50,000 cubic feet used semiannually - $2.95 per 100 cubic feet

Billing: Bills for water service are rendered semiannually and become due and payable upon issuance following the period for which service is rendered. A late payment charge of 1 percent per month will be added to bills not paid within 20 days of issuance. This late payment charge will be applied to the total unpaid balance for utility service, including unpaid late payment charges. This late payment charge is applicable to all customers. The utility customer may be given a written notice that the bill is overdue no sooner than 20 days after the bill is issued. Unless payment or satisfactory arrangement for payment is made within the next 10 days, service may be disconnected pursuant to Wis. Admin. Code ch. PSC 185.

Combined Metering: Volumetric meter readings will be combined for billing if the utility for its own convenience places more than one meter on a single water service lateral. Multiple meters placed for the purpose of identifying water not discharged into the sanitary sewer are not considered for utility convenience and shall not be combined for billing. This requirement does not preclude the utility from combining readings where metering configurations support such an approach. Meter readings from individually metered separate service laterals shall not be combined for billing purposes.

ITEM NO. CA14

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: April 21, 2009

REGULAR ____ **CONSENT** X **EFFECTIVE DATE** **May 1, 2009**

DATE: April 8, 2009

TO: Public Utility Commission

FROM: Renee Sloan

THROUGH: Lee Sparling, Marc Hellman, and Michael Dougherty

SUBJECT: WILLAMETTE WATER COMPANY: (Advice No. 09-12) Revises Schedule No. 7, Purchased Water Cost Adjustment.

STAFF RECOMMENDATION:

Pursuant to ORS 757.210 and ORS 757.220, Staff recommends the Commission approve Willamette Water Company's (WWC or Company) proposed revisions to Schedule No. 7, Purchased Water Cost Adjustment, effective May 1, 2009.

DISCUSSION:

History
At its June 19, 2008, public meeting, the Commission approved Advice No. 08-29, an Automatic Adjustment Clause (AAC)[1] tariff for water WWC purchases from the Eugene Water and Electric Board (EWEB).

As approved in Advice No. 08-29, the Company's Schedule No. 7 defines procedures for periodic rate revision due to changes in the Company's purchased water cost (reflected in the previous year's May to April EWEB invoices), to describe how a rate change for purchased water cost is calculated, and to identify any other requirements. The purchased water cost adjustment applies to Schedules 1, 2, 3, 4, and 5 contained in the Company's tariffs.

Charges under the applicable schedules are subject to increases that may be made without prior hearing to reflect the changes in the Company's purchased water costs

[1] Schedule No. 7 is an AAC as defined in ORS 757.210(b).

resulting from adjustments in the rate EWEB charges to WWC. Per Schedule No. 7, WWC may file purchased water cost adjustments annually to be effective upon the date EWEB implements rate changes.

Current Filing
On March 17, 2009, EWEB's commissioners approved an 18.3 percent increase in rates for water purchased by WWC. The new rates will go into effect May 1, 2009.

Subsequently, on April 6, 2009, WWC filed Advice No. 09-12 to revise the adjustment rates in Schedule No. 7. The Company requested a May 1, 2009, effective date to coincide with the date of EWEB's rate increase. Because WWC's requested effective date is less than 30 days from the tariff filing date, the Company also filed the required LSN Form.

Staff and the Company worked together to determine the 2009 rate using the steps outlined in Schedule No. 7 and agree that the adjustment rate should be $0.597. Adding $0.597 to the tariffed variable rate of $1.80 per 100 cubic feet results in an adjusted variable rate of $2.397.[2]

In addition to the proposed adjustment rates, the Company proposes two housekeeping changes to Schedule No. 7, Sheet No. 10A. The first proposed revision replaces the word "power" with the word "water" in paragraph two, relating to Purpose. The other revision removes the word "the" from the title just above Year 1.[3] Staff agrees with the proposed housekeeping changes.

Advice No. 09-12 is filed in compliance with Order No. 08-256 and meets the conditions approved by the Commission in Advice No. 08-29.

PROPOSED COMMISSION MOTION:

Pursuant to ORS 757.210 and ORS 757.220 Willamette Water Company's proposed revisions to Schedule No. 7 be approved with an effective date of May 1, 2009.

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[2] The 2008 adjusted variable rate was $2.052.
[3] Description of Purchased Water Cost Adjustment Calculation for ~~the~~ Year 1 (May 2008 through April 2009).

ITEM NO. 4

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: June 10, 2008

REGULAR X **CONSENT** ____ **EFFECTIVE DATE** June 19, 2008

DATE: June 3, 2008

TO: Public Utility Commission

FROM: Michael Dougherty

THROUGH: Lee Sparling and Marc Hellman

SUBJECT: WILLAMETTE WATER COMPANY: (Advice No. 08-29) Requests approval of an Automatic Adjustment Clause for purchased water from the Eugene Water and Electric Board.

STAFF RECOMMENDATION:

Pursuant to ORS 757.210, ORS 757.220, and Commission Order No. 08-256 (UW 125), Staff recommends that the Commission approve Willamette Water Company's (WWC or Company) request for an Automatic Adjustment Clause (AAC) for purchased water from the Eugene Water and Electric Board (EWEB) subject to the following conditions:

1. WWC shall file with the Commission proposed tariffs and information concerning subsequent EWEB increases within 30 days of applicable purchased water increase decisions by EWEB, to be effective no less than 30 days after the filing date.

2. Pursuant to Commission Order No. 08-256 (UW 125), if the Company has not made a general rate filing by January 1, 2014, the Company agrees to file rates, should Staff so request, to be effective with the effective date of the next automatic tariff change, that move one-third toward full AWWA-factor based rates.

3. Pursuant to Commission Order No. 08-256 (UW 125), approval of the AAC does not relieve the Company from its obligation to pursue lower cost water supplies.

DISCUSSION:

Background

WWC is located in Goshen, Oregon, and provides water service to approximately 54 commercial customers, 9 industrial customers, 9 fire protection customers, and about 100 residential customers. The Company purchases all its water from EWEB.

On December 19, 2007, the Company filed a rate case application with the Commission (UW 125/Advice 07-35). A major cost factor behind the Company's rate application was the steadily increasing cost of purchased water, which comprises over 32 percent of Willamette's total operating expense. EWEB has raised the rate for Willamette's purchased water by nearly 27 percent since 2002.

In addition, Staff was informed by EWEB personnel that EWEB's Board proposed to implement an additional 17.5 percent increase to Willamette's cost of wholesale water in May 2008. That rate hike would increase Willamette's cost of purchased water by almost 44 percent since the Commission approved the Company's previous rates in 2002.

On May 15, 2008, the Commission issued Order No. 08-256 (UW 125) that approved a stipulation between the active Parties of WWC's rate case application (Staff, WWC, and the Goshen Fire District). The Stipulation resulted in revenue requirement of $209,047, a 17.7 percent increase in the Company's total revenues.

The approved revenue requirement did not include EWEB's May 1, 2008, increase in purchased water rates. The Parties agreed that Willamette should file a tariff with the Commission requesting an automatic adjustment clause to incorporate EWEB's 2008 rate increase into its rates. The automatic adjustment clause also is intended to capture subsequent EWEB increases (approximately 10 years) until the next general rate case. This filing complies with the Commission order.

The Automatic Adjustment Clause

The proposed tariff, Schedule No. 7, is an AAC as defined in ORS 757.210(b). The purpose of the tariff is to define procedures for periodic revision in rates due to changes in the Company's purchased water cost (that reflect the previous year's May to April EWEB invoices), to describe how a rate change for purchased power cost is calculated, and to identify any other requirements. The purchased water cost adjustment applies to the following schedules contained in the Company's tariffs: Schedules 1, 2, 3, 4, and 5.

Charges under the applicable schedules are subject to increases that may be made without prior hearing to reflect the changes in the Company's purchased water costs resulting from adjustments in the rate charged to the Company by EWEB. The Company may file purchased water cost adjustments annually to be effective upon the date EWEB implements rate changes.

Staff and the Company worked together to develop a fair method of implementing the AAC that considers increased costs and consumption. The following demonstrates the 2008 adjustment.

1. The 2007 purchased water cost approved in UW 125 multiplied by EWEB's quoted 17.5 percent May 1, 2008, rate increase determines the anticipated cost.

2007 Cost	2008 EWEB Increase	Anticipated 2008 Cost
$65,332	17.50%	$76,765

2. Adjust 2007 base year cost for consumption by multiplying 2007 base year cost to projected consumption and dividing result by 2007 base year consumption.

2007 Base Year Cost	2008 Projected Consumption	2007 Base Year Consumption	Adjusted 2007 Base Year Cost
$65,332	4,556,676 cf	4,559,500 cf	$65,292

3. Subtract the 2007 adjusted base year cost from the 2008 anticipated water cost.

Anticipated 2008 Cost	Adjusted 2007 Cost	2008 Increase
$76,765	$65,292	$11,474

4. The 2008 increase based on EWEB's increase is divided by the Company's projected 2008 consumption. This is the Adjustment Rate.

2008 Increase	2008 Projected Consumption	2008 Increase per 100 cf
$11,474	4,556,676 cf	$0.252

5. Add the UW 127 Commodity Rate ($1.80) and the 2008 Adjustment Rate.

UW 127 Commodity Rate	2008 Increase per 100 cf	2008 Adjusted Rate
$1.80	$0.252	$2.052

The adjustment rate in 2008 for Schedules 1, 2, 3, 4, and 5 is $0.252.

PROPOSED COMMISSION MOTION:

Pursuant to ORS 757.210, ORS 757.220, and Commission Order No. 08-256 (UW 125), Willamette Water Company's request for an Automatic Adjustment Clause for purchased water from the Eugene Water and Electric Board be approved with an effective date of June 19, 2008, subject to the recommended conditions.

Exhibit GLW-8

Water Rate Information

Effective August 19, 2009, the New Jersey Board of Public Utilities approved a change in New Jersey American Water's purchased water and purchased sewer treatment adjustment clause charges.

Purchased Water Adjustment Clause (PWAC)

New Jersey American Water purchases water from a number of water service providers to supplement its own surface water and groundwater supplies. While we take steps to minimize the amount of water we purchase, these supplies are critical to providing a reliable source of water supply for our customers. The PWAC is considered a direct pass-through charge, which enables the company to recover the costs related to purchasing water from other water suppliers to supplement our own ground and surface water supplies.

The rates we are charged by other water service providers increase periodically to reflect their increased costs to produce and/or deliver the water they sell to us. However, please be aware that the company challenges all increases, attends public hearings and submits numerous interrogatories requesting support for such increased costs. As a result, the PWAC is reset on an annual basis and is adjusted to reflect current costs. Because we are a regulated water utility, we filed with the New Jersey Board of Public Utilities (NJBPU) to increase the PWAC to recover our costs on April 7, 2009. The NJBPU, after a thorough review made its determination and, effective August 19, New Jersey American Water's PWAC will increase from $0.3675 to $0.4078 to per thousand gallons – or approximately $0.28 per month for the average residential customer using 7,000 gallons per month. The total PWAC is reflected in a separate charge on your water bill, called "PWAC."

Purchased Sewerage Treatment Adjustment Clause (PSTAC)

New Jersey American Water provides sewer (wastewater) services in Ocean City, the Adelphia section of Howell Township and Lakewood Township. Like the PWAC, the PSTAC is a pass-through charge for sewage treatment costs. The PSTAC reflects the costs that the company pays to regional wastewater treatment authorities for treating wastewater in areas where we operate and maintain the sewer pipelines or collection system. Each year, the PSTAC is reset and may increase or decrease depending on different factors, including amount of wastewater sent to the sewage treatment plants and the authorities' costs associated with treating the sewage. The NJBPU approved the following changes to the PSTAC, effective August 19,2009, for the PSTAC year April 1, 2009 through March 31, 2010:

- **Lakewood Township**: Effective August 19, the PSTAC will increase from $3.4037 to $4.5813 per thousand gallons, which results in an increase of $7.07 per month for the average residential customer.
- **Ocean City**: Effective August 19, the PSTAC will increase from $19.3047 to $21.0781 per thousand gallons, which results in an increase of $2.96 per month for the average residential customer.
- **Adelphia section of Howell Township**: Effective August 19, the PSTAC will decrease from $4.8398 to $4.4661 per thousand gallons, which results in a decrease of $1.50 per month for the average residential customer.

The fiscal year for the PWAC and PSTAC runs from April 1 through March 31. Depending on when the company files for the rate change and when the adjusted rates are approved by the NJBPU, the recovery of any increases or decreases in the PWAC and/or PSTAC costs may need to be compressed into the remaining months of the PWAC or PSTAC fiscal year. For example, in April 2009, New Jersey American Water filed its request with the NJBPU for the changes in PWAC and PSTAC, to be effective April 1, 2009 through March 31, 2010. The new rates were approved by the NJBPU effective August 19, 2009. That means the company has not been recovering the increase in costs associated with the PWAC and PSTAC from April 1 through August 18, 2009. As a result, the total increase in costs for the entire fiscal year must be recovered between August 19, 2009 and March 31, 2010.

Prior to this, the last time the NJBPU approved a change in the company's PWAC and PSTAC was October 23, 2008. For Lakewood sewer service customers, the PSTAC changes last occurred on March 30, 2007.

Exhibit GLW-9

SOURCE: Middlesex Water Company

Jun 18, 2009 11:42 ET

Middlesex Water Company Receives Approval to Implement Purchased Water Adjustment Clause

ISELIN, NJ--(Marketwire - June 18, 2009) - Middlesex Water Company (NASDAQ: MSEX) has received approval to implement a Purchased Water Adjustment Clause (PWAC), effective July 1, 2009. The PWAC is a pass-through charge, which enables the company to recover the increased unit cost of raw or finished water purchased from external sources.

Middlesex Water filed an application with the New Jersey Board of Public Utilities (BPU) on January 12, 2009, seeking permission to establish a PWAC and implement a tariff rate sufficient to recover increased costs of $0.9 million to purchase untreated water from the New Jersey Water Supply Authority and treated water from a non-affiliated regulated water utility. The Company supplements its groundwater supplies with purchased surface water. Middlesex Water will bill general water service customers a PWAC rate of $0.6675 per thousand cubic feet of metered water to recover the increased purchased water costs.

About Middlesex Water Company

Middlesex Water Company, organized in 1897, provides regulated and unregulated water and wastewater utility services in New Jersey and Delaware through various subsidiary companies. For additional information regarding Middlesex Water Company, visit the Company's web site at http://www.middlesexwater.com/ or call (732) 634-1500.

Contact:
Bernadette Sohler
Vice President - Corporate Affairs
Middlesex Water Company
(732) 638-7549
bsohler@middlesexwater.com

CITY OF FULLERTON
Water Utility
303 West Commonwealth Avenue
Fullerton, California 92832

Issued By:
Engineering Department
Water System Management Division

SCHEDULE W-CA

COMMODITY ADJUSTMENT CLAUSE

A. APPLICABILITY

Applicable to all areas served by the Utility and to all rate schedule commodity charges.

B. PURPOSE

1. To provide for the automatic adjustment of the Utility's water rate schedule commodity charges per 1,000 gallons whenever the cost per acre foot (A.F.) of water is increased or decreased with respect to the base year due to changes in the Orange County Water District (OCWD) pump tax, the Metropolitan Water District of Southern California (MWD) acre foot charge for water, the cost of electricity associated with water pumping, and the annual water system losses. The base year is defined as the fiscal year when the most recent general water rate covers water utility operating expenses, capital improvement projects, and reserve levels.

2. To establish the method for determining the cost of water paid by the Utility per acre-foot and for determining any resulting change (to the nearest mill) to the rate schedule commodity charges per 1,000 gallons.

C. COST OF WATER - BASE YEAR

The cost of water shall be the sum of the percentage of water pumped times the pump tax per A.F. plus the percentage of water purchased times the cost per A.F.

The following computation is an example only, and is based on the base year 1995-96, not the current base year. It is included to demonstrate the calculation of the base year water costs.

For the base year 1995-96, 75 percent of the water was pumped, and 25 percent was purchased. The percentage of water to be pumped and purchased can vary as determined by the Director of Engineering. Based on the A.F. costs indicated below, the cost of water for 1995-96 was $217.59 per A.F. for all water except agriculture, and $151.47 per A.F. for agriculture water.

EXAMPLE ONLY:

All Schedules Except Agricultural Services (1995-96)

		OCWD Pump Tax Domestic Water		Cost of Electricity		
75%	x	($85.00	+	$61.47)	=	$109.85
		MWD A.F. Price Domestic Water				
25%	x	$430.97			=	$107.74
				Cost per A.F.	=	$217.59

Agricultural Services (1995-96)

		OCWD Pump Tax Agricultural Water		Cost of Electricity		

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Water Utility
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Issued By:
Engineering Department
Water System Management Division

75% x ($42.50 + $61.47) = $ 77.98

SCHEDULE W-CA (continued)

MWD A.F. Price
Agricultural Water

25% x $293.97 = $ 73.49

Cost per A.F. = $151.47

D. ADJUSTMENT METHOD

1. Computation of the amount of commodity adjustment to be applied to the rate schedule commodity charges is illustrated in the following example.

2. Beginning July 1, 1996, 75% of the water was pumped and 25% was purchased and the cost adjustment was as follows:

		OCWD Pump Tax Domestic Water		Cost of Electricity		
75%	x	($88.00	+	$61.00)	=	$111.75

		MWD A.F. Price Domestic Water		Connection Charge ÷ MWD budgeted A.F.		R.T.S. Charge ÷ MWD budgeted A.F.		
25%	x	($435.00	+	$6.57	+	$0.00)	=	$110.39

Cost per A.F. = $222.14

Using these figures, $222.14 minus $217.59 equals a $4.55 increase per A.F. compared to the base year. Since one A.F. equals 325,851 gallons, or 325.851 thousands of gallons, then the commodity adjustment equals $4.55/325.851 = $0.014 per 1,000 gallons. This figure is divided by the System Loss Factor (see Section H, Page No. 3.1.5) to account for annual water system losses. The final commodity adjustment equals $0.014/0.959 = $0.015 per 1,000 gallons.

Adjustment for agriculture service was computed in a similar manner using the 1995-96 base year average cost per acre-foot of $151.47.

3. The percentage of water to be pumped and purchased shall be established by the Director of Engineering in May of each year to be applicable for the following year beginning July 1 of the fiscal year.

4. The amount of the commodity adjustment and the data elements required to compute the commodity adjustment shall be shown in the "Commodity Adjustment Summary" section each time the commodity adjustment is changed, beginning with the current base year.

E. APPLICATION OF COMMODITY ADJUSTMENT

At such time as the Utility is notified by the water providing agencies and/or the electrical utilities of a rate change, the Director of Engineering shall prepare the calculations necessary to show the fiscal impact and the amount of the incremental change on the commodity charge

CITY OF FULLERTON
Water Utility
303 West Commonwealth Avenue
Fullerton, California 92832

Issued By:
Engineering Department
Water System Management Division

SCHEDULE W-CA – Continued

The commodity charge for all rate schedules shall be adjusted to reflect the new cost of water per A.F., when collective charges have a net effect that exceeds 5 mill per 1,000 gallons compared to the base year or the previous commodity charge adjustments if adjustments have been made since the base year. The increased or decreased cost of water shall be rounded to the nearest mill per 1,000 gallons and added to the commodity charge for each rate block of each water schedule rate charge. The new rates resulting from any such changes in cost for purchased or pumped water shall be provided to the City Treasurer for implementation as soon as practical.

Information on these adjustments shall be provided to the City Manager who shall provide the City Council with said information. However, no City Council action shall be required to implement these rate changes, provided that the procedures and methods for adjustments contained herein are provided.

F. COMMODITY ADJUSTMENT SUMMARY

The amount of the commodity adjustment and the data elements required to compute the commodity adjustment shall be shown in this section each time the commodity adjustment is changed, beginning with the current base year.

Fiscal Year:	BASE YEAR 2008-09	2009-10
Effective Date	01/01/09	07/01/09
Percentage To Be:		
Pumped	69%	62%
Purchased	31%	38%
OCWD Cost Per A.F. ($)		
OCWD Domestic	249.00	249.00
OCWD Agriculture	124.50	124.50
Pumping Cost*	56.53	66.05
MWD Cost Per A.F. ($)		
MWD Domestic	610.25	777.00
MWD Agriculture	496.25	498.50
Cost per A.F. ($)		
Domestic	411.70	490.59

CITY OF FULLERTON
Water Utility
303 West Commonwealth Avenue
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Issued By:
Engineering Department
Water System Management Division

Increase per A.F. ($)		
Compared to Base Year		
Domestic	0.00	$87
Commodity Adjustment from current rate ($ Per 1,000 Gallons)		
Domestic	0.00	0.284

*See section on Electrical Pumping Cost (Section G, Page No. 3.1.4) for method used to derive this figure.

SCHEDULE W-CA - Continued

G. ELECTRICAL PUMPING COST

FISCAL YEAR:	2007-08	2008-09	2009-10
Electric Rate Effective Date			
Southern Califomia Edison	3/31/07	3/31/08	3/31/09
Anaheim Public Utility	3/31/07	3/31/08	3/31/09
A.F. of Water Pumped (includes In Lieu)	20,610.5	23,462.30	22,457.00
Southern California Edison			
*Pumping KWH	5520	10,880	18,560
Pumping Dollars Schedule PA-1	$3,103	$4,203	$5,589
*Pumping KWH	653004	1,094,620	1,263,300
Pumping Dollars Schedule PA-2	$81,462	$122,226	$146,828
*Pumping KWH	1,129,495	4,581,782	4,627,972
Pumping Dollars Schedule TOU-PA-B	$177,174	$447,829	$410,923
*Pumping KWH	2,557,675	3,311,895	3,004,314
Pumping Dollars Schedule TOU–PA–5	$238,470	$286,069	$262,964
Anaheim Public Utility			
*Pumping KWH	2,002,657	2,313,071	2,360,402
Pumping Dollars			

Exhibit GLW-11

Every year, the City of Burbank adopts a **Citywide Fee Schedule** that governs all charges and fees for City services.
View this Fee Schedule

BWP offers different types of water services, including General Service, Fire Protection, and Temporary Water Service. The rates for these services are the same for residential and commercial customers. The vast majority of customers will be on the General Water Service Rate.

SECTION 1. SINGLE FAMILY RESIDENTIAL SERVICE

(Last Update 6/9/09, Resolution 27,921)

The total charge shall be the sum of the Water Availability Charge, Demand Charge, Quantity Charge, and a Water Cost Adjustment Charge (WCAC) as established in this section.

	Description	Period	Fee Amount	Unit/Time
(A)	Water Availability Charge Size of Meter: All	7-1-2009	$9.34	Month
(B)	Quantity Charge	7-1-2009		
	First 15 HCF/mo		$0.821	100 cubic feet
	Next 15 HCF/mo		$1.001	100 cubic feet
	All additional HCF/mo		$1.181	100 cubic feet
(C)	Water Cost Adjustment Charge (WCAC)	7-1-2009	$1.28	100 cubic feet

(D) Minimum Charge:

The minimum charge per customer shall be the sum of the Water Availability Charge.

SECTION 2. MULTI-FAMILY RESIDENTIAL, COMMERCIAL AND INDUSTRIAL SERVICE

The total charge shall be the sum of the Water Availability Charge, Quantity Charge, and a Water Cost Adjustment Charge (WCAC) as established in this section.

	Description	Period	Fee Amount	Unit/Time
(A)	Water Availability Charge			
	Size of Meter: All	7-1-2009	$9.34	Month
(B)	Quantity Charge	7-1-2009		
	1. Summer HCF		$1.151	100 cubic ft.
	2. Non-summer HCF		$0.441	100 cubic ft.
(C)	Water Cost Adjustment Charge (WCAC)	7-1-2009	$1.28	100 cubic ft.

(D) Minimum Charge

The minimum charge per customer shall be the sum of the Water Availability Charge.

(E) Water Efficiency Non-Compliance

1. First year of non-compliance	25% of all water charges

2. Subsequent years of non-compliance		50% of all water charges

SECTION 3. SCHOOL SERVICE

The total charge shall be the sum of the Water Availability Charge, Quantity Charge, and a Water Cost Adjustment Charge (WCAC) as established in this section.

	Description	Period	Fee Amount	Unit/Time
(A)	Water Availability Charge			
	Size of Meter: All	7-1-2009	$4.67	Month
(B)	Quantity Charge	7-1-2009		
	1. Summer HCF		$0.576	100 cubic ft.
	2. Non-summer HCF		$0.221	100 cubic ft.
(C)	Water Cost Adjustment Charge (WCAC)	7-1-2009	$0.64	100 cubic ft.

(D) Minimum Charge

The minimum charge per customer shall be the Water Availability Charge.

SECTION 4. NEW SERVICE INSTALLATIONS

	Description	Size of Meter	Amount
(A)	Connection Fees for New Installations	5/8 inch	$427.00
		¾ inch	$608.00
		1 inch	$960.00
		1½ inch	$1,813.00
		2 inch	$2,730.00
		3 inch	$4,800.00
		4 inch	$7,466.00
		6 inch	$13,865.00
		8 inch	$20,478.00
		10 inch	$26,984.00
		12 inch	$45,862.00
(B)	Hook Up Fees	All	Actual cost

SECTION 5. TEMPORARY SERVICE

The total monthly charge shall be the sum of a Processing Fee, a Service Charge, a Quantity Charge, and a Water Cost Adjustment Charge (WCAC) as established in this section. In addition, if a fire hydrant meter is required for the temporary service, a meter Rental Rate shall be charged.

	Description	Amount	Unit/Time
(A)	Processing Fee		
	(1) Open Account	$30.00	Each occurrence
(B)	Service Charge		

	(1) Metered Service	Same as Section 2.	Month
	(2) Unmetered Service	$30.00	Month

(C) Quantity Charge and WCAC

The Quantity Charge for unmetered water shall be made as follows:

(1) For concrete curbs - three units per one hundred lineal feet.

(2) For settling trenches not exceeding two feet in width and five feet in depth - six units per one hundred lineal feet.

(3) For larger trenches a proportional charge shall be made as estimated by the Manager of the Water Division.

(4) For concrete walks - one and one half units per one hundred square feet.

(5) For settling graded streets - three quarters of one unit per one hundred square feet.

(6) For mixing and curing concrete - three quarters of one unit per cubic yard.

(7) For mixing and curing concrete by a patented process - one third of one unit per cubic yard.

(8) For settling filled ground a charge will be made for a quantity of water equal to one-third the cubic contents of the fill rates provided in this chapter.

(9) For miscellaneous uses not herein specified, the quantity shall be estimated by the Water Division.

One unit of water equals one hundred cubic feet. A quantity charge and WCAC shall be based on the water use estimated above and shall be two (2) times the rate specified in Schedule WG-1.

(D) Fire Hydrant Meter Rental

(1) Deposit	$900.00	Each occurrence
(2) Rate	$5.00	Day

(E) Estimated Monthly Billing

A one hundred dollar ($100.00) charge shall be made to cover the expense of estimating the billing each month for each meter not returned for reading and checking as provided in the Water Rules and Regulations Act 2.36(d).

SECTION 6. PRIVATE FIRE SERVICE

The total monthly bill shall be the sum of the Water Availability Charge, Quantity Charge, and a Water Cost Adjustment Charge (WCAC) as established in this section.

Description	Amount	Unit/Time
(A) Service Charge		
Size of Service Lateral		
(1) 2 inch or smaller	$20.00	Month
(2) 4 inch	$34.00	Month
(3) 6 inch	$62.00	Month
(4) 8 inch	$110.00	Month
(5) 10 inch	$180.00	Month
(6) 12 inch	$262.30	Month

(B) Quantity Charge

The Quantity Charge shall be three (3) times the rate specified in Section 2.

(C) WCAC

The WCAC shall be three (3) times the rate specified in Section 2.

(D) Hook-Up Fees Actual Cost

SECTION 7. WATER COST ADJUSTMENT CHARGE (WCAC)

Description

(A) Purpose

The Quantity Charge specified in Schedules WG-1, WS-1, WT-1, and WF-1 are subject to a purchased water cost adjustment charge (WCAC) as specified in this section in order to compensate the City for its varying costs of purchasing or producing water. The WCAC shall be adjusted when the Balancing Account is less than one month or greater than three-months purchased water and shall be calculated to the nearest five mills ($0.005). The monthly WCAC shall not increase or decrease by more than ten (10) percent from the prior month's WCAC.

(B) Formula

For Schedules WG-1, WT-1, and WF-1, the adjustment shall be determined in accordance with the following formula:

$$\text{Adjustments (mills per unit)} = \frac{1000 \times \text{Estimated Water Costs}}{\text{Estimated Units of Water Sales} \times .95}$$

For Schedule WS-1, the adjustment shall be determined in accordance with the following formula:

$$\text{Adjustments (mills per unit)} = \frac{500 \times \text{Estimated Water Costs}}{\text{Estimated Units of Water Sales} \times .95}$$

(C) Definitions

(1) "Estimated Water Costs" shall mean the total cost to the City of purchased water delivered to the City from the Metropolitan Water District (MWD) or other independent suppliers, basin replenishment water, related MWD charges such as Delta Water Supply Surcharge, Readiness to Service Charge and Capacity Reservation Charge, chemical costs for treating the water, including granular activated carbon, compliance water testing, ULARA watermaster expense related to the maintenance, protection, and/or development of basin water resources and the total cost to the City for electric power to pump water. All such costs shall be estimated monthly by the General Manager for the next 12-month period. The WCAC Balancing Account will be adjusted by any under or over-collections of water costs exceeding the Balancing Account limits experienced by the City. The City Council will be advised of any change in the WCAC rate.

(2) "Estimated Units of Water Sales" shall mean: the hundreds of cubic feet of potable water sales for the next 12-month period as estimated by the General Manager.

SECTION 8. MISCELLANEOUS WATER CHARGES

The total monthly bill shall be the sum of the Water Availability Charge, Quantity Charge, and a Water Cost Adjustment Charge (WCAC) as established in this section.

Description	Amount	Unit/Time
(A) Penalties		
(1) Restoration of Services after non-payment	$30.00	Reconnection
(2) Disconnection after illegal connection	$100.00	Violation
(3) Service Call - non payment	$50.00	Call
(4) Bad check charge	$25.00	Check

(5) Late Fee (on past due payments)	1.5%	Month
(6) Repairs and replacements due to illegal water connections	At Cost	Each occurrence
(7) Collection Activity	$30.00	Call
(8) Emergency Turn on/off customer request after hours	$25.00	Call
(9) Penalty for unauthorized connection to department facilities	$500.00	Violation
(10) Penalty for unauthorized use of water through a department facility	$500.00	Violation
(11) Collection Agency Fee	20% of Debt Total Due	Each

(B) Water Distribution Main Charge (When applicant or his/her predecessor in interest has not previously paid such charge.)

(1) Water Main Charge	$60.00	Front foot of parcel adjacent to the water main

(C) Water Main Replacement Fee (Water Rules and Regulations Section 4.34)

(1) 8-inch main	$60.00	Front Foot of parcel adjacent to the water main
(2) 12-inch main	$100.00	Front Foot of parcel adjacent to the water main

(D) Miscellaneous Charges

(1) Special Facilities Charge	100%	Cost
(2) Copies of Rules and Regulations	$5.00	Copy
(3) Public Fire Hydrant Installations	At Cost	Each occurrence
(4) Fire Hydrant Flow Test	$400.00	Each occurrence
Fire Hyrant Flow Information	$100.00	Each occurance
(5) Inspection Services/Flushing for customer installed domestic/fire service	$275.00	Each occurance

(E) Deposits

(1) Each applicant for water service may be required to guarantee payment of charges for water by depositing or otherwise furnishing double the estimated average billing for such service, provided no deposit shall be less than twenty dollars ($20.00).

(2) Each applicant for a new service connection shall be required to make a deposit equal to the estimated cost of installation prior to installation.

(3) Each applicant for temporary service shall be required to deposit with the General Manager an amount equal to the estimated bill for water service to be rendered, including installation and removal of service facilities, and the cost of any equipment furnished by the City.

(4) A deposit of fifty dollars ($50.00) shall be required for consumer requests to test the consumer's meter if such test has been performed on that service in the 12 months immediately preceding. If the meter is inaccurate, the deposit will be refunded and a billing adjustment made. If the meter is accurate, the deposit shall be forfeited.

(F) Backflow Prevention

(1) Applicants for service shall be required to pay a plan check charge to cover costs for evaluating premises for potential cross-connection per Title 17 of the California Administrative Code. Such fee shall be $50.00 minimum, up to actual costs for large facilities.

(2) Where backflow prevention device must be maintained and tested, an administrative fee of $5.00 per month shall be charged.

(3) Backflow Prevention Assembly Test, Schedule WB-3

The department shall charge $90.00 for each backflow prevention assembly tested. If repairs are required, the department shall additionally charge for the actual time and materials cost incurred, plus a $50.00 processing fee. The department reserves the right to decline the testing of any assembly. A single family residence (R-1) shall be exempt from this charge.

(G) Water Testing Fees

Fees for water tests will be charged at the current laboratory contract rates. No mark-up will be charged.

SECTION 9. RECYCLED WATER RATES

Description	Period	Amount	Unit/Time
(A) Recycled Water Service			
The total charge shall be the sum of the Water Availability Charge and the Quantity Charge as established in this section.			
(1) Water Availability Charge	All	$9.34	Month
(2) Quantity Charge		$1.89	100 cubic feet
(B) School Recycled Water Service			
The total charge shall be the sum of the Water Availability Charge and the Quantity Charge as established in this section.			
(1) Water Availability	All	$4.67	Month
(2) Quantity charge		$0.95	100 cubic feet
(C) Temporary Recycled Water Services Monthly Truck Rate: RT-1			
The total monthly charge shall be the sum of a Processing Fee and a Flat Rate Quantity Charge as established in this section. A refundable deposit for the fire hydrant meter is also required.			
(1) Processing and Deposit Fee			
(a) Open Account		$100.00	Each occurrence
(b) Hydrant Meter Deposit		$900.00	Each occurrence
(2) Flat Rate Quantity Charge Period: July 1, 2009		$100.00	Truck/Month
(D) New Recycled Water Service			
(1) The Connection Fee for Reclaimed Water Service shall be the same as that for domestic water as established in Section 3.A.			
(2) Hook-Up Fee	All	Actual Cost	

SECTION 10. PHYSICAL SOLUTION WATER COST

The water rights in the Upper Los Angeles River Area were established by the JUDGMENT AFTER TRIAL BY COURT in Superior Court Case No. 650079, entitled **The City of Los Angeles, A Municipal Corporation, Plaintiffs vs. City of San Fernando, et al., Defendants.** Under the Judgment, certain parties have rights to Physical Solution Water upon payment of specified charges. Valhalla and Lockheed have the right to 300 acre-feet and 25 acre-feet of water respectively.

From time to time, other property owners, not covered by the Judgment, have a need to produce ground water for temporary and/or long term dewatering activities relating to construction, building foundations, basements or underground facilities, and for property soil and groundwater contamination clean up activities. The water is typically discharged to a storm drain or sewer. The City of Burbank should be compensated for the removal of this water from the groundwater basin. The charge for this water will be the Physical Solution Water Charge plus an Administrative Fee.

(A) Physical Solution Water Charge

The charge for Physical Solution water in Burbank is determined by Section 9.4 of the Judgment.

(1) For Fiscal Year 2009/2010 the charge to Valhalla and Lockheed for the first 300 acre-feet and 25 acre-feet respectfully will be $414.00 per acre-foot.

(2) Valhalla and Lockheed production exceeding that specified in 1 above, and all other production for dewatering or soil/groundwater clean up activities, will be charged $923 per acre-foot.

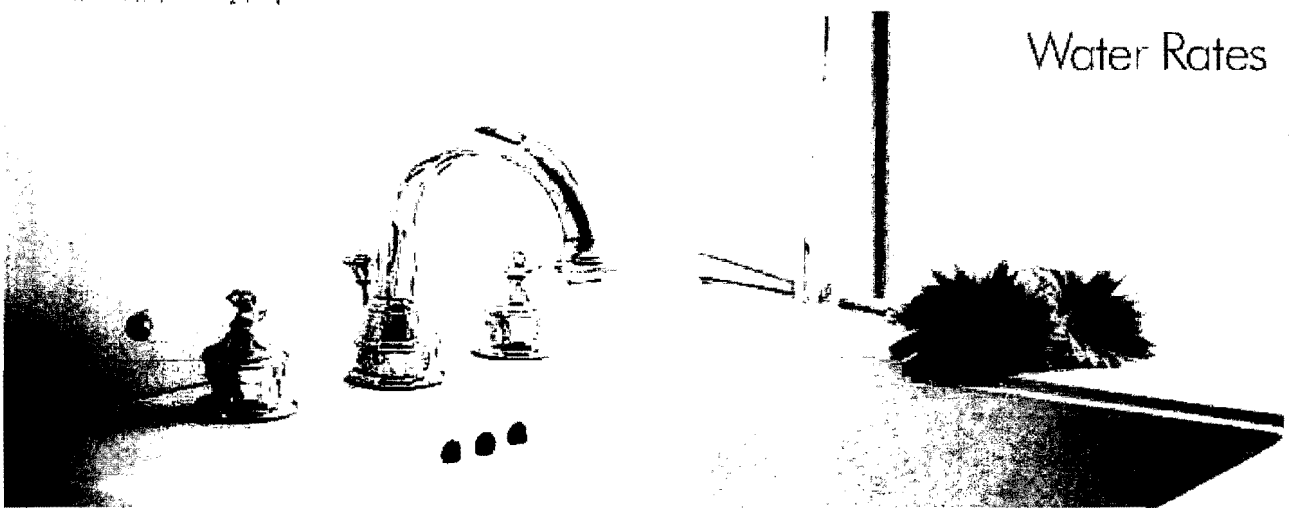
(B) Administrative Fee

An Administrative Fee of $50.00 will be added to each monthly billing.

It is the responsibility of the producer to report the monthly water extraction to the Burbank Water & Power Department, Water Division and the Upper Los Angeles River Area Watermaster. The reported extraction shall be made prior to the 15th of the following month.

Questions? If you have questions about BWP's electrical or water rates, please call us at 818-238-3700.

Exhibit GLW-12



Water Rate Information

Residential Water Rates

- These rates apply to all Glendale *Water & Power* water customers with a regular water service.
- A master-metered complex has one water meter serving more than one unit in a building or buildings. The individual units do not have their own water meters.
- Applies to water sold, supplied, distributed, or transported to customers within the City of Glendale and annexed territories.

Business Water Rates

Applies to water sold, supplied, distributed or transported to customers within the City of Glendale.

- These rates apply to all Glendale *Water & Power* water customers with a regular water service.
- A master-metered complex has one water meter serving more than one unit in a building or buildings. The individual units do not have their own water meters.

Water Billing Unit

The billing unit for **water usage** in your Glendale *Water & Power* bill is **hundred cubic feet (HCF)**. One HCF equals 748 gallons.

Brief Overview of Water Rate Schedules

Glendale *Water & Power* maintains three (3) Water Rates:

Standard Water Service Rate - WS

This is the rate that applies to all regular water services in Glendale, residential and business.

- This is the rate that applies to WS water service on your Residential water account.
- The majority of residential water services have water meters of 1 inch or smaller.
- Customer Charge (CC) is assessed regardless of usage.
- Commodity Charge (UC) is assessed when water is used through this meter.
- Water Adjustment Charge (WAC) is assessed when water is used through this meter.
- Total Water Charges (TWC) = CC + UC + WAC

Customer Charge	**Size of Meter**	**Customer Charge**
	1 inch	$ 13.6099 per month
	1-1.5"	$ 23.9268 per month
	2 "	$ 38.8501 per month
	3 "	$ 59.6742 per month
	4 "	$ 101.4556 per month
	6 "	$ 161.0917 per month
	8 "	$ 258.3406 per month
	10 "	$ 369.7894 per month
	12 "	$ 517.7090 per month
Commodity (usage) Charge	For 1st 10 HCF per month	$ .73 per HCF
	Remaining HCF	$ 1.57 per HCF
	-	-
Water Adjustment Charge	$ 1.39 per HCF	

Private Fire Line Water Service Rate - WF

- Fire lines may be connected with automatic sprinkling systems or to hose attachments within a multi-family complex such as an apartment building.
- Customer Charge (per meter per month) assessed with or without usage through this meter.
- Commodity Charge is assessed only when water is used through this meter for non-fire fighting purposes (as recorded by bypass meter) The commodity charge is the same rate as for standard water usage.
- Water Adjustment Charge is assessed upon assessment of the Commodity Charge.
- Total Water Charges (TWC) = CC + UC + WAC for non-firefighting
- Total Water Charges (TWCF) = CC for firefighting

Customer Charge	**Size of Meter**	**Customer Charge**
	2 "	$ 11.71 per month
	3 "	$ 24.46 per month
	4 "	$ 33.97 per month
	6 "	$ 48.55 per month
	8 "	$ 67.96 per month
	10 "	$ 116.46 per month
Commodity (usage) Charge	For 1st 10 HCF per month	$ 0.80 per HCF
	Remaining HCF	$ 1.80 per HCF
	-	-
Water Adjustment Charge	$1.39 per HCF	-

Recycled Water Service Rate - WR

- The rate for recycled water service is approximately 75% of the standard water service rate (~25% discount)
- For use in special non-potable purposes.
- **Not** for human or animal use or consumption.

Customer Charge	**Size of Meter**	**Customer Charge**
	1 inch	$ 10.2074 per month
	1 - 1.5	$ 17.9451 per month
	2 "	$ 29.1375 per month
	3 "	$ 44.7556 per month
	4 "	$ 76.0917 per month
	6 "	$ 120.8188 per month

Customer Charge	Size of Meter	Customer Charge
	8 "	$ 193.7554 per month
	10 "	$ 277.3421 per month
	12 "	$ 388.2818 per month
Commodity (usage) Charge	For 1st 10 HCF per month	$ 0.5475 per HCF
	Remaining HCF	$ 1.1775 per HCF
Water Adjustment Charge	$1.04 per HCF	

Explanation of Water Charge Components Present:

Customer Charge

- **Charge is per month and based on the size of water meter**
- This component of the water rate reflects the cost of metering support, customer service, and maintaining your account.

Commodity (Usage) Charge

- **Charge is $.73 for first 10 HCF used per month; $1.57 for all HCF used in excess of 10 HCF per month.**
- This rate is considered a modified "conservation rate" that encourages water conservation.
- This is the water usage charge. This supports the cost of the system that brings the water to your home or business.

Water Adjustment Charge

- **Charge is $1.39 per HCF on all water bills, except discounted Recycled Water Rate which is $1.04**
- This component of the water rate recovers the costs of purchasing water from Metropolitan Water District and the costs of pumping water from our local basins.
- The water adjustment rate is calculated quarterly each year and becomes effective the first day of January, April, July, and October of each year.
- The water adjustment amount does not necessarily change quarterly. It is based on pumping costs and purchased water costs of the previous 4 months.

Glendale City Utility User's Tax

- **Charge is 7% of the total water and electric charges.**
- This charge is waived on the accounts of low-income senior citizens. To be eligible for this exemption, the account holder must be at least 62 years of age. The total maximum gross income, including all members of the household, can be no more than $13,950 per year. To be considered for this exemption, an application must be filed with Glendale *Water & Power*.

Exhibit GLW-13

BUILDING A WORLD OF DIFFERENCE®

KANSAS CITY BOARD OF PUBLIC UTILITIES

Report on

Revenue Requirements, Costs of Service, and Rates for Water Service

January 2010

BLACK & VEATCH
Building a world of difference.

BLACK & VEATCH
Building a **world** of difference.

January 29, 2010

Kansas City Board of Public Utilities
Mr. Don Gray, General Manager
540 Minnesota Avenue
Kansas City, KS 66101

Dear Mr. Gray:

We are pleased to present our *Report on Revenue Requirements, Costs of Service, and Rates for Water Service* for the Kansas City Board of Public Utilities (BPU). An introduction and executive summary of the principal findings and recommendations precede the detailed text of the report.

We wish to acknowledge the cooperation and assistance of the BPU staff in providing guidance and information for the study. It is a pleasure to be of service to the BPU in this matter.

Very truly yours,

BLACK & VEATCH CORPORATION

Anna White

Anna White
Project Manager

Enclosure

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Introduction

The Kansas City Board of Public Utilities (BPU) water utility provides retail water service to customers within the County. It also provides water service to four area wholesale customers.

Purpose

In 2009, the BPU selected Black & Veatch Corporation (B&V) to perform an analysis of revenue requirements, cost of service, and rates for its water utility. B&V has conducted the analysis and projection of water utility revenue requirements for the six year study period ending in fiscal year 2014. Additionally, analysis of water utility cost of service and rate design required to meet projected 2010, 2011, 2012, and 2013 revenue requirements has been completed and is detailed in this report.

Scope

This study includes a comprehensive review of projected revenue under existing rates, revenue requirements, customer costs of service, and rates for treated water service. Projection of financial operations under existing rates indicates the degree to which current revenues can be expected to meet anticipated financial requirements during the study period.

Projected revenue requirements include operation and maintenance expense, payment-in-lieu-of-taxes (PILOT), principal and interest payments on existing and proposed revenue bonds, and capital improvement requirements met from revenues. These projections are based upon a study of past and budgeted costs incurred in providing water service and include allowances for anticipated future conditions, growth, and inflation.

Allocated costs of service are developed for each class of customer and type of service based on considerations of utility revenue needs and projected customer service requirements. Rate adjustments are designed in accord with allocated costs of service, local policy and practical considerations.

In conducting our analysis and in forming an opinion of the projection of future operations summarized in this report, B&V has made certain assumptions with respect to conditions, events, and circumstances that may occur in the future. The methodologies utilized by B&V in performing the analysis follow generally accepted industry practices for such projections. Such assumptions and methodologies are summarized in this report and are reasonable and appropriate for the purpose for which they are used. While B&V believes the assumptions are reasonable and the projection methodology valid, actual results may materially differ from those projected, as influenced by the conditions, events, and circumstances that may actually occur.

Executive Summary

Revenues and Revenue Requirements

1. The Kansas City Board of Public Utilities (BPU) currently provides treated water and water distribution services to approximately 52,400 accounts within the Unified Government of Wyandotte County including four wholesale customers. The number of accounts is projected to remain constant throughout the study period.
2. Sales of treated water are projected to increase from 10,421,300 hundred cubic feet (Ccf) in 2009 to 10,603,300 Ccf by 2014. This reflects an average growth rate of about 0.4 percent annually.
3. The BPU's current water rates became effective January 1, 2008. These rates include a monthly customer charge, which varies by meter size, and a volume charge. Retail rates include minimum usage requirements that vary by meter size. Generally speaking, the existing outside city rates are higher than inside city rates.
4. Revenue is currently derived principally from charges for treated water service, with some revenue also obtained from connect and disconnect fees, service fees, interest income, and other miscellaneous revenue. Revenue from treated water sales, under existing rates, is projected to increase from $33,171,700 in 2009 to $33,667,200 in 2014. Other water revenues are estimated to increase from $2,139,000 in 2009 to $2,794,200 in 2014.
5. Costs of service to be recovered from water service charges include system operation and maintenance expense, payment-in-lieu-of-taxes (PILOT), principal and interest payments on existing and proposed revenue bonds, and capital improvement requirements met from revenues.
6. Operation and maintenance expense includes the costs associated with payroll and fringe benefits, purchased services, materials and supplies, contract services, utilities, and other items. Future operating expenses are projected to increase from $22,943,100 in 2009 to $28,584,100 in 2014.
7. Major capital improvement expenditures for the six-year study period are estimated to total $66,976,200. Projected revenue bond issues totaling $45,250,000, together with current revenues, service fees (system development charges), grant proceeds, and estimated future interest earnings are proposed for financing the water utility improvement program.
8. As illustrated in the cash analyses presented in Tables 8 and 9 of this report, it is anticipated that the projected capital program requirements and estimates of future operating expenses during the 2009-2014 study period examined can be financed with revenue increases of 8 percent effective June 1, 2010, followed by revenue increases of 8 percent effective January 1, 2011 and 7.5 percent effective January 1 in each year 2012, 2013, and 2014. The BPU is seeking approval for implementation of rates for the first four years of the study period. This

includes the 8 percent adjustments in 2010 and 2011, followed by the 7.5 percent adjustments in 2012 and 2013.

Cost Allocations

9. The annual cost of service for the water system to be met from treated water rates during the projected 2013 test year is as follows:

Total Revenue Requirements:		
Operating & Maintenance Expense	$27,752,500	
PILOT	4,453,200	
Existing Debt Service	10,255,000	
Proposed Debt Service	3,131,100	
Revenue Capital Financing	3,250,000	
Total		$48,841,800
Revenue Requirements Met from Other Sources:		
Other Operating Revenue	$1,775,200	
Interest Income	173,600	
PILOT	4,453,200	
Full Year Revenue Increase Adjustment	(248,500)	
Use of Available Funds	(58,900)	
Total		$6,094,600
Net Costs to be Met from Charges		$42,747,200

It is projected that the Net Costs to be Met from Charges shown above will be funded from revenue from charges that reflect 8 percent revenue increases effective June 1, 2010 and January 1, 2011 and 7.5 percent revenue increases effective January 1, 2012 and January 1, 2013.

10. As a basis for design of a schedule of water rates, costs of service are allocated to classes of customers in accordance with respective service requirements. The resulting costs of service allocated to customer classes are summarized in Table 18 of this report. The allocated costs shown are adjusted to recognize recovery of City, Interdepartmental, inside and outside city Public Fire Projection costs, and the Wholesale facility credit from other inside and outside city retail customer classes.

Water Rate Adjustments

11. A schedule of existing and proposed 2010, 2011, 2012, and 2013 rates for water service designed on the basis of cost of service and local policy considerations described in the report is shown in Table A-1 and A-2. The differential between inside and outside city rates and minimum usage requirements is recommended to be phased out by 2013. Additionally, the volume charges for both inside and outside city retail customers is proposed to be phased to a 3-step declining block by 2013.
12. Typical water bills under existing rates and rates proposed are shown in Table 21 of the report.

Table A-1
Existing and Proposed Rates

Meter Size	Existing			Proposed Rates (a)											
				2010 (b)			2011			2012			2013		
	Monthly Customer Charge	Monthly Minimum Bill	Minimum Usage Requirement	**Monthly Customer Charge**	**Monthly Minimum Bill**	**Minimum Usage Requirement**	Monthly Customer Charge	Monthly Minimum Bill	Minimum Usage Requirement	**Monthly Customer Charge**	**Monthly Minimum Bill**	**Minimum Usage Requirement**	Monthly Customer Charge	Monthly Minimum Bill	Minimum Usage Requirement
	$	$	Ccf	**$**	**$**	**Ccf**	$	$	Ccf	**$**	**$**	**Ccf**	$	$	Ccf
RATE CODE 10 - INSIDE CITY															
Monthly Charge															
5/8"	12.69	12.69	0.10	**13.65**	**13.98**	**0.10**	15.55	15.90	0.10	**17.50**	**17.87**	**0.10**	19.35	19.74	0.10
3/4"	13.18	26.80	4.70	**16.60**	**32.16**	**4.70**	18.95	35.49	4.70	**21.30**	**38.60**	**4.70**	23.55	41.83	4.70
1"	15.27	37.10	7.50	**20.70**	**45.33**	**7.50**	23.60	49.78	7.50	**26.55**	**53.90**	**7.50**	29.35	58.22	7.50
1.5"	20.58	66.74	15.70	**32.50**	**80.99**	**15.70**	37.00	88.35	15.70	**41.60**	**95.03**	**15.70**	46.00	101.77	15.70
2"	26.95	100.02	25.50	**44.20**	**121.21**	**25.50**	50.40	131.84	25.50	**56.70**	**141.29**	**25.50**	62.60	150.51	25.50
3"	47.09	180.31	45.50	**96.00**	**231.21**	**45.50**	109.50	252.34	45.50	**123.00**	**271.19**	**45.50**	136.00	289.51	45.50
4"	73.62	290.99	74.00	**154.50**	**372.64**	**74.00**	176.00	406.33	74.00	**198.00**	**436.82**	**74.00**	219.00	465.99	74.00
6"	142.55	577.73	148.00	**301.00**	**734.48**	**148.00**	343.00	800.51	148.00	**386.00**	**860.14**	**148.00**	427.00	916.71	148.00
8"	200.89	912.23	247.50	**449.00**	**1,172.03**	**247.50**	512.00	1,274.98	247.50	**575.00**	**1,365.55**	**247.50**	635.00	1,451.07	247.50
10"	317.55	1,370.86	372.00	**596.00**	**1,681.32**	**372.00**	679.00	1,824.19	372.00	**763.00**	**1,949.46**	**372.00**	843.00	2,067.43	372.00
12"	464.36	1,767.17	462.50	**682.00**	**2,030.68**	**462.50**	778.00	2,201.03	462.50	**875.00**	**2,349.25**	**462.50**	967.00	2,488.27	462.50
Monthly Volume Charge - $/Ccf															
First 7 Ccf	2.959			**3.310**			3.520			**3.680**			3.890		
Next 153 Ccf	2.945			**2.910**			3.070			**3.180**			3.280		
Next 1,840 Ccf	2.750			**2.910**			3.070			**3.180**			3.280		
Next 6,000 Ccf	2.063			**2.063**			2.063			**2.450**			3.030		
Over 8,000 Ccf	1.320			**1.620**			1.990			**2.450**			3.030		
RATE CODE 20 - OUTSIDE CITY															
Monthly Charge															
5/8"	12.89	24.36	3.60	**13.65**	**25.57**	**3.60**	15.55	24.00	2.40	**17.50**	**21.92**	**1.20**	19.35	19.74	0.10
3/4"	13.40	35.20	6.70	**16.60**	**38.78**	**6.70**	18.95	40.07	6.00	**21.30**	**40.80**	**5.30**	23.55	41.83	4.70
1"	15.59	52.81	11.40	**20.70**	**56.67**	**11.40**	23.60	57.76	10.10	**26.55**	**58.03**	**8.80**	29.35	58.22	7.50
1.5"	21.16	92.04	21.70	**32.50**	**98.45**	**21.70**	37.00	100.63	19.70	**41.60**	**101.39**	**17.70**	46.00	101.77	15.70
2"	27.84	144.92	35.80	**44.20**	**151.18**	**35.80**	50.40	153.02	32.40	**56.70**	**152.42**	**29.00**	62.60	150.51	25.50
3"	49.00	262.43	65.50	**96.00**	**289.41**	**65.50**	109.50	293.17	58.80	**123.00**	**292.18**	**52.10**	136.00	289.51	45.50
4"	76.86	432.83	108.70	**154.50**	**473.62**	**108.70**	176.00	477.25	97.10	**198.00**	**473.39**	**85.50**	219.00	465.99	74.00
6"	144.78	815.36	205.00	**301.00**	**900.35**	**205.00**	343.00	917.17	186.00	**386.00**	**920.56**	**167.00**	427.00	916.71	148.00
8"	204.03	1,149.00	288.70	**449.00**	**1,291.92**	**288.70**	512.00	1,359.40	275.00	**575.00**	**1,409.43**	**261.30**	635.00	1,451.07	247.50
10"	322.52	1,816.28	456.50	**596.00**	**1,927.22**	**456.50**	679.00	1,997.03	428.30	**763.00**	**2,038.82**	**400.10**	843.00	2,067.43	372.00
12"	471.63	2,655.98	667.00	**682.00**	**2,625.77**	**667.00**	778.00	2,619.47	598.80	**875.00**	**2,565.81**	**530.60**	967.00	2,488.27	462.50
Monthly Volume Charge - $/Ccf															
All Usage	3.275			**0.000**						**0.000**					
First 7 Ccf				**3.310**			3.520			**3.680**			3.890		
Next 153 Ccf				**2.910**			3.070			**3.180**			3.280		
Next 1,840 Ccf				**2.910**			3.070			**3.180**			3.280		
Next 6,000 Ccf				**2.063**			2.063			**2.450**			3.030		
Over 8,000 Ccf				**1.620**			1.990			**2.450**			3.030		

(a) Effective January 1 of each year shown unless otherwise indicated.
(b) Effective June 1, 2010.

Table A-2
Existing and Proposed Rates

Meter Size	Existing	Proposed Rates (a) 2010 (b)	2011	2012	2013
	$	$	$	$	$
RATE CODE 40 - FIRE PROTECTION					
Monthly Charge					
2"	7.97	7.97	7.97	7.97	7.97
4"	20.44	20.44	20.44	20.44	20.44
6"	49.86	49.86	49.86	49.86	49.86
8"	100.21	100.21	100.21	100.21	100.21
10"	175.95	175.95	175.95	175.95	175.95
12"	281.10	281.10	281.10	281.10	281.10
RATE CODES 31, 32, 33, 34 - WHOLESALE					
Monthly Charge					
All Sizes	160.00	160.00	160.00	160.00	160.00
Monthly Volume Charge - $/Ccf					
All Usage	1.301	1.420	1.530	1.640	1.770
RATE CODE 50 - INTERDEPARTMENTAL					
Monthly Volume Charge - $/Ccf					
All Usage	0.510	0.510	0.510	0.510	0.510

(a) Effective January 1 of each year shown unless otherwise indicated.
(b) Effective June 1, 2010.

Revenues and Revenue Requirements

Water utility revenue is derived principally from charges for treated water service. Other sources of income include service fees, connect and disconnect fees, interest income, and other miscellaneous sources. Additionally, PILOT charges are assessed as a percentage of each customer's water bill, which in turn is remitted to the Unified Government.

Customer Growth

Table 1 presents a summary of the historical and projected number of monthly accounts for the period 2004 through 2014. Customer classifications are based generally on the rate codes administered by BPU and the type of service provided. Based on historical trends in account levels, and the current degree of economic uncertainty that exists at the regional and national level, account growth is projected to remain flat across all customer classes, reflecting a stable account base with relatively little expected change over the study period. Projected accounts are expected to remain constant at about 52,400 throughout the study period.

Water Sales

Historical and projected water sales volumes for the period 2004 through 2014 are shown in Table 2. These projections of annual water sales are based upon an estimation of annual usage per account times the number of accounts projected in Table 1. In estimating future water sales, several dynamics have been accounted for in the anticipated results. Usage trends for BPU have been affected by climatological events over the past five years, with several periods of substantial rainfall which has served to suppress overall consumption. Secondly, a general trend of decreasing usage per account has been observed, which is assumed to be the combined result of more efficient fixtures and appliances, better water management, and reduced average household size. Such a trend is relatively common for water utilities in the Midwest. Finally, the BPU is in the process of implementing a meter replacement program for 3-inch and larger meters. Based on the age and condition of the meters being replaced and the results of similar programs implemented at other water utilities, the BPU anticipates an increase in billed consumption for these accounts upon replacement of the meter. The implementation period for meter replacement is expected to take approximately five years.

The projections assume normal weather conditions, while the overall trend in declining usage per account is expected to be slightly exceeded by the impact of the meter replacement program. Overall, total customer usage is projected to increase slightly over the study period, from 10,421,300 hundred cubic feet (Ccf) in 2009 to 10,603,300 Ccf in 2014, representing an annual increase of about 0.4 percent. As shown in Table 2, Inside City Retail volumes are anticipated to increase slightly as a result of the meter replacement program, while usage for all other classes is assumed to remain constant throughout the study period.

Table 1
Historical and Projected Number of Accounts

	Historical					Projected					
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Inside City											
Retail	49,911	50,091	50,224	50,252	50,053	50,050	50,050	50,050	50,050	50,050	50,050
City	145	152	152	159	160	160	160	160	160	160	160
Temporary Public Fire	25	29	34	27	26	30	30	30	30	30	30
Private Fire Connections	297	315	347	362	376	380	380	380	380	380	380
Outside City											
Retail	1,781	1,811	1,793	1,691	1,702	1,700	1,700	1,700	1,700	1,700	1,700
Temporary Public Fire	2	1	2	4	0	0	0	0	0	0	0
Private Fire Connections	107	107	104	96	92	92	92	92	92	92	92
Wholesale	4	4	4	4	4	4	4	4	4	4	4
Interdepartmental	18	18	18	19	20	20	20	20	20	20	20
Total	52,290	52,528	52,678	52,614	52,433	52,436	52,436	52,436	52,436	52,436	52,436

Table 2
Historical and Projected Water Usage

	Historical					Projected					
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
	Ccf	Ccf	Ccf	Ccf	Ccf	Ccf	Ccf	Ccf	Ccf	Ccf	Ccf
Inside City											
Retail	8,595,118	8,648,003	8,762,627	8,297,670	7,505,696	7,536,500	7,570,400	7,607,400	7,644,500	7,681,500	7,718,500
City	283,876	330,052	338,811	430,925	394,382	394,400	394,400	394,400	394,400	394,400	394,400
Temporary Public Fire	33,299	45,632	30,672	10,435	35,720	25,100	25,100	25,100	25,100	25,100	25,100
Private Fire Connections	25,640	6,824	5,398	7,484	8,450	0	0	0	0	0	0
Outside City											
Retail	310,749	297,180	283,030	270,347	241,830	256,000	256,000	256,000	256,000	256,000	256,000
Temporary Public Fire	531	0	109	373	0	0	0	0	0	0	0
Private Fire Connections	1,065	672	779	767	1,059	0	0	0	0	0	0
Wholesale	380,683	435,845	564,764	490,729	404,492	433,000	433,000	433,000	433,000	433,000	433,000
Interdepartmental	2,108,215	2,473,612	2,004,755	1,779,165	1,776,346	1,776,300	1,776,300	1,776,300	1,776,300	1,776,300	1,776,300
Total	11,739,176	12,237,820	11,990,945	11,287,895	10,367,975	10,421,300	10,455,200	10,492,200	10,529,300	10,566,300	10,603,300

Water Revenue Under Existing Rates

The majority of the BPU's water utility revenue is derived from rates and charges for water service. A summary of the BPU's current water user charges, effective January 1, 2008, is presented in Table 3. The retail rates consist of monthly customer charges, which vary by meter size, plus declining block volume charges for inside city customers and separate uniform volume charges for all other customer classifications. Retail rates include minimum usage requirements that vary by meter size. Existing rates for wholesale, fire protection, and interdepartmental water usage are also shown in Table 3.

Projections of future water sales revenue are based on estimates of customer accounts and meter size distributions, water consumption and water use patterns, existing user charges, and wholesale customer contract provisions. Additionally, water sales revenue also includes fire protection charges, which have been estimated based on the number of fire accounts and the associated charges applicable to them. Historical and projected water sales revenue under existing rates and charges is shown in Table 4 for the period 2004 through 2014. Based on the aggregated estimates of the variables indicated above, gross water user charge revenue is expected to be $33,171,700 in 2009, increasing to $33,667,200 by 2014, as shown on Table 4. Gross water revenues represent the total user charges that could be billed based on the level of service provided; however, as a matter of policy, the City of Kansas City, Kansas (City) accounts are not billed for municipal usage and interdepartmental revenues are not billed but rather are addressed through accounting transfers. As such, billed revenue is lower than depicted in Table 4. Required adjustments to gross revenue are recognized in Table 9.

Other Income

In addition to revenues generated by user charges for water service, income is also generated through a variety of other miscellaneous revenue sources, as shown in Table 5. Sources of miscellaneous revenue include connect and disconnect fees, service fees, and other revenue. Fees associated with the account NExch-Main, Design & Ext are associated with new water development mains, while service fees are system development charges assessed to new connections. Both of these miscellaneous revenue sources are anticipated to be well below their historical levels in 2009 based on the relatively lower level of development and connection activity occurring within the service area; however, annual increases are expected throughout the study period in anticipation of improvement in the underlying economic conditions.

Table 3
Existing Rates
(Effective January 1, 2008)

RATE CODE 10 - INSIDE CITY

Meter Size	Monthly Customer Charge	Monthly Minimum Bill	Minimum Usage Requirement	Hydrant Daily Rental Fee
	$	$	Ccf	$
5/8"	12.69	12.69	0.10	1.50
3/4"	13.18	26.80	4.70	
1"	15.27	37.10	7.50	
1.5"	20.58	66.74	15.70	
2"	26.95	100.02	25.50	
3"	47.09	180.31	45.50	
4"	73.62	290.99	74.00	
6"	142.55	577.73	148.00	
8"	200.89	912.23	247.50	
10"	317.55	1,370.86	372.00	
12"	464.36	1,767.17	462.50	

Ccf Units Per Month	Ccf per Block	Rate per Ccf
		$
0 to 7	7	2.959
8 to 160	153	2.945
161 to 2,000	1,840	2.750
2,001 to 8,000	6,000	2.063
Over 8,000		1.320

Ccf - Hundred Cubic Feet

RATE CODE 20 - OUTSIDE CITY

Meter Size	Monthly Customer Charge	Monthly Minimum Bill	Minimum Usage Requirement
	$	$	Ccf
5/8"	12.89	24.36	3.60
3/4"	13.40	35.20	6.70
1"	15.59	52.81	11.40
1.5"	21.16	92.04	21.70
2"	27.84	144.92	35.80
3"	49.00	262.43	65.50
4"	76.86	432.83	108.70
6"	144.78	815.36	205.00
8"	204.03	1,149.00	288.70
10"	322.52	1,816.28	456.50
12"	471.63	2,655.98	667.00

Ccf Units Per Month	Rate per Ccf
	$
All	3.275

RATE CODE 40 - FIRE PROTECTION

Rate Code	Meter Size	Monthly Customer Charge
		$
47	2"	7.97
42	4"	20.44
43	6"	49.86
44	8"	100.21
45	10"	175.95
46	12"	281.10

RATE CODE 50 - INTERDEPARTMENTAL

Ccf Units Per Month	Rate per Ccf
	$
All	0.51

WHOLESALE

Code	Monthly Customer Charge
	$
31,32,33,34	160.00

Ccf Units Per Month	Rate per Ccf
	$
31	1.301
32	1.301
33	1.301
34	1.301

Table 4
Historical and Projected User Charge Gross Revenue

	Historical					Projected					
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
	$	$	$	$	$	$	$	$	$	$	$
Inside City											
Retail	27,976,386	28,159,104	29,053,704	29,766,786	29,008,199	29,050,000	29,142,400	29,243,200	29,344,000	29,444,800	29,545,500
City	672,212	784,142	809,086	946,653	927,187	958,900	958,900	958,900	958,900	958,900	958,900
Temporary Public Fire	126,043	164,026	137,501	79,155	148,767	116,300	116,300	116,300	116,300	116,300	116,300
Private Fire Connections	284,384	253,080	273,221	313,966	345,962	320,700	320,700	320,700	320,700	320,700	320,700
Outside City											
Retail	1,217,810	1,185,516	1,163,611	1,155,826	1,114,243	1,193,500	1,193,500	1,193,500	1,193,500	1,193,500	1,193,500
Temporary Public Fire	4,490	505	1,998	2,071	0	0	0	0	0	0	0
Private Fire Connections	75,699	75,286	75,467	75,616	78,382	74,600	74,600	74,600	74,600	74,600	74,600
Wholesale	483,534	552,486	713,683	633,360	532,964	563,500	563,500	563,500	563,500	563,500	563,500
Interdepartmental	1,075,190	1,261,577	1,022,425	907,374	905,936	894,200	894,200	894,200	894,200	894,200	894,200
Total Gross User Charge Revenue	31,915,748	32,435,723	33,250,695	33,880,806	33,061,641	33,171,700	33,264,100	33,364,900	33,465,700	33,566,500	33,667,200

Table 5
Historical and Projected Miscellaneous Revenue (a)

	Historical				Projected					
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
	$	$	$	$	$	$	$	$	$	$
Disposal of Assets-Gain/Loss	(699,359)	0	0	0	0	0	0	0	0	0
Other Miscellaneous Revenues	(69,436)	(69,939)	5,739	(53,637)	0	0	0	0	0	0
Other Income	4,067	18,390	151,867	(124,749)	38,100	38,900	39,700	40,500	41,300	42,100
Public Authority	101,771	106,460	122,013	108,282	120,000	122,400	124,800	127,300	129,800	132,400
Forfeited Discounts	492,336	518,949	493,102	546,988	511,900	522,100	532,500	543,200	554,100	565,200
Connect and Disconnect Fees	421,969	462,993	399,171	422,050	428,400	437,000	445,700	454,600	463,700	473,000
Tower/Pole Attachment Rentals	142,876	149,434	143,750	240,571	144,300	151,500	154,500	157,600	160,800	164,000
Diversion Fines	45,169	43,970	40,661	50,820	42,600	43,500	44,400	45,300	46,200	47,100
Service Fees	2,000,753	1,818,246	1,463,893	1,093,595	479,400	500,000	750,000	1,000,000	1,020,000	1,040,400
NExch-Main, Design & Ext Fee	1,281,668	1,403,996	880,873	1,466,171	374,300	337,200	350,700	364,700	379,300	330,000
Total	3,721,815	4,452,499	3,701,068	3,750,091	2,139,000	2,152,600	2,442,300	2,733,200	2,795,200	2,794,200

(a) Does not include interest and PILOT revenue.

Operation and Maintenance Expense Projections

Table 6 summarizes the BPU's historical and projected operations and maintenance (O&M) expense. These expenses are organized by primary function into the areas of Production, Transmission & Distribution, Customer Service, and General & Administrative. Costs include payroll and fringe benefits, purchased services, materials and supplies, contract services, utilities, and other items. Table 6 does not include PILOT that is paid to the Unified Government; however, it is included in the operating cash flow and will be discussed in more detail in a subsequent section of the report.

Projections of O&M expenses for the years 2009 through 2014 are based on BPU's 2009 budget levels adjusted to include allowances for inflation and other anticipated changes.

No increases in direct labor are projected for 2010 with the exception of clerical and step adjustments. Beginning in 2011, direct labor is anticipated to increase 2 percent per year. Non-labor inflation is estimated at 5 percent in 2010 and 4 percent per year from 2011 through 2014. Power costs are estimated to increase by 6 percent annually beginning in 2010 and bad debt expense is anticipated to be approximately 1.2 percent of projected billed user charge revenue during the study period. Projected O&M expenses also reflect anticipated increases in the cost of benefits due primarily to increased pension funding levels.

As a matter of policy, the BPU budgets salaries and wages (and associated benefits) based on the number of approved staff positions. However, it is common for the utility to operate at a level less than fully staffed as several positions are held and not filled. To recognize the impact of this practice, the budget also contains separate accounts with negative cost projections that serve to reduce the overall salaries and wages costs to a level commensurate with anticipated filled positions. In estimating future salaries and wages expenses for the BPU, it is assumed the positions currently being held will be gradually released or filled, such that by 2014 the cost projections reflect a staff level consistent with the total approved positions.

As illustrated on Table 6, total operation and maintenance expense is projected to increase from $23,943,100 in 2009 to $28,584,100 in 2014, or about 3.6 percent annually.

Capital Improvement Program and Financing Plan

The BPU's Major Capital Improvement Program (CIP) for 2009 through 2014 is summarized in Table 7. The CIP was developed by BPU management and consists of capital improvement projects anticipated to be designed and constructed during the study period. As shown on Line 23, the BPU anticipates spending $66,976,200 from 2009 to 2014 on projects required to maintain the system and keep it running efficiently, meet regulatory requirements, and continue to meet anticipated demand.

The CIP is comprised of water projects and common projects. The water projects are those that solely benefit the water utility, while the common projects provide benefit to both the water and electric utility. Water projects are fully funded by the water utility, and the cost

Table 6
Historical and Projected Operation & Maintenance Expense (a)

Account No.	Account Description	Historical O&M 2005 $	2006 $	2007 $	2008 $	Projected O&M 2009 $	2010 $	2011 $	2012 $	2013 $	2014 $
PRODUCTION											
50600	Misc. Steam Power Expense	39,000	54,100	54,500	17,400	30,600	32,200	33,500	34,800	36,200	37,600
51000	Maintenance Supervision	6,900	8,700	0	0	326,200	332,700	340,400	353,300	361,500	369,200
51100	Maint of Structures-Pwr Prod	0	0	0	0	5,800	6,100	6,400	6,600	6,900	7,200
60000	Operation Supv & Eng-Wtr Supp	354,300	169,100	329,600	272,800	414,800	426,100	440,900	462,400	478,800	492,500
60100	Operation L-WTRSP	(14,500)	35,700	16,800	(17,300)	0	0	0	0	0	0
62300	Fuel or Pwr Purch for Pumping	763,400	665,700	631,600	867,200	847,200	897,800	951,400	1,008,200	1,068,300	1,132,000
62400	Pump Labor	2,800	0	0	0	0	0	0	0	0	0
62500	Expenses Transferred-Cr	(923,600)	(991,000)	(909,300)	(937,900)	(962,000)	(1,019,800)	(1,080,900)	(1,145,800)	(1,214,600)	(1,287,400)
64000	Operation Supv & Eng-Wtr Proc	1,105,600	1,103,300	1,254,000	1,200,500	1,302,000	1,331,800	1,374,100	1,439,700	1,486,700	1,525,400
64100	Chemical Expense	703,400	689,100	839,100	952,400	1,481,700	1,555,800	1,618,000	1,682,700	1,750,000	1,820,000
64300	Laboratory Expense	300	100	0	2,100	200	200	300	300	300	300
64400	Wtr Proc Comp Equip & Supplies	566,700	647,000	689,600	686,500	802,400	836,500	858,700	892,500	916,600	939,100
65000	Maint Supv and Eng-Wtr Proc	919,700	940,100	978,900	1,095,600	1,134,000	1,168,500	1,199,300	1,241,700	1,274,600	1,308,400
65200	Maint Wtr Trtmnt Equip-Wtr Proc	243,400	182,100	237,400	249,500	284,900	299,100	311,100	323,600	336,500	350,000
	Total Production	3,767,400	3,504,000	4,122,200	4,388,800	5,667,800	5,867,000	6,053,200	6,300,000	6,501,800	6,694,300
TRANSMISSION & DISTRIBUTION											
56000	Operation Supv and Eng-Trans	2,500	24,800	26,500	22,800	18,700	19,000	20,000	21,500	22,600	23,200
57000	Maintenance of Station Equip	1,600	1,300	3,800	1,700	1,400	1,500	1,500	1,600	1,700	1,700
58000	Operation Supv and Eng-Dist	131,000	141,000	145,200	141,000	124,900	127,200	133,700	144,200	151,700	156,300
58200	Station Expenses-Dist	13,800	12,800	11,300	10,100	12,200	12,800	13,300	13,800	14,400	14,900
58400	Underground Line	0	0	0	400	0	0	0	0	0	0
58600	Meter Expense	536,700	616,400	587,200	540,700	580,500	594,200	608,400	631,600	646,900	661,100
58800	Misc Distribution Expense	2,000	2,900	2,100	3,800	4,400	4,600	4,800	5,000	5,200	5,400
59100	Maint of Structures-Dist	600	600	600	500	800	800	900	900	900	1,000
66200	Trans and Dist Line Expense	1,399,100	1,531,300	1,756,900	1,794,200	1,721,900	1,817,400	1,873,800	1,954,200	2,015,900	2,071,900
66300	Meter Expense	1,424,800	2,272,300	2,834,400	2,242,100	1,998,500	2,043,200	2,115,300	2,230,500	2,311,800	2,372,900
66500	Operation Labor & Exp-Wtr Dist	0	66,000	813,100	599,600	491,100	500,800	516,300	541,300	558,500	572,400
67000	Maint Supv and Eng-T and D	2,092,700	2,312,700	2,342,300	1,943,600	2,565,000	2,619,100	2,714,100	2,867,100	2,974,600	3,054,200
67100	Maint-Structure & Improvement	0	95,800	112,900	78,500	178,000	186,900	194,400	202,200	210,200	218,600
67200	Maintenance Mains	(6,400)	0	0	0	0	0	0	0	0	0
67300	Maint-Distribution-Mains	576,700	751,500	894,200	583,400	720,000	756,000	786,200	817,700	850,400	884,400
67400	Maintenance Transmission Main	3,400	0	0	0	0	0	0	0	0	0
67500	Maintenance of Services	79,200	203,400	13,100	9,200	10,600	11,100	11,600	12,000	12,500	13,000
67600	Maintenance Water Meter	1,136,200	257,900	3,800	300	0	0	0	0	0	0
67700	Maintenance of Fire Hydrants	12,900	7,800	11,200	6,300	10,000	10,500	10,900	11,400	11,800	12,300
67900	Operatn & Maint Exp-Sys Cntrl	158,000	177,500	158,200	646,300	503,500	523,100	543,800	577,400	601,100	617,400
68000	Operation Supv and Eng-T&D	(15,600)	64,800	30,400	(31,300)	0	0	0	0	0	0
70000	Store Clr-Personnel & General	362,500	402,500	485,300	440,200	484,000	502,500	512,500	529,500	540,100	550,900
70100	Store Clr-Service Center	18,400	9,700	12,800	12,900	11,900	12,600	13,200	14,000	14,700	15,500
70200	Store Clr-Quindaro	1,400	2,600	2,400	1,400	2,400	2,500	2,600	2,700	2,800	2,900
70300	Store Clr-Muncie	5,500	8,100	4,800	4,800	5,700	6,000	6,300	6,600	6,900	7,300
70400	Store Clr-Nearman	8,100	6,900	7,200	5,500	7,000	7,400	7,700	8,000	8,300	8,600
75000	Telecommunications Clr-All	89,500	99,700	121,200	110,300	115,000	118,900	124,500	132,400	138,800	143,700
80100	Trans Clr-Personnel & General	601,200	704,700	775,300	728,200	112,000	114,200	116,500	120,300	122,700	125,200
80400	Trans Clr-Muncie	105,600	102,900	105,700	131,100	295,100	303,800	312,200	323,700	332,700	342,100
81000	Trans Clr-Service Center	238,400	245,100	262,800	330,700	577,600	597,600	614,900	637,200	655,700	674,800
82000	Trans Clr-Quindaro	60,400	44,000	82,200	98,400	217,400	224,000	230,300	238,600	245,400	252,300
	Total Transmission & Distribution	9,040,200	10,167,000	11,606,900	10,456,700	10,769,600	11,117,700	11,489,700	12,045,400	12,458,300	12,804,000
CUSTOMER SERVICE											
90100	Supv and Customer Serv Expense	537,400	590,200	677,600	611,800	657,100	690,700	707,000	733,700	751,300	767,700
90200	Meter Reading Expense	588,800	649,200	739,300	682,000	693,300	712,800	727,500	751,700	767,300	783,200
90300	Cust Records and Coll Expense	932,700	1,002,100	1,094,800	1,093,200	1,084,900	1,139,800	1,166,700	1,208,800	1,237,600	1,265,800
90400	Uncollectible Accounts Expense	85,500	171,200	281,400	570,000	387,000	406,400	458,900	495,000	533,700	575,400
90500	Miscellaneous Cash Expense	(144,700)	22,600	0	0	0	0	0	0	0	0
91100	Supervision-Sales	104,300	78,100	113,000	115,200	82,900	86,400	89,000	92,200	95,000	97,800
91300	Advertising Expense	0	400	300	(200)	600	600	700	700	700	800
91900	Other Marketing Services	12,800	5,100	12,200	7,000	5,100	5,300	5,500	5,700	6,000	6,200
	Total Customer Service	2,116,800	2,518,900	2,918,600	3,079,000	2,910,900	3,042,000	3,155,300	3,287,800	3,391,600	3,496,900
GENERAL & ADMINISTRATIVE											
92000	Admin and General Salaries	1,441,600	1,439,200	1,546,100	1,558,100	1,493,900	1,543,100	1,592,400	1,673,500	1,728,700	1,770,700
92001	General Salaries	0	0	0	0	24,500	35,800	36,500	37,700	38,500	39,200
92100	Office Supplies and Expenses	1,321,300	1,068,100	1,221,700	1,429,800	1,330,400	1,397,200	1,453,600	1,512,400	1,573,500	1,637,200
92300	Outside Services Employed	466,500	488,900	894,900	918,700	1,114,400	1,170,100	1,216,900	1,265,600	1,316,200	1,368,900
92400	Property Insurance	275,000	298,900	173,400	177,600	180,000	189,000	196,600	204,400	212,600	221,100
92500	Injuries and Damages	128,100	120,300	162,000	163,400	170,400	178,900	186,100	193,500	201,300	209,300
92600	Employee Pension and Benefits	1,012,100	(268,200)	(26,000)	58,500	3,000	3,200	3,400	3,600	3,800	4,000
92602	Insurance BCBS	(38,900)	(800)	(10,600)	(4,600)	0	0	0	0	0	0
92604	Insurance Life	(700)	0	(2,000)	0	0	0	0	0	0	0
92800	Regulatory Commission Expense	43,800	29,200	30,700	43,700	60,800	63,500	65,800	68,400	70,900	73,400
93000	Misc General Expense	57,900	61,100	31,600	45,300	46,000	48,300	50,300	52,300	54,400	56,500
93100	Rents	20,800	33,000	24,500	41,300	0	0	0	0	0	0
93200	Maintenance of General Plant	682,900	537,200	558,500	476,500	171,400	179,400	186,200	193,600	200,900	208,600
	Total General & Administrative	5,410,400	3,806,900	4,604,800	4,908,300	4,594,800	4,808,500	4,987,800	5,205,000	5,400,800	5,588,900
Total O&M Expenditures		20,334,800	19,996,800	23,252,500	22,832,800	23,943,100	24,835,200	25,686,000	26,838,200	27,752,500	28,584,100

(a) Excludes Payment-in-Lieu-of-Taxes.

Table 7
Proposed Capital Improvement Program

Line No.		2009 $	2010 $	2011 $	2012 $	2013 $	2014 $	Total $
	WATER							
1	Water Equipment	203,000	135,000	740,800	653,100	640,500	717,900	3,090,300
2	Water Environmental Work	0	0	0	0	0	0	0
3	Water Facility Improvements	48,000	31,000	210,000	207,000	210,000	225,000	931,000
4	Water Furnishings & Equipment	31,000	55,500	36,100	37,400	38,700	40,000	238,700
5	Water Grounds	15,600	7,500	20,900	21,600	22,400	23,200	111,200
6	Water Technology	37,500	10,000	108,800	112,600	115,900	117,100	501,900
7	Water Accident Claims	42,900	43,800	70,100	72,600	75,100	77,700	382,200
8	Water Services	501,400	518,500	652,300	675,100	698,800	723,200	3,769,300
9	Water Meters	629,200	597,700	955,000	990,000	1,025,000	1,060,000	5,256,900
10	Water Storage and Transmission	1,919,100	71,300	569,000	171,900	100,000	153,200	2,984,500
11	Water Distribution	2,752,700	3,771,800	6,232,400	9,022,400	9,042,100	6,193,100	37,014,500
12	Water Developmental Mains	340,300	306,500	318,800	331,500	344,800	300,000	1,941,900
13	Water Production Projects	887,000	225,600	4,396,500	3,003,000	564,500	300,000	9,376,600
14	Subtotal	7,407,700	5,774,200	14,310,700	15,298,200	12,877,800	9,930,400	65,599,000
	COMMON (a)							
15	Common Equipment	0	0	0	0	0	0	0
16	Common Furnish and Equipment	25,600	5,000	5,000	5,000	5,000	5,000	50,600
17	Common Facility Improvements	6,600	52,200	43,500	45,100	45,100	45,100	237,600
18	Common Grounds	0	2,000	2,000	2,000	2,000	2,000	10,000
19	Common Technology	153,700	72,000	72,000	72,000	72,000	72,000	513,700
20	Administrative Service Technology	73,300	87,000	88,000	89,000	89,000	89,000	515,300
21	Common Tele Communications	0	10,000	10,000	10,000	10,000	10,000	50,000
22	Subtotal	259,200	228,200	220,500	223,100	223,100	223,100	1,377,200
23	Total	7,666,900	6,002,400	14,531,200	15,521,300	13,100,900	10,153,500	66,976,200

(a) Water utility share of common water and electric utility costs.

estimates shown on Lines 1 through 14 reflect the total cost of the applicable project or phase of project proposed. The common projects are funded through contributions by both the water and electric utilities. The BPU has estimated the water utility's share of common projects to be 20 percent. As such, the cost estimates included on Lines 15 through 22 of Table 7 reflect 20 percent of the total cost of the applicable project or phase of project.

Within the water projects, water distribution projects (Line 11 of Table 7) represent the most significant commitment of capital resources. The $37,014,500 in distribution related projects from 2009 through 2014 includes, among other projects, automated meter reading implementation, leak detection projects, and distribution system projects prompted either by the Unified Government or through BPU planning.

Water production projects (Line 13 of Table 7) represent the second highest category of capital projects. The $9,376,600 in production projects includes the 4.0 million gallon per day reservoir and process control upgrades at the Nearman Water Treatment Plant.

Water meters (Line 9) and water services (Line 8) total $5,256,900 and $3,769,300 in capital projects from 2009 to 2014, respectively. These projects provide improvements across all sizes of meters and services.

Table 8 shows the proposed plan to finance the capital improvements identified in Table 7. Lines 1 through 6 within Table 8 illustrate the proposed sources of funds. Financing for the proposed improvements is anticipated to be from a combination of funds on hand, system development charges, EPA grant proceeds, revenue bond proceeds, cash transfers from the operating fund, and interest income. The proposed system development charges, shown on Line 1 of Table 8, were previously projected as service fees on Table 5. The BPU was awarded a $485,000 grant from the EPA in September 2009. Anticipated spending of this grant is shown on Line 2. Revenue bonds are anticipated to be issued every 2 years beginning in mid-year 2010 and are shown on Line 3. The ability for the BPU to cash finance a portion of the capital projects is expected to improve over time as debt service coverage levels improve. Cash financing of capital improvements from annual revenues is expected to total $10,850,000 for the study period as indicated on Line 4 of Table 8. Interest income (Line 5) is expected to be earned at a rate of approximately 2.0 percent on available balances. Line 6 shows the total of all funds available to finance the capital improvement program.

The application of funds shows that $66,976,200 in total capital improvement expenditures are projected over the planning period, as previously summarized in Table 7. Capital financing issuance expenses related to the sale of bonds are estimated at 2.0 percent of the bond proceeds and are shown on Line 8. Line 9 indicates the amount of revenue bond reserve payments required by current bond covenants. In the event that the net revenues of the electric and water facilities for the previous 12 month period is 130 percent or greater of the maximum annual debt service, the BPU will not be required to make any deposits into the Bond Reserve Account. It is anticipated that no payments to the Bond Reserve Account will be required during the study period. Line 10 shows the total of all fund applications, which, when subtracted from

Table 8
Capital Financing Plan

Line No.		Fiscal Year Ending December 31, 2009 $	2010 $	2011 $	2012 $	2013 $	2014 $	Total $
	SOURCES OF FUNDS							
1	Service Fees (SDCs)	479,400	500,000	750,000	1,000,000	1,020,000	1,040,400	4,789,800
2	EPA Grants	242,500	242,500	0	0	0	0	485,000
3	Revenue Bonds	0	19,500,000	0	22,500,000	0	3,250,000	45,250,000
4	Transfer from Operating	850,000	0	0	1,000,000	3,250,000	5,750,000	10,850,000
5	Interest	60,500	140,100	143,600	93,500	92,300	3,200	533,200
6	Subtotal	1,632,400	20,382,600	893,600	24,593,500	4,362,300	10,043,600	61,908,000
	USE OF FUNDS							
7	Capital Improvement Program	7,666,900	6,002,400	14,531,200	15,521,300	13,100,900	10,153,500	66,976,200
8	Bond/Loan Issuance Expense	0	390,000	0	450,000	0	65,000	905,000
9	Bond/Loan Reserve Fund Requirement	0	0	0	0	0	0	0
10	Subtotal	7,666,900	6,392,400	14,531,200	15,971,300	13,100,900	10,218,500	67,881,200
	FUND BALANCE							
11	Net Annual Cash Balance	(6,034,500)	13,990,200	(13,637,600)	8,622,200	(8,738,600)	(174,900)	(5,973,200)
12	Beginning Fund Balance (a)	6,043,600	9,100	13,999,300	361,700	8,983,900	245,300	6,043,600
13	Cumulative Fund Balance	9,100	13,999,300	361,700	8,983,900	245,300	70,400	70,400

(a) Includes System Development Charges Reserve and Series 2009A bond proceeds.

the anticipated sources on Line 6, determines the net annual cash balance shown on Line 11 of Table 8. A 2009 beginning of year balance of $6,043,600 in unencumbered utility improvement funds is projected to be available to assist in the financing plan as shown on Line 12. This amount consists of $3,100,000 in the System Development Charges Reserve and about $2,943,600 million in bond proceeds from the Series 2009A bond issue. The resulting end of year balance is shown on Line 13.

System Operations

Table 9 shows the application of estimated future revenues under existing rates and estimated additional revenue from proposed rate increases to meet projected obligations for the period 2009 through 2014. This table summarizes the financing of operation and maintenance expense, PILOT, debt service costs on outstanding and proposed bonds, and the transfer of operating funds for major improvement financing.

Sources of funds include operating revenues from water sales under existing rates, additional revenues realized from proposed revenue adjustments, other operating revenues, and interest earnings on available balances, net of credits for free water provided to the City and Interdepartmental accounts.

Line 1 of Table 9 shows projected water revenues under existing rates as previously presented in Table 4. These revenues represent commodity and service charges at current rate levels that are subject to rate adjustments. Lines 2 through 8 show indicated increases in water revenues associated with rate increases assumed to be in effect for the number of months indicated for each calendar year. It is assumed there will be a billing lag of 1 month between the effective date of the proposed revenue increases and the date the utility begins to receive revenue from the proposed increases. The date and magnitude of increase shown for each year were selected based on consideration of three principal criteria, which include: (1) total revenue necessary to meet cash requirements, (2) total revenue required to provide a reasonable margin of coverage in excess of minimum bond coverage requirements, and (3) establishment of rate increases on a generally levelized basis intended to "phase in" or otherwise minimize the impact of burdensome rate adjustments required in any single year. These proposed increases apply to all revenues shown in Line 1, and the resulting dollar impact of total revenue from the proposed revenue increases is shown on Line 8.

Line 9 represents the credit for free water provided to the City and for Interdepartmental accounts. The value of the revenue credit increases over time as a result of the revenue adjustments proposed on Lines 2 through 7.

Line 11 shows other operating revenue, previously projected in Table 5. Operating revenues in Table 9 are net of system development charges or service fees, which for the purpose of this analysis represent a source of funds for the capital plan as shown on Line 1 of Table 8.

PILOT is shown on Line 12 of Table 9. PILOT is administered by the BPU as an additional percentage assessed on utility bills. This revenue is remitted to the Unified

Table 9
Operating Cash Flow

Line No.				Fiscal Year Ending December 31, 2009 $	2010 $	2011 $	2012 $	2013 $	2014 $
	REVENUE								
	Operating Revenue								
1	Gross Revenue Under Existing Rates			33,171,700	33,264,100	33,364,900	33,465,700	33,566,500	33,667,200
	Additional Revenue Required (a):								
	Year	Percent	Months Effective						
2	2009	0.00%	11	0	0	0	0	0	0
3	2010	8.00%	6		1,330,600	2,669,200	2,677,300	2,685,300	2,693,400
4	2011	8.00%	11			2,642,500	2,891,400	2,900,100	2,908,800
5	2012	7.50%	11				2,683,600	2,936,400	2,945,200
6	2013	7.50%	11					2,893,600	3,166,100
7	2014	7.50%	11						3,119,900
8	Subtotal Rate Revenue			33,171,700	34,594,700	38,676,600	41,718,000	44,981,900	48,500,600
9	Free Water			(1,853,100)	(1,927,200)	(2,148,100)	(2,310,000)	(2,483,200)	(2,669,500)
10	Net Revenue Received			31,318,600	32,667,500	36,528,500	39,408,000	42,498,700	45,831,100
11	Other Operating Revenue (excludes SDCs)			1,659,600	1,652,600	1,692,300	1,733,200	1,775,200	1,753,800
12	PILOT			3,587,900	4,428,100	4,602,500	4,130,100	4,453,200	4,801,600
13	Subtotal Operating Revenue			36,566,100	38,748,200	42,823,300	45,271,300	48,727,100	52,386,500
	Non-Operating Revenue								
14	Interest - Operating Fund			44,500	38,700	41,000	59,700	69,500	69,100
15	Interest - Reserve Funds (b)			104,100	104,100	104,100	104,100	104,100	104,100
16	Subtotal Non-Operating Revenue			148,600	142,800	145,100	163,800	173,600	173,200
17	**Total Revenue**			**36,714,700**	**38,891,000**	**42,968,400**	**45,435,100**	**48,900,700**	**52,559,700**
	REVENUE REQUIREMENT								
	Operating Expenditures								
18	O&M Expenses			23,943,100	24,835,200	25,686,000	26,838,200	27,752,500	28,584,100
19	PILOT Rate			9.9%	12.8%	11.9%	9.9%	9.9%	9.9%
20	PILOT			3,587,900	4,428,100	4,602,500	4,130,100	4,453,200	4,801,600
21	Subtotal O&M Expenses			27,531,000	29,263,300	30,288,500	30,968,300	32,205,700	33,385,700
22	Net Revenue			9,183,700	9,627,700	12,679,900	14,466,800	16,695,000	19,174,000
	Debt Service								
	Existing								
23	Parity Debt			7,416,300	7,524,900	8,155,100	8,155,500	8,147,500	8,158,000
24	Non-Parity Debt			2,107,400	2,107,700	2,107,700	2,107,400	2,107,500	2,108,000
	Proposed								
25	Parity Debt			0	726,900	1,453,700	2,292,400	3,131,100	3,252,300
26	Subtotal Debt Service			9,523,700	10,359,500	11,716,500	12,555,300	13,386,100	13,518,300
27	Transfer to Capital Fund			850,000	0	0	1,000,000	3,250,000	5,750,000
28	**Total Revenue Requirements**			**37,904,700**	**39,622,800**	**42,005,000**	**44,523,600**	**48,841,800**	**52,654,000**
	Operating Fund Balance								
29	Net Annual Cash Balance			(1,190,000)	(731,800)	963,400	911,500	58,900	(94,300)
30	Beginning Fund Balance (c)			3,490,000	2,300,000	1,568,200	2,531,600	3,443,100	3,502,000
31	Net Cumulative Fund Balance			2,300,000	1,568,200	2,531,600	3,443,100	3,502,000	3,407,700
32	Days O&M Reserved			35	23	36	47	46	44
33	Reserve Target - Days O&M			45	45	45	45	45	45
34	Reserve Target - $			2,951,900	3,061,900	3,166,800	3,308,800	3,421,500	3,524,100
35	Target Variance			(651,900)	(1,493,700)	(635,200)	134,300	80,500	(116,400)

(a) The BPU is seeking approval of rates that reflect the proposed revenue increases for 2010 through 2013.

(b) Includes interest earnings on the Customer Deposits, Self Insurance Reserve, Debt Service Fund, Improvement and Emergency Fund, and Economic Development Fund.

(c) Includes Unrestricted Balance plus balances in the Operating Reserve Fund, Construction Reserve, Debt Reduction Reserve, Rate Stabilization Fund, and System Development Charges Reserve.

Government. In 2009 the PILOT percentage was 9.9 percent of gross revenue from charges. As shown on Line 19 of Table 9, the BPU anticipates the PILOT percentage will increase to 12.8 percent in 2010, and then reduce to 11.9 percent in 2011, and 9.9 percent thereafter.

Interest income is presented on Lines 14 and 15, and reflects earnings on applicable operating and reserve fund balances at an estimated annual rate of 2.0 percent.

Total revenues are projected to range from $36,714,700 in 2009 to $52,559,700 in 2014, primarily reflecting the impact of proposed revenue increases, increases in the PILOT percentage, and slight increases in revenue under existing rates and other operating revenues.

Projected operation and maintenance expense from Table 6 is shown on Line 18 of Table 9. The projected PILOT rate is shown on Line 19 and the projected expense is shown on Line 20, which equates to the revenue shown on Line 12, reflecting the pass-through nature of the revenue stream to the Unified Government.

Debt service requirements for existing and proposed bonds are shown on Lines 23 through 26. These debts include outstanding revenue bonds from Series 1992, 1998, 1999, 2004, 2004B, and 2009A issues. In addition, the utility carries non-parity debt related to a 2001 Lease Series and loans from the Kansas Department of Health and Environment. Proposed revenue bond debt service resulting from the bond sales identified on Line 3 of Table 8 is shown on Line 25 of Table 9. Additional revenue bonds indicated to be issued are assumed to be 25 year term, 5.5 percent fixed interest rate bonds with equal annual payments of principal and interest.

Cash funding of the capital improvement program is represented on Line 27, as identified previously in Line 4 of Table 8, and total revenue requirements are shown on Line 28.

Line 29 indicates the estimated Net Annual Cash Balance from operations remaining at the end of each year. The $3,490,000 balance of operating funds available at the beginning of year 2009, shown on Line 30, is comprised of the 2008 end of year balances available from general operating fund investments and cash on hand. The Net Cumulative Fund Balance is shown on Line 31.

The BPU has established a financial guideline for the water utility that the Net Cumulative Fund Balance available at the end of the year should meet or exceed 60 days of operation and maintenance expense; however, achieving a 60 day reserve by 2014 would necessitate implementing substantially larger rate adjustments. To maintain a series of manageable revenue increases, the BPU has reduced the target to 45 days within the study period. The actual operating reserve is shown on Line 32 measured in number of days. Line 34 shows the operating reserve target and Line 35 indicates the difference between the 45 day reserve target and the balance estimated to be achieved on Line 32.

Bond Coverage Requirements

An additional consideration in measuring the adequacy of revenues is the provision of sufficient debt service coverage to meet the bond covenant requirements for the issuance of parity

revenue bonds. Bonds for the water and electric utilities are issued as combined utility revenue bonds, therefore, debt service coverage is considered for the two utilities on a combined basis; however, it is appropriate and prudent to examine the ability of the water utility to meet bond coverage requirements on an individual basis. Table 10 shows the ability of the water utility revenues to meet utility revenue bond coverage requirements.

The revenue bond Indenture provides that utility rates shall be maintained such that net revenue during each fiscal year will be equal to or greater than 120 percent of the maximum annual debt service in each year on a combined utility basis. For the issuance of parity revenue bonds, net revenue must be equal to or greater than 130 percent of the maximum annual debt service in the immediately prior fiscal year and projected future net revenue must be equal to or greater than 130 percent of the maximum annual debt service for the period described in the bond Indenture. In accordance with the bond Indenture, net revenue includes PILOT revenue but not PILOT expense. The ability of the water utility revenues to meet revenue bond coverage requirements with the indicated revenue increases is shown on Lines 1 through 4 of Table 10. Line 3 indicates that the minimum level of coverage is met in each year, if water rates are increased, with the exception of 2010. Based on recent history and financial performance, it is anticipated that the net revenue on a combined utility basis will be greater than 1.2 times maximum annual combined debt service requirements for each year of the study period if both electric and water rates are increased. In addition, the BPU has established a financial guideline that net revenue including PILOT should be equal to 160 percent of the maximum annual debt service. As shown on Lines 5 through 8 of Table 10, this requirement is met by 2014 for the water utility if water rates are increased as proposed.

While PILOT revenue is allowed to be included in the determination of net revenue, the rating agencies also evaluate coverage without the benefit of PILOT revenues since the BPU remits these revenues directly back to the Unified Government. Furthermore, the bond Indenture provides that rates shall be maintained such that net revenues are sufficient to not only satisfy the debt service coverage requirement, but also, among other things, make all required PILOT payments. Thus, as a practical matter, coverage should be evaluated without the benefit of PILOT revenues. As such, the BPU has established an additional target to achieve 1.4 times maximum annual debt service coverage, excluding PILOT revenue, by 2014. Lines 9 through 12 of Table 10 indicate that this target will be met by 2014 if water rates are increased; however, coverage with the indicated water revenue increases is projected to be less than 1 times maximum annual debt service in 2009 and 2010 and less than 1.2 times maximum annual debt service in 2011 and 2012 as shown on Line 11. Without the indicated water revenue increases, coverage for the water utility would be below 1 times maximum annual debt service during the entire period from 2009 through 2014.

On a stand-alone basis the current coverage levels for the water utility are considered to be significantly below target. The series of revenue increases proposed in Table 9 are necessary to improve coverage levels to meet the BPU's targets and to fund the capital improvement

Table 10
Coverage Requirements

Line No.		2009	2010	2011	2012	2013	2014
	Rate Covenant						
1	Net Revenue including PILOT Revenue (a)	12,771,600	14,055,800	17,282,400	19,014,100	21,148,200	23,975,600
2	Maximum Annual Debt Service Requirements - Total Debt	10,313,172	11,766,872	11,766,872	13,444,272	13,444,272	13,686,572
3	Coverage Ratio including PILOT Revenue	1.24	1.19	1.47	1.41	1.57	1.75
4	Target	1.20					
	Financial Guideline						
5	Net Revenue including PILOT Revenue (a)	12,771,600	14,055,800	17,282,400	19,014,100	21,148,200	23,975,600
6	Maximum Annual Debt Service Requirements - Total Debt	10,313,172	11,766,872	11,766,872	13,444,272	13,444,272	13,686,572
7	Coverage Ratio including PILOT Revenue	1.24	1.19	1.47	1.41	1.57	1.75
8	Target	1.60					
9	Net Revenue excluding PILOT Revenue (a)	9,183,700	9,627,700	12,679,900	14,466,800	16,695,000	19,174,000
10	Maximum Annual Debt Service Requirements - Total Debt	10,313,172	11,766,872	11,766,872	13,444,272	13,444,272	13,686,572
11	Coverage Ratio excluding PILOT Revenue	0.89	0.82	1.08	1.08	1.24	1.40
12	Target	1.40					

(a) Net Revenue includes the proposed revenue increases reflected in Table 9. The BPU is seeking approval of rates that reflect the proposed revenue increases for 2010 through 2013.

program. Table 10 indicates that the primary driver of the needed revenue adjustment is debt service coverage. Once debt coverage levels are met, the BPU will be able to contribute greater levels of cash to fund capital projects.

It should be recognized that the indicated percentage revenue increases discussed above are overall revenue increases. The results of the cost of service analysis presented in subsequent sections of this report will indicate the degree to which rate increases may vary from this average for the various customer classes, with some classes receiving a greater than average increase while others receive a less than average increase or perhaps a decrease.

Cost Allocations

Cost of service allocations provide a means of determining the proportionate responsibility of each customer class for the service provided. Cost responsibilities are based upon allocations of various elements of costs of service according to the relative service requirements of respective customer classes. Factors considered in determining service requirements include the volume of water used, relative peak capacity requirements placed on the system, the number and size of services to customers, and other relevant factors.

Test Year

Cost of service allocations are made for one or more years that are considered representative of the period that the resulting rates are expected to be in effect. The BPU intends to implement four rate adjustments beginning in 2010 through 2013. As shown in Table 9, the adjustments include 8.0 percent in mid-year 2010, followed by 8.0 percent to be implemented January 1, 2011, and 7.5 percent adjustments to be implemented January 1 in each year 2012 and 2013. For presentation purposes the year 2013 is selected as the test year for this study.

Cost of Service to be Allocated

The cost of service to be allocated to the various customer classes consists of the total revenue requirements for the 2013 test year as derived from Table 9 and summarized in Table 11. In determining costs of service to be met from water rates, other operating revenue and non-operating revenue are deducted from total revenue requirements.

The elements comprising the cost of service are assigned to the two cost categories of operating expense and capital costs. Operating expense consists entirely of operation and maintenance expense and PILOT expense. Operating expense is reduced by other operating revenue, PILOT revenue and interest income. Capital costs consist of debt service requirements on existing and proposed bond issues and capital improvements financed from annual revenues. Costs to be recovered by user charges are reduced by interest income. The level of total cost of service to be met by user charges is also affected by the need to design water rates assuming full recovery of the indicated revenue increase as well as potential changes in the use of the operating fund balance.

The total test year cost of service to be recovered from rates for water sales applicable to all customers of the water utility amounts to $42,747,200 with net operating expense totaling $26,078,900 and capital costs totaling $16,668,300.

Functional Cost Components

The costs of water service are analyzed by system function in order to properly allocate the costs to the various classes of customers. In this analysis, costs are separated to the basic

Table 11
Total Cost of Service
Test Year 2013

Line No.	Description	Operating Expense $	Capital Cost $	Total $
	REVENUE REQUIREMENTS			
1	Operating Expense	27,752,500		27,752,500
2	PILOT	4,453,200		4,453,200
3	Existing Debt Service		10,255,000	10,255,000
4	Proposed Debt Service		3,131,100	3,131,100
5	Revenue Capital Financing		3,250,000	3,250,000
6	Total	32,205,700	16,636,100	48,841,800
	REVENUE REQUIREMENTS MET FROM OTHER SOURCES			
7	Other Operating Revenue	1,775,200		1,775,200
8	Interest Income	101,100	72,500	173,600
9	PILOT	4,453,200		4,453,200
10	Full Year Revenue Increase Adjustment (a)	(163,900)	(84,600)	(248,500)
11	Use of Available Funds (b)	(38,800)	(20,100)	(58,900)
12	Total	6,126,800	(32,200)	6,094,600
13	Net Costs to be Met from Charges	26,078,900	16,668,300	42,747,200

(a) Adjustment for bill proration and billing lag.
(b) Reflects use of funds available at the beginning of the year.

functional components of base costs, extra capacity costs, and customer costs. Costs applicable only to specific customer classes are assigned directly to those classes.

Base costs are those which vary directly with the total quantity of water used, as well as those costs associated with serving customers under average load conditions without the elements necessary to meet water use variations or peak demands. Base costs include operating costs of supply or purchased power, treatment, pumping and distribution facilities, and a portion of administrative and general costs, as well as capital costs on water plant investment associated with serving customers to the extent required for a constant, or average annual rate of use.

Extra capacity costs include operating costs incurred due to demands in excess of average load conditions and capital costs for additional plant and system capacity beyond that which are required for the average rate of use. Total extra capacity costs are subdivided into costs associated with maximum day and maximum hour demand. Maximum day extra capacity costs are incurred in meeting demands in excess of average day requirements. Maximum hour extra capacity costs are incurred in meeting demands in excess of maximum day use.

Customer costs are defined as costs which tend to vary in proportion to the number of customers connected to the system. Customer costs are further classified as: (1) billing related costs, including meter reading, billing, collecting and accounting, and related administrative and general costs, and (2) meter related costs, including maintenance and capital charges associated with meters and services.

The separation of costs of service into these principal categories provides the means of further allocating such costs to the various customer classes on the basis of the respective base, extra capacity, and customer cost requirements of each particular type of usage.

Wholesale customers generally do not use smaller water distributions mains as do retail users. Therefore, separate functional cost of service categories are designated for costs which are common to all customer classes and those which are common to retail service classes only.

Allocation to Cost Components

The BPU water system is comprised of various facilities each designed and operated to fulfill a given function. In order to provide adequate service to its customers at all times, the system must be capable of providing not only the average annual amount of water used, but also supplying water at maximum rates of demand.

Since all customers do not exert maximum demands at the same time, capacities of the various system components are established to meet the maximum coincidental demand of all classes of customers, as a whole. The capacities of some facilities, such as raw water pumping, the water treatment plants, and transmission mains are typically designed to meet maximum day demands. Other facilities, such as treated water pumping, filtered water storage, and distribution mains, are designed to meet maximum hourly rates of water use. These requirements result in different ratios of average to maximum demands, or load factors to be met by the various parts of

the system. The demand ratios, in turn, provide the basis for allocating costs of respective facilities to the base and extra capacity cost components.

Analysis of the total system's historical maximum day and maximum hour demands to average day demands results in appropriate ratios for the allocation of capital costs and operating expenses to base and extra capacity cost components. A maximum day to average day ratio of 1.5 is used based on the historical demands of BPU's water system. This ratio indicates that approximately 66.7 percent of the capacity of facilities designed and operated to meet maximum day demand is required for average day or base usage. The remaining 33.3 percent is required for maximum day extra capacity requirements. The costs associated with facilities required to meet maximum hour demand are allocable to base, maximum day extra capacity, and maximum hour extra capacity. A maximum hour to annual average day water use ratio of 2.0 is used based on the experienced demands of the water system. This ratio indicates that approximately 50 percent of the capacity of facilities designed and operated to meet maximum hour demand is required for average day or base usage. Approximately 25 percent is utilized for maximum day extra capacity uses and the remaining 25 percent is required to meet maximum hour extra capacity demand in excess of maximum day demands.

The inside city, outside city, wholesale, and interdepartmental water demands reflect the demands that the respective groups are estimated to place on those facilities allocated directly to each. The peak demands for maximum hour facilities allocable directly to each group may be expressed in terms of base, maximum day extra capacity, and maximum hour extra capacity in excess of maximum day demand.

Customer costs, such as meter related expenses and billing, collecting, and accounting expenses, are allocated to customer classes on the basis of the number of bills rendered or customers served and are assigned directly to the customer meter and billing cost components. Costs for maintaining public and private fire hydrants are directly allocated to the fire protection cost component.

In establishing the costs associated with each functional cost component, the net capital portion of the test year cost of service associated with existing debt service is distributed to cost functions based on an allocation of the estimated test year value of water system facilities. The portion of net capital costs associated with proposed capital improvements is distributed to the cost functions based on an allocation of the estimated test year value of water system facilities plus the proposed capital improvement program for 2010 through 2014. The test year net operating expense is similarly allocated to cost functions based on the projected test year expense estimated for each water system component.

Allocation of Plant Investment

The estimated test year value of water system facilities is allocated to appropriate cost functions as the basis for further distribution to the various customer classes. The resulting

distribution is the basis for assigning the capital charges associated with debt service on existing bonds for the test year to respective classes.

The estimated test year net plant investment in existing water facilities consists of plant in service as of December 31, 2008 and the 2009 construction work in progress. Table 12 shows the allocation of total estimated water net plant value for the test year on an original cost less depreciation value basis. Total net plant investment is estimated to be $163,984,500, as shown on Line 45 of the table.

The level of detail provided in Table 12 generally conforms to the level of information available in the BPU's fixed asset records. Since the BPU fixed asset records are not sufficiently detailed to separately identify transmission, distribution, and service mains, the portion of main investment in each category shown on Lines 14 through 16 of Table 12 is estimated based on analysis of the utility's inventory of pipe length by diameter. This inch-mile analysis indicates the percentage of investment which may be attributable to the transmission, distribution, or service main categories. Because wholesale customers are served through 8 inch connections, transmission mains are defined as pipe 8 inches or greater in diameter. Distribution mains are defined as pipe with diameters of 3 inches to 6 inches. Service mains are defined as pipe less than 2.5 inches in diameter. Transmission mains are allocated common to all while distribution and service mains are allocated common to retail only.

Supply, pumping, treatment, storage, transmission mains, and meter reading and billing facilities are designed to meet the service requirements of all treated water customers; therefore, these facilities are allocated to the common to all cost functions. Plant investment is allocated to cost components on a design or cost causative basis, recognizing the principal function governing the design and resulting cost of the facility. These allocations are made using the base and extra capacity ratios previously described.

The source of supply facilities, pumping plant, treatment plant, and transmission mains are designed primarily to meet maximum day requirements and are, therefore, allocated to base and maximum day extra capacity cost components.

Reservoirs, which principally serve to meet maximum hour extra capacity requirements are allocated 90 percent to maximum hour capacity, along with the land associated with reservoirs. Water distribution mains must meet the maximum hour requirements of all customers served by the distribution mains. This excludes the wholesale customers that own and maintain their own distribution systems and are serviced through master metered arrangements. Accordingly, the investment in distribution mains is allocated to base, maximum day extra capacity, and maximum hours extra capacity cost components for only those customers served by the BPU's distribution system.

The investment in meters and services is assigned directly to metered customers and the investment in public fire hydrants is allocated directly to fire protection.

Most general plant costs have been allocated on the basis of all other plant allocations with the exception of capital leases, shown on Line 27, which includes the investment in the

Table 12
Allocation of Net Plant Investment to Functional Cost Components
Test Year 2013

Line No.		Net Plant Investment	Common to All				Common to Retail				
				Extra Capacity		Meter		Extra Capacity			
			Base	Maximum Day	Maximum Hour	Reading & Billing	Base	Maximum Day	Maximum Hour	Meters & Services	Fire Protection
		$	$	$	$	$	$	$	$	$	$
	Source of Supply Plants										
1	Structure Intake	2,423,600	1,616,500	807,100							
2	Suppy Mains	179,100	119,500	59,600							
3	Subtotal Source of Supply	2,602,700	1,736,000	866,700	0	0	0	0	0	0	0
	Pumping Plant										
4	Land	66,900	44,600	22,300							
5	Structures	7,918,500	5,281,600	2,636,900							
6	Electric Pump Equipment	466,200	311,000	155,200							
7	Other Pump Equipment	700	500	200							
8	Subtotal Pumping Plant	8,452,300	5,637,700	2,814,600	0	0	0	0	0	0	0
	Water Treatment										
9	Purification Building	48,479,100	32,335,600	16,143,500							
10	Equipment	13,263,200	8,846,600	4,416,600							
11	Subtotal Water Treatment	61,742,300	41,182,200	20,560,100	0	0	0	0	0	0	0
	Transmission & Distribution										
12	Land	147,500	14,800		132,700		0		0		
13	Reservoir	6,959,600	696,000		6,263,600		0		0		
	Mains & Access										
14	Transmission Mains	38,389,800	25,606,000	12,783,800							
15	Distribution Mains	16,847,000					8,423,400	4,211,800	4,211,800		
16	Service Mains	1,030,100								1,030,100	
17	Subtotal	56,266,900	25,606,000	12,783,800	0	0	8,423,400	4,211,800	4,211,800	1,030,100	0
18	Firemains	11,500									11,500
19	Services	6,238,900								6,238,900	
20	Meters	2,086,900								2,086,900	
21	Meter Install	0								0	
22	Hydrants	7,387,000									7,387,000
23	Subtotal Transmission & Distribution	79,098,300	26,316,800	12,783,800	6,396,300	0	8,423,400	4,211,800	4,211,800	9,355,900	7,398,500
	General Plant										
24	Land	110,300	73,600	36,700							
25	Structures & Improvements	2,961,300	1,447,800	715,900	123,700	24,200	162,900	81,400	81,400	180,900	143,100
26	Office Furniture & Equipment	391,000	191,100	94,500	16,300	3,200	21,500	10,800	10,800	23,900	18,900
27	Capital Leases	2,557,800	637,700	315,400	54,500	1,264,000	71,700	35,900	35,900	79,700	63,000
28	Transportation Equipment	220,300	107,600	53,300	9,200	1,800	12,100	6,100	6,100	13,500	10,600
29	Stores Equipment	1,400	700	300	100	0	100	0	0	100	100
30	Tools, Shop, & Equipment	8,200	4,000	2,000	300	100	500	200	200	500	400
31	Laboratory Equipment	0	0								
32	Power Operated Equipment	6,200	2,900	1,500	300	100	300	200	200	400	300
33	Communication Equipment	321,000	157,000	77,600	13,400	2,600	17,700	8,800	8,800	19,600	15,500
34	Miscellaneous Equipment	700	500	200	0	0	0	0	0	0	0
35	Water Plant Acq	0	0	0	0	0	0	0	0	0	0
36	Subtotal General Plant	6,578,200	2,622,900	1,297,400	217,800	1,296,000	286,800	143,400	143,400	318,600	251,900
37	Total Water Plant	158,473,800	77,495,600	38,322,600	6,614,100	1,296,000	8,710,200	4,355,200	4,355,200	9,674,500	7,650,400
	Common Plant										
38	Structures & Impr	992,300	485,200	240,000	41,400	8,100	54,500	27,300	27,300	60,600	47,900
39	Office Furn & Equip	3,450,500	1,687,500	834,400	144,000	28,200	189,600	94,800	94,800	210,600	166,600
40	Transportation Equip	2,900	1,400	700	100	0	200	100	100	200	100
41	Tools, Shop, & Equip	7,800	3,800	1,900	300	100	400	200	200	500	400
42	Communication Equip	1,003,300	490,700	242,600	41,900	8,200	55,100	27,600	27,600	61,200	48,400
43	Misc Equip	53,900	26,400	13,000	2,200	400	3,000	1,500	1,500	3,300	2,600
44	Subtotal Common Plant	5,510,700	2,695,000	1,332,600	229,900	45,000	302,800	151,500	151,500	336,400	266,000
45	Grand Total Water and Common Plant	163,984,500	80,190,600	39,655,200	6,844,000	1,341,000	9,013,000	4,506,700	4,506,700	10,010,900	7,916,400
46	Capital Charges to be Recovered (a)	10,255,000	5,014,900	2,479,900	428,000	83,900	563,600	281,800	281,800	626,000	495,100

(a) Includes debt service on existing bonds.

BPU's billing and financial systems. Based on guidance from the BPU, the portion attributable to the billing system has been directly assigned to meter reading and billing, while the costs associated with the financial system have been allocated based on all other plant in service.

Common plant represents investment in facilities shared with the BPU's electric utility. The common plant costs shown on Table 12 represent about 20 percent of the total investment, which has been determined by the BPU to reflect the water utility's proportionate share of such investment. This investment is allocated to water functional cost components on the basis of total water plant (Line 37).

Projected test year capital charges to be recovered on the basis of the allocation of plant investment total $10,255,000 and are shown on Line 46 of Table 12.

Allocation of Capital Improvements

Table 13 presents the allocation of capital improvements to the functional cost components. As previously shown in Table 7, the total capital improvements proposed for the 2010 through 2014 period is $59,309,400. The allocation of each improvement to cost components is performed in a similar manner to the allocation of net plant investment previously described. The anticipated investment in mains has been subdivided into the transmission, distribution, and service mains categories on the basis of existing plant in service.

Line 37 in Table 13 shows the allocation of the total proposed capital program. This amount is added to existing plant in service, summarized on Line 38, to calculate the grand total of plant in service on Line 39. Grand total plant investment, which includes existing plant investment plus projected capital improvements, is estimated to be $223,293,900 as shown in Line 39, and serves as the basis for distributing the cost of future debt and cash financed capital to functional cost components.

The capital costs projected for the test year to be recovered are $6,413,300 which includes debt service on proposed bonds, cash-financed capital, and a credit for other revenue sources. These projected capital costs are assigned to the functional cost components on the basis of the allocation of plant investment and are shown on line 40.

Allocation of Operation and Maintenance Expense

Test year operation and maintenance expenses are allocated to functional cost components as shown in Table 14. Costs have been analyzed at the account level, consistent with the projection of operating expenses previously shown in Table 6. The allocation of projected test year operating expense related to treated water service cost components is similar to the allocation of plant value. Production costs generally relate to the treatment of water; therefore, such costs are allocated to the base and maximum day component, with the exception of Lines 10 through 12. Lines 10 through 12 represent chemical and lab costs and have been allocated to the base functional cost component.

Table 13
Allocation of Capital Improvements to Functional Cost Components
Test Year 2013

Line		Net Capital Program	Common to All: Extra Capacity Base	Common to All: Extra Capacity Maximum Day	Common to All: Extra Capacity Maximum Hour	Common to All: Meter Reading & Billing	Common to Retail: Extra Capacity Base	Common to Retail: Extra Capacity Maximum Day	Common to Retail: Extra Capacity Maximum Hour	Meters & Services	Fire Protection
		$	$	$	$	$	$	$	$	$	$
	Source of Supply Plants										
1	Structure Intake	0	0	0							
2	Suppy Mains	0	0	0							
3	Subtotal Source of Supply	0	0	0	0	0	0	0	0	0	0
	Pumping Plant										
4	Land	0	0	0							
5	Structures	0	0	0							
6	Electric Pump Equipment	568,200	379,000	189,200							
7	Other Pump Equipment	0	0	0							
8	Subtotal Pumping Plant	568,200	379,000	189,200	0	0	0	0	0	0	0
	Water Treatment										
9	Purification Building	3,809,800	2,541,100	1,268,700							
10	Equipment	0	0	0							
11	Subtotal Water Treatment	3,809,800	2,541,100	1,268,700	0	0	0	0	0	0	0
	Transmission & Distribution										
12	Land	0	0		0		0		0		
13	Reservoir	4,977,000	497,700		4,479,300		0		0		
	Mains & Access										
14	Transmission Mains	15,379,700	10,258,300	5,121,400							
15	Distribution Mains	6,749,300					3,374,700	1,687,300	1,687,300		
16	Service Mains	412,700								412,700	
17	Subtotal	22,541,700	10,258,300	5,121,400	0	0	3,374,700	1,687,300	1,687,300	412,700	0
18	Firemains	0									0
19	Services	3,366,800								3,366,800	
20	Meters	16,787,400								16,787,400	
21	Meter Install	0									
22	Hydrants	1,747,800									1,747,800
23	Subtotal Transmission & Distribution	49,420,700	10,756,000	5,121,400	4,479,300	0	3,374,700	1,687,300	1,687,300	20,566,900	1,747,800
	General Plant										
24	Land	0	0	0	0	0	0	0	0	0	0
25	Structures & Improvements	1,001,500	254,600	122,500	83,400	0	62,800	31,400	31,400	382,900	32,500
26	Office Furniture & Equipment	697,100	177,200	85,300	58,000	0	43,700	21,900	21,900	266,500	22,600
27	Transportation Equipment	525,000	133,400	64,200	43,700	0	32,900	16,500	16,500	200,700	17,100
28	Stores Equipment	2,050,000	521,100	250,700	170,700	0	128,600	64,300	64,300	783,700	66,600
29	Tools, Shop, & Equipment	268,700	68,300	32,900	22,400	0	16,900	8,400	8,400	102,700	8,700
30	Laboratory Equipment	0	0								
31	Power Operated Equipment	0	0	0	0	0	0	0	0	0	0
32	Communication Equipment	93,600	23,900	11,400	7,800	0	5,900	2,900	2,900	35,800	3,000
33	Miscellaneous Equipment	874,800	222,500	107,000	72,800	0	54,900	27,400	27,400	334,400	28,400
34	Water Plant Acq	0	0	0	0	0	0	0	0	0	0
35	Capital Leases	0	0	0	0	0	0	0	0	0	0
36	Subtotal General Plant	5,510,700	1,401,000	674,000	458,800	0	345,700	172,800	172,800	2,106,700	178,900
37	Total Proposed Capital Program	59,309,400	15,077,100	7,253,300	4,938,100	0	3,720,400	1,860,100	1,860,100	22,673,600	1,926,700
38	Existing Plant in Service	163,984,500	80,190,600	39,655,200	6,844,000	1,341,000	9,013,000	4,506,700	4,506,700	10,010,900	7,916,400
39	Grant Total Plant Investment	223,293,900	95,267,700	46,908,500	11,782,100	1,341,000	12,733,400	6,366,800	6,366,800	32,684,500	9,843,100
40	Capital Charges to be Recovered (a)	6,413,300	2,736,200	1,347,300	338,400	38,500	365,700	182,900	182,900	938,700	282,700

(a) Includes debt service on proposed bonds less revenue from other sources.

Table 14
Allocation of Operation and Maintenance Expense to Functional Cost Components
Test Year 2013

Line No.	Account No.	Account Description	Operating Expense	Common to All: Base	Common to All: Extra Capacity: Maximum Day	Common to All: Extra Capacity: Maximum Hour	Common to All: Meter Reading & Billing	Common to Retail: Base	Common to Retail: Extra Capacity: Maximum Day	Common to Retail: Extra Capacity: Maximum Hour	Common to Retail: Meters & Services	Common to Retail: Fire Protection
			$	$	$	$	$	$	$	$	$	$
	Production											
1	50600	Misc. Steam Power Expense	36,200	24,100	12,100							
2	51000	Maintenance Supervision	361,500	241,100	120,400							
3	51100	Maint of Structures-Pwr Prod	6,900	4,600	2,300							
4	60000	Operation Supv & Eng-Wtr Supp	478,800	319,400	159,400							
5	60100	Operation L-WTRSP	0	0	0							
6	62300	Fuel or Pwr Purch for Pumping	1,068,300	712,600	355,700							
7	62400	Pump Labor	0	0	0							
8	62500	Expenses Transferred-Cr	(1,214,600)	(810,100)	(404,500)							
9	64000	Operation Supv & Eng-Wtr Proc	1,486,700	991,600	495,100							
10	64100	Chemical Expense	1,750,000	1,750,000								
11	64300	Laboratory Expense	300	300								
12	64400	Wtr Proc Comp Equip & Supplies	916,600	916,600								
13	65000	Maint Supv and Eng-Wtr Proc	1,274,600	850,200	424,400							
14	65200	Maint Wtr Trtmnt Equip-Wtr Proc	336,500	224,400	112,100							
15		Total Production	6,501,800	5,224,800	1,277,000	0	0	0	0	0	0	0
	Transmission & Distribution											
16	56000	Operation Supv and Eng-Trans	22,600	9,400	4,600	0	0	3,000	1,500	1,500	2,600	0
17	56200	Transmission - Station Equipment	0	0	0							
18	57000	Maintenance of Station Equip	1,700	1,100	600							
19	58000	Operation Supv and Eng-Dist	151,700	62,300	31,000	0	0	20,400	10,200	10,200	17,600	0
20	58200	Station Expenses-Dist	14,400	5,900	2,900	0	0	1,900	1,000	1,000	1,700	0
21	58400	Underground Line	0	0	0	0	0	0	0	0	0	0
22	58500	Light / Sign	0	0	0	0	0	0	0	0	0	0
23	58600	Meter Expense	646,900	277,100	94,300	0	108,900	34,200	17,100	17,100	97,700	400
24	58800	Misc Distribution Expense	5,200	2,000	1,100	0	0	700	400	400	600	0
25	59100	Maint of Structures-Dist	900	300	200	0	0	100	100	100	100	0
26	66200	Trans and Dist Line Expense	2,015,900	934,500	466,600	0	0	307,400	153,700	153,700	0	0
27	66300	Meter Expense	2,311,800								2,311,800	
28	66500	Operation Labor & Exp-Wtr Dist	558,500	228,900	114,200	0	0	75,300	37,600	37,600	64,900	0
29	67000	Maint Supv and Eng-T and D	2,974,600	1,218,600	608,400	0	0	400,900	200,400	200,400	345,900	0
30	67100	Maint-Structure & Improvement	210,200	86,100	43,000	0	0	28,300	14,200	14,200	24,400	0
31	67200	Maintenance Mains	0	0	0	0	0	0	0	0	0	0
32	67300	Maint-Distribution-Mains	850,400	348,400	173,900	0	0	114,600	57,300	57,300	98,900	0
33	67400	Maintenance Transmission Main	0	0	0	0	0	0	0	0	0	0
34	67500	Maintenance of Services	12,500	0	0	0	0	0	0	0	12,500	0
35	67600	Maintenance Water Meter	0	0	0	0	0	0	0	0	0	0
36	67700	Maintenance of Fire Hydrants	11,800	0	0	0	0	0	0	0	0	11,800
37	67900	Operatn & Maint Exp-Sys Cntrl	601,100	246,300	122,900	0	0	81,000	40,500	40,500	69,900	0
38	68000	Operation Supv and Eng-T&D	0	0	0	0	0	0	0	0	0	0
39	70000	Store Clr-Personnel & General	540,100	258,100	128,900			49,500	24,800	24,800	54,000	
40	70100	Store Clr-Service Center	14,700	4,700	2,400	0	200	1,500	800	800	4,300	0
41	70200	Store Clr-Quindaro	2,800	1,100	400	0	0	300	100	100	800	0
42	70300	Store Clr-Muncie	6,900	2,200	1,100	0	100	700	400	400	2,000	0
43	70400	Store Clr-Nearman	8,300	2,800	1,300	0	100	900	400	400	2,400	0
44	70500	Store Clr-Kaw	0	0	0	0	0	0	0	0	0	0
45	75000	Telecommunications Clr-All	138,800	46,200	23,100		34,700	17,400	8,700	8,700		
46	80100	Trans Clr-Personnel & General	122,700	19,500	8,600	0	70,300	5,000	2,500	2,500	14,200	100
47	80400	Trans Clr-Muncie	332,700	109,500	53,300	0	3,500	34,200	17,100	17,100	97,600	400
48	81000	Trans Clr-Service Center	655,700	47,900	16,200	0	563,000	5,900	2,900	2,900	16,800	100
49	82000	Trans Clr-Quindaro	245,400	38,900	17,300	0	140,700	10,000	5,000	5,000	28,400	100
50		Total Transmission & Distribution	12,458,300	3,951,800	1,916,300	0	921,500	1,193,200	596,700	596,700	3,269,100	12,900
	Customer Service											
51	90100	Supv and Customer Serv Expense	751,300				751,300					
52	90200	Meter Reading Expense	767,300				767,300					
53	90300	Cust Records and Coll Expense	1,237,600				1,237,600					
54	90400	Uncollectible Accounts Expense	533,700				533,700					
55	90500	Miscellaneous Cash Expense	0									
56	91100	Supervision-Sales	95,000	32,800	13,900	0	20,600	5,800	2,900	2,900	16,000	100
57	91200	Demo Expense	0	0	0	0	0	0	0	0	0	0
58	91300	Advertising Expense	700	300	100	0	200	0	0	0	100	0
59	91900	Other Marketing Services	6,000	2,000	900	0	1,300	400	200	200	1,000	0
60		Total Customer Service	3,391,600	35,100	14,900	0	3,312,000	6,200	3,100	3,100	17,100	100
	General & Administrative											
61	92000	Admin and General Salaries	1,728,700	597,300	252,400	0	374,700	106,200	53,100	53,100	290,800	1,100
62	92001	General Salaries	38,500	13,300	5,600	0	8,300	2,400	1,200	1,200	6,500	0
63	92100	Office Supplies and Expenses	1,573,500	543,800	229,800	0	341,000	96,600	48,300	48,300	264,700	1,000
64	92200	Admin Credit	0	0	0	0	0	0	0	0	0	0
65	92300	Outside Services Employed	1,316,200	454,800	192,200	0	285,300	80,800	40,400	40,400	221,400	900
66	92400	Property Insurance	212,600	73,500	31,000	0	46,100	13,100	6,500	6,500	35,800	100
67	92500	Injuries and Damages	201,300	69,500	29,400	0	43,600	12,400	6,200	6,200	33,900	100
68	92600	Employee Pension and Benefits	3,800	1,400	600	0	800	200	100	100	600	0
69	92602	Insurance BCBS	0	0	0	0	0	0	0	0	0	0
70	92604	Insurance Life	0	0	0	0	0	0	0	0	0	0
71	92800	Regulatory Commission Expense	70,900	24,400	10,400	0	15,400	4,400	2,200	2,200	11,900	0
72	93000	Misc General Expense	54,400	18,800	7,900	0	11,800	3,300	1,700	1,700	9,200	0
73	93099	PILOT Transfer	0	0	0	0	0	0	0	0	0	0
74	93100	Rents	0	0	0	0	0	0	0	0	0	0
75	93200	Maintenance of General Plant	200,900	69,500	29,300	0	43,500	12,300	6,200	6,200	33,800	100
76		Total General & Administrative	5,400,800	1,866,300	788,600	0	1,170,500	331,700	165,900	165,900	908,600	3,300
77	Total O&M Expenditures		27,752,500	11,078,000	3,996,800	0	5,404,000	1,531,100	765,700	765,700	4,194,800	16,300
78	Net Operating Expenses to be Recovered		26,078,900	10,410,100	3,755,800	0	5,078,100	1,438,800	719,500	719,500	3,941,800	15,300

Transmission and distribution expenses are shown itemized on Lines 16 through 49 of Table 14. The basis for allocating many of the accounts to functional cost components is the distribution of transmission, distribution, and service line investment previously developed in Table 12; however, some exceptions have been made. Meter expense shown on Line 23 reflects BPU's fraud detection program, and as such these costs have been distributed to cost components on the basis of all transmission and distribution expenses. Transmission and distribution line expense (Line 26) has been allocated on the basis of transmission and distribution investment, excluding services, based on discussions with BPU staff regarding the activities performed under this account. Lines 39 and 45 have been allocated based on an assessment by BPU to determine which functions these costs supported. Lines 40 through 44 (stores) have been allocated on the basis of all transmission and distribution expenses. Line 48 reflects fleet costs at the service center location; based on BPU analysis approximately 83% of this cost is related to supporting meter reading and customer service functions. The remainder has been allocated to all other components on the basis of transmission and distribution expenses.

Customer service costs shown on Lines 51 through 54 have been assigned directly to the common to all meter reading and billing component. Other general and administrative costs, shown on Lines 55 through 59 and 61 through 75, are allocated on the basis of all other O&M costs excluding power and chemicals.

Total operation and maintenance expenses for the provision of water service by the BPU is projected to be $27,752,500 for the 2013 test year as previously shown in Line 1 of Table 11 and shown on Line 77 of Table 14. Other operating revenue and income, excluding PILOT obligations, considered applicable to operating expense is expected to be $1,673,600 for the test year and is subtracted from the total operation and maintenance expenses. This can be viewed in detail on Lines 7 through 11 in Table 11. Total net operation and maintenance expenses of $26,078,900 to be recovered from rates are shown on Line 78 in Table 14.

Distribution of Costs to Customer Classes

The total cost responsibility of each customer class may be estimated by developing unit costs of service for each cost component and assigning those costs to the customer classes based on the respective requirements of each class. To properly recognize the costs of service, each customer class is allocated its share of base costs, extra capacity costs, customer costs, which consist of meter related costs, billing, collection, and accounting costs, and fire protection costs.

Customer Classification

For purposes of cost of service analysis and rate design, the water system's customers are classified to reflect groups of customers with similar service requirements who can be served at a similar average cost and the classification used by the BPU for record keeping purposes. The customer classes are separated into general categories of inside city, outside city, wholesale, and interdepartmental.

- **Inside City** - Inside city customers are Residential, Commercial, Industrial, Public Authority, Schools, City, City Private Fire Connection, Temporary Fire Hydrant, Public Fire Hydrant, and Private Fire Connection customers who receive retail water service at the individual consumer's premise and pay regular inside city full service rates.
- **Outside City** - Outside city customers are Residential, Commercial, Public Authority, Schools, Public Fire Hydrant, and Private Fire Connection customers who receive retail water service at the individual consumer's premise and pay regular outside city full service rates.
- **Wholesale** – This class includes contract rate customers and bulk water supplied to cities and districts outside of BPU's service area. Customers in this class include Consolidated Rural Water District #1, Lan Del Water District, the City of Bonner Springs, and Suburban Water.
- **Interdepartmental** - Includes water service provided to BPU's electric utility.

The Residential customer class includes accounts with 5/8-, 3/4-, 1-, 1 1/2-, and 2-inch meters that are billed on a monthly basis.

The Commercial customer class includes accounts with meters 5/8-inch and larger meters that are billed monthly. Included in the Commercial class are apartment buildings, small, medium and large commercial establishments and light industry.

The Industrial customer class includes inside city accounts that generally have large meters, typically larger than 1-inch. These monthly billed customers are generally large volume users and may have more than one meter.

Units of Service

In allocating the responsibility for costs of service, base costs, extra capacity costs, and customer costs may be distributed to customer classes according to respective service requirements of the classes.

The cost of service responsibility for base costs varies with the volume of water used and may be distributed to customer classes on that basis. Extra capacity costs are those costs associated with meeting peak rates of water use and are distributed to customer classes on the basis of respective extra capacity requirements. In determining the responsibility of each customer class for extra capacity costs, peak requirements of the various classes are estimated on the basis of an analysis of the water system's operating records and experience of other water utility systems.

The estimated units of service for the various customer classifications are shown in Table 15. This table shows projected test year water use by customer classes, including annual and average day usage, the estimated maximum day capacity factors and the resulting maximum day total capacity and extra capacity requirements in excess of average day, and the estimated maximum hour capacity factors and the resulting maximum hour total capacity and extra capacity requirements in excess of maximum day. Estimates of total annual water use, shown in Column 1 of the table, are consistent with projected volumes previously discussed in Table 2; however, additional detail is provided regarding specific customer class usage within the retail classes. For

Table 15
Estimated Units of Service
Test Year 2013

Line No.	Customer Class	(1) Water Usage: Total Annual (Ccf)	(2) Water Usage: Average Day (Ccf/day) (1) / 365	(3) Maximum Day: Capacity Factor (%)	(4) Maximum Day: Total Capacity (Ccf/day) (2) x (3)	(5) Maximum Day: Extra Capacity (Ccf/day) (4) - (2)	(6) Maximum Hour: Capacity Factor (%)	(7) Maximum Hour: Total Capacity (Ccf/day) (2) x (6)	(8) Maximum Hour: Extra Capacity (Ccf/day) (7) - (4)	(9) Bills	(10) Equivalent Meters & Services	(11) Fire Protection Hydrants
	INSIDE CITY											
1	Residential	3,656,600	10,018	210%	21,038	11,020	285%	28,551	7,513	541,201	45,643	
2	Commercial	2,551,727	6,991	195%	13,632	6,641	265%	18,526	4,894	56,190	15,059	
3	Industrial	1,307,608	3,582	160%	5,731	2,149	220%	7,880	2,149	1,716	2,865	
4	Public Authority	37,553	103	195%	201	98	265%	273	72	84	126	
5	Schools	128,012	351	195%	684	333	265%	930	246	1,409	1,140	
6	City	394,400	1,081	195%	2,108	1,027	265%	2,865	757	1,656	7,609	
7	City Private Fire Connection				15	15		68	53			
8	Temporary Fire Hydrants	25,100	69	195%	135	66	265%	183	48	360	450	
9	Public Fire Hydrant				2,681	2,681		12,371	9,690			6,041
10	Private Fire Connections				250	250		1,153	903			
11	Total Inside City	8,101,000	22,195		46,475	24,280		72,800	26,325	602,616	72,891	6,041
	OUTSIDE CITY											
12	Residential	146,800	402	210%	844	442	285%	1,146	302	19,031	1,615	
13	Commercial	108,100	296	195%	577	281	265%	784	207	1,309	380	
14	Public Authority	100	0	195%	0	0	265%	0	0	48	8	
15	Schools	1,000	3	195%	6	3	265%	8	2	12	6	
16	Public Fire Hydrant				124	124		571	447			279
17	Private Fire Connections				58	58		268	210			
18	Total Outside City	256,000	701		1,609	908		2,777	1,168	20,400	2,010	279
19	Wholesale	433,000	1,186	160%	1,898	712	220%	2,609	711	48		
20	Interdepartmental	1,776,300	4,867	195%	9,491	4,624	265%	12,898	3,407	240		
21	Total	10,566,300	28,949		59,473	30,524		91,084	31,611	623,304	74,901	6,320

instance, Inside City Retail has been expanded to show units of service for Residential, Commercial, Industrial, and other smaller classes of users. This additional detail was developed to enable appropriate assignment of peak system responsibility to customers. As a basis for distribution of extra capacity costs to the various customer classes, respective non-coincidental peak requirements of each class are estimated. The sum of the non-coincidental peak requirements of the individual classes exceeds the experienced or coincidental peak of the system due to diversity in requirements among the classes.

Generally, Residential and Commercial customers place more severe peak demands on the water system than Industrial customers. Therefore, Residential and Commercial customers are assigned higher capacity factors than the Industrial class, since water used by customers in the Industrial class is generally spread more uniformly throughout the day, and maximum rates of use tend to depart from the average less than the peak requirements of the Residential and Commercial customer classes. Wholesale customers are projected to have usage patterns generally related to Industrial customers, while Interdepartmental customers are projected to have usage patterns generally related to Commercial customers.

Extra capacity requirements for fire protection service recognize, in part, peak fire flow requirements, and system capabilities established by the Insurance Services Office. Requirements are allocated between inside city and outside city classes in proportion to the relative total number of 6-inch equivalent fire connections in service.

Customer costs are distributed to classes on the basis of the number of bills rendered for each customer class as indicated in Column 9 of Table 15. Meter related costs are allocated on the basis of the number of equivalent 5/8-inch meters serving each customer class which are shown in Column 10. The number of equivalent meters and services estimated for each customer classification is based upon the total number of various size meters connected to the water system by the respective classes and the ratio of the cost of various sized meters and services to the cost of a 5/8-inch meter installation.

Customer Class Cost of Service

Unit costs of service are developed by dividing the total cost allocated to each functional cost component by the total applicable units of service. The customer class responsibility for service is obtained by applying unit costs of service to the number of units for which the customer class is responsible.

Table 16 presents the development of unit costs of service applicable to each cost function. Lines 1 through 4 show the total units of service for each of the customer groups developed in Table 15. Total allocated costs shown on Lines 6, 8, and 10 were previously developed in Tables 14, 12, and 13, respectively. Unit costs of service for each component are determined simply by dividing the allocated cost by the total units of service.

Table 17 shows the allocation of cost of service to the BPU's customers. Costs are allocated to various customer classes by applying the appropriate unit cost of service to the respective service requirements of each customer class.

Table 16
Unit Cost of Service
Test Year 2013

Line No.		Total	Common to All				Common to Retail				
				Extra Capacity		Meter		Extra Capacity			
			Base	Maximum Day	Maximum Hour	Reading & Billing	Base	Maximum Day	Maximum Hour	Meters & Services	Fire Protection
		$	$	$	$	$	$	$	$	$	$
	Total Units of Service										
1	Inside City		8,101,000	24,280	26,325	602,616	8,101,000	24,280	26,325	72,891	6,041
2	Outside City		256,000	908	1,168	20,400	256,000	908	1,168	2,010	279
3	Wholesale		433,000	712	711	48					
4	Interdepartmental		1,776,300	4,624	3,407	240	1,776,300	4,624	3,407		
5	Total		10,566,300	30,524	31,611	623,304	10,133,300	29,812	30,900	74,901	6,320
	Net Operating Expense										
6	Total Cost - $	26,078,900	10,410,100	3,755,800	0	5,078,100	1,438,800	719,500	719,500	3,941,800	15,300
7	Unit Cost - $/Unit		0.98522	123.04416	0.00000	8.14707	0.14199	24.13458	23.28479	52.62684	2.42089
	Existing Capital Costs										
8	Total Cost - $	10,255,000	5,014,900	2,479,900	428,000	83,900	563,600	281,800	281,800	626,000	495,100
9	Unit Cost - $/Unit		0.47461	81.24427	13.53959	0.13461	0.05562	9.45257	9.11974	8.35771	78.33861
	Proposed Capital Costs										
10	Total Cost - $	6,413,300	2,736,200	1,347,300	338,400	38,500	365,700	182,900	182,900	938,700	282,700
11	Unit Cost - $/Unit		0.25896	44.13904	10.70513	0.06177	0.03609	6.13511	5.91909	12.53255	44.73101
12	Total Unit Cost of Service		1.71879	248.42747	24.24472	8.34344	0.23369	39.72226	38.32362	73.51710	125.49051
	Total Cost of Service										
13	Inside City	35,605,100	13,923,800	6,031,800	638,200	5,027,900	1,893,200	964,500	1,008,900	5,358,700	758,100
14	Outside City	1,187,600	440,000	225,600	28,300	170,200	59,800	36,100	44,800	147,800	35,000
15	Wholesale	938,700	744,200	176,900	17,200	400	0	0	0	0	0
16	Interdepartmental	5,015,800	3,053,100	1,148,700	82,600	2,000	415,100	183,700	130,600	0	0
17	Total	42,747,200	18,161,100	7,583,000	766,300	5,200,500	2,368,100	1,184,300	1,184,300	5,506,500	793,100

Table 17
Allocation of Cost of Service to Customer Classes
Test Year 2013

Line No.		Total	Common to All: Base	Common to All: Extra Capacity: Maximum Day	Common to All: Extra Capacity: Maximum Hour	Common to All: Meter Reading & Billing	Common to Retail: Base	Common to Retail: Extra Capacity: Maximum Day	Common to Retail: Extra Capacity: Maximum Hour	Common to Retail: Meters & Services	Fire Protection
			Ccf	Ccf/day	Ccf/day	Bills	Ccf	Ccf/day	Ccf/day	Bills	Hydrants
1	Unit Cost of Service - $/unit		1.71879	248.42747	24.24472	8.34344	0.23369	39.72226	38.32362	73.51710	125.49051
	Inside City										
	Residential										
2	Units of Service		3,656,600	11,020	7,513	541,201	3,656,600	11,020	7,513	45,643	
3	Allocated Cost - $	18,655,900	6,284,900	2,737,700	182,200	4,515,500	854,500	437,700	287,900	3,355,500	
	Commercial										
4	Units of Service		2,551,727	6,641	4,894	56,190	2,551,727	6,641	4,894	15,059	
5	Allocated Cost - $	8,778,000	4,385,900	1,649,800	118,700	468,800	596,300	263,800	187,600	1,107,100	
	Industrial										
6	Units of Service		1,307,608	2,149	2,149	1,716	1,307,608	2,149	2,149	2,865	
7	Allocated Cost - $	3,531,800	2,247,500	533,900	52,100	14,300	305,600	85,400	82,400	210,600	
	Public Authority										
8	Units of Service		37,553	98	72	84	37,553	98	72	126	
9	Allocated Cost - $	115,900	64,500	24,300	1,700	700	8,800	3,900	2,800	9,200	
	Schools										
10	Units of Service		128,012	333	246	1,409	128,012	333	246	1,140	
11	Allocated Cost - $	456,800	220,000	82,700	6,000	11,800	29,900	13,200	9,400	83,800	
	City										
12	Units of Service		394,400	1,042	810	1,656	394,400	1,042	810	7,609	
13	Allocated Cost - $	1,694,200	677,900	258,900	19,600	13,800	92,200	41,400	31,000	559,400	
	Temporary Fire Hydrants										
14	Units of Service		25,100	66	48	360	25,100	66	48	450	
15	Allocated Cost - $	107,100	43,100	16,400	1,200	3,000	5,900	2,600	1,800	33,100	
	Public Fire Hydrant										
16	Units of Service			2,681	9,690			2,681	9,690		6,041
17	Allocated Cost - $	2,136,900		666,000	234,900			106,500	371,400		758,100
	Private Fire Connections										
18	Units of Service			250	903			250	903		
19	Allocated Cost - $	128,500		62,100	21,900			9,900	34,600		
20	Total Inside City	35,605,100	13,880,700	6,015,400	637,100	5,024,900	1,887,300	961,800	1,007,100	5,325,600	758,100
	Outside City										
	Residential										
21	Units of Service		146,800	442	302	19,031	146,800	442	302	1,615	
22	Allocated Cost - $	710,700	252,600	109,800	7,300	158,800	34,300	17,600	11,600	118,700	
	Commercial										
23	Units of Service		108,100	281	207	1,309	108,100	281	207	380	
24	Allocated Cost - $	343,900	185,800	69,800	5,000	10,900	25,300	11,200	7,900	28,000	
	Public Authority										
25	Units of Service		100	0	0	48	100	0	0	8	
26	Allocated Cost - $	1,200	200	0	0	400	0	0	0	600	
	Schools										
27	Units of Service		1,000	3	2	12	1,000	3	2	6	
28	Allocated Cost - $	3,400	1,700	700	0	100	200	100	100	500	
	Public Fire Hydrant										
29	Units of Service			124	447			124	447		279
30	Allocated Cost - $	98,600		30,800	10,800			4,900	17,100		35,000
	Private Fire Connections										
31	Units of Service			58	210			58	210		
32	Allocated Cost - $	29,800		14,400	5,100			2,300	8,000		
33	Total Outside City	1,187,600	440,300	225,500	28,200	170,200	59,800	36,100	44,700	147,800	35,000
	Wholesale										
34	Units of Service		433,000	712	711	48					
35	Allocated Cost - $	938,700	744,200	176,900	17,200	400					
	Interdepartmental										
36	Units of Service		1,776,300	4,624	3,407	240	1,776,300	4,624	3,407	0	
37	Allocated Cost - $	5,015,800	3,053,100	1,148,700	82,600	2,000	415,100	183,700	130,600	0	
38	Total System	42,747,200	18,118,300	7,566,500	765,100	5,197,500	2,362,200	1,181,600	1,182,400	5,473,400	793,100

Table 18 shows allocated and adjusted cost of service by customer class, revenue under existing rates, and the indicated revenue adjustment for each class. Costs associated with City and Interdepartmental service and public fire protection are not recovered through direct charges; therefore, the cost of service for these classes is reallocated to all other retail customers in proportion to their allocated cost of service. Additionally, wholesale customers receive a facility credit for customer-owned storage facilities that reduce the BPU's cost of providing service. The amount of this credit, as shown in Column 2 on Line 18, is reallocated to all other retail customers in proportion to their allocated cost of service. The test year adjusted cost of service, reflecting the reallocation of these costs, is shown in Column 3. The indicated increase or decrease in revenue required to meet adjusted cost of service is shown in Column 5 of Table 18. It should be noted that the total system adjustment of 34.8 percent shown on Line 19 of Table 18 is the cumulative impact of the 8.0 percent increases in 2010 and 2011, and the 7.5 percent increases proposed for 2012 and 2013.

Table 18
Comparison of Allocated Cost of Service with Revenue Under Existing Rates Test Year 2013

Line No.		(1) Allocated Cost of Service	(2) Adjustment	(3) Adjusted Cost of Service	(4) Revenue Under Existing Rates	(5) Indicated Revenue Adjustment
		$	$	$ (1) + (2)	$	(3) / (4)
	INSIDE CITY					
1	Residential	18,655,900	5,246,500	23,902,400	17,438,800	37.1%
2	Commercial (a)	8,885,100	2,432,200	11,317,300	8,588,100	31.8%
3	Industrial	3,531,800	966,800	4,498,600	3,017,200	49.1%
4	Public Authority	115,900	31,700	147,600	108,600	35.9%
5	Schools	456,800	125,000	581,800	434,100	34.0%
6	City	1,694,200	(1,694,200)	0		0.0%
7	Public Fire Hydrant	2,136,900	(2,136,900)	0		0.0%
8	Private Fire Connections	128,500		128,500	320,700	-59.9%
9	Total Inside City	35,605,100	4,971,100	40,576,200	29,907,500	35.7%
	OUTSIDE CITY					
10	Residential	710,700	212,800	923,500	768,000	20.2%
11	Commercial (a)	343,900	102,900	446,800	394,100	13.4%
12	Public Authority	1,200	400	1,600	1,800	-11.1%
13	Schools	3,400	1,000	4,400	3,800	15.8%
14	Public Fire Hydrant	98,600	(98,600)	0		0.0%
15	Private Fire Connections	29,800		29,800	74,600	-60.1%
16	Total Outside City	1,187,600	218,500	1,406,100	1,242,300	13.2%
17	Wholesale	938,700	(173,800)	764,900	563,600	35.7%
18	Interdepartmental	5,015,800	(5,015,800)	0		0.0%
19	Total	42,747,200	0	42,747,200	31,713,400	34.8%

(a) Includes Temporary Public Fire (Rate Code 10H).

Water Rate Adjustments

The principal consideration in the derivation of water rate schedules is the establishment of equitable charges to customers served, commensurate with the cost of providing that service. The only method of assessing entirely equitable rates would be the determination of each customer's bill based upon his particular service requirements. Since this may be impractical when dealing with thousands of customers, rates are normally designed to fit average conditions for groups of customers having similar service requirements. Practicability also requires that rates be reasonably simple in application and subject to as few misinterpretations as possible.

The revenue requirements and cost of service allocations described in this report provide the basis for recommending adjustments to existing water rates. The revenue requirements section shows the need for adjustment and the level of revenue required. The allocations section provides the unit costs of service used in the rate design process and gives a basis for determining whether resultant rates will develop revenues which recover costs of service from customer classes in proportion to service required and provide the total level of revenue required.

Existing Water Rates

The BPU provides water service to the majority of its customers on a retail basis and existing rates are based generally upon the size of meter serving the customer's premise and the quantity of water purchased. Wholesale service is provided to various entities outside the City at rates stipulated by individual contracts for service. Provision for fire protection charges is also included in the existing rate schedules. Table 3 indicates the BPU's existing water rates.

Retail Service

The existing schedule of water rates, as summarized in Table 3, was implemented on January 1, 2008. The existing schedule of retail rates includes monthly customer charges which vary with meter size, plus declining block volume charges for inside city customers and separate uniform volume charges for all other customer classifications. Retail rates include minimum usage requirements that vary by meter size. Generally speaking, existing outside city rates are higher than inside city rates for service charges, caused in part by a higher level of minimum usage included in the outside city minimum bill. Additionally, outside city volume charges reflect a single uniform charge per quantity used. Based on discussions with the BPU staff, the level of service provided to inside city and outside city customers is similar. Without a discernable difference in the level of service provided, it is recommended that the differential between inside city and outside city rates and minimum usage requirement be phased out over time.

Wholesale Service

Existing rates to wholesale customers for water usage through master meters for resale to individual customers are currently established by individual service agreements between the BPU and the respective entities. These agreements allow for a facility credit for customer-owned storage facilities that reduces the BPU's costs of providing service.

Private Fire Protection Service

The existing schedule of charges for private fire protection service became effective January 1, 2008 and consists of a monthly charge that varies by meter size.

Proposed Water Rates

Table 19-1 shows the existing and proposed water rates for inside and outside city customers for 2010, 2011, 2012, and 2013. Table 19-2 shows the proposed water rates for fire protection, wholesale, and interdepartmental customers. As noted earlier in this section, the differential between inside and outside city rates and minimum usage requirements is recommended to be phased out over time. Additionally, the 5-step declining block for inside city is proposed to be reduced to 4 steps in 2010 and 3-steps in 2012. This change was made to allow more equitable cost recovery by customer class. Similarly, the uniform volume charge for outside city is proposed to change to a 4-step declining block in 2010 and 3 steps in 2012. Table 19-1 shows that proposed rates and minimum usage requirements are identical between inside city and outside city customers by 2013.

The rates for fire protection and interdepartmental customers are proposed to remain at the existing charges. Additionally, it is recommended that the proposed monthly charge applicable to wholesale customers remain at the existing charge. The proposed volume charge for the wholesale customers includes a storage facilities credit to recognize that the wholesale customers provide their own storage facilities.

Water Service Revenue Under Proposed Rates

A comparison of the estimated 2013 test year revenue under proposed rates to the adjusted cost of service for each of the customer classes is shown in Table 20. Column 1 of Table 20 shows the estimated test year revenue from each class anticipated to be received under the schedules of proposed rates for retail, wholesale, and fire protection service previously presented.

Column 3 of Table 20 shows the relationship of projected revenue under the proposed rates (Column 1) to the adjusted cost of service in Column 2. This comparison indicates the proposed rates will recover revenues from customer groups reasonably commensurate with the cost of service. The indicated revenue adjustment in Column 5 of Table 20 indicates the relationship between revenue projected under existing rates and revenue projected under proposed rates. The indicated revenue adjustments in Column 5 are developed for each customer

Table 19-1
Existing and Proposed Rates

Meter Size	Existing			Proposed Rates (a)											
				2010 (b)			2011			2012			2013		
	Monthly Customer Charge	Monthly Minimum Bill	Minimum Usage Requirement	**Monthly Customer Charge**	**Monthly Minimum Bill**	**Minimum Usage Requirement**	Monthly Customer Charge	Monthly Minimum Bill	Minimum Usage Requirement	**Monthly Customer Charge**	**Monthly Minimum Bill**	**Minimum Usage Requirement**	Monthly Customer Charge	Monthly Minimum Bill	Minimum Usage Requirement
	$	$	Ccf	**$**	**$**	**Ccf**	$	$	Ccf	**$**	**$**	**Ccf**	$	$	Ccf
RATE CODE 10 - INSIDE CITY															
Monthly Charge															
5/8"	12.69	12.69	0.10	**13.65**	**13.98**	**0.10**	15.55	15.90	0.10	**17.50**	**17.87**	**0.10**	19.35	19.74	0.10
3/4"	13.18	26.80	4.70	**16.60**	**32.16**	**4.70**	18.95	35.49	4.70	**21.30**	**38.60**	**4.70**	23.55	41.83	4.70
1"	15.27	37.10	7.50	**20.70**	**45.33**	**7.50**	23.60	49.78	7.50	**26.55**	**53.90**	**7.50**	29.35	58.22	7.50
1.5"	20.58	66.74	15.70	**32.50**	**80.99**	**15.70**	37.00	88.35	15.70	**41.60**	**95.03**	**15.70**	46.00	101.77	15.70
2"	26.95	100.02	25.50	**44.20**	**121.21**	**25.50**	50.40	131.84	25.50	**56.70**	**141.29**	**25.50**	62.60	150.51	25.50
3"	47.09	180.31	45.50	**96.00**	**231.21**	**45.50**	109.50	252.34	45.50	**123.00**	**271.19**	**45.50**	136.00	289.51	45.50
4"	73.62	290.99	74.00	**154.50**	**372.64**	**74.00**	176.00	406.33	74.00	**198.00**	**436.82**	**74.00**	219.00	465.99	74.00
6"	142.55	577.73	148.00	**301.00**	**734.48**	**148.00**	343.00	800.51	148.00	**386.00**	**860.14**	**148.00**	427.00	916.71	148.00
8"	200.89	912.23	247.50	**449.00**	**1,172.03**	**247.50**	512.00	1,274.98	247.50	**575.00**	**1,365.55**	**247.50**	635.00	1,451.07	247.50
10"	317.55	1,370.86	372.00	**596.00**	**1,681.32**	**372.00**	679.00	1,824.19	372.00	**763.00**	**1,949.46**	**372.00**	843.00	2,067.43	372.00
12"	464.36	1,767.17	462.50	**682.00**	**2,030.68**	**462.50**	778.00	2,201.03	462.50	**875.00**	**2,349.25**	**462.50**	967.00	2,488.27	462.50
Monthly Volume Charge - $/Ccf															
First 7 Ccf	2.959			**3.310**			3.520			**3.680**			3.890		
Next 153 Ccf	2.945			**2.910**			3.070			**3.180**			3.280		
Next 1,840 Ccf	2.750			**2.910**			3.070			**3.180**			3.280		
Next 6,000 Ccf	2.063			**2.063**			2.063			**2.450**			3.030		
Over 8,000 Ccf	1.320			**1.620**			1.990			**2.450**			3.030		
RATE CODE 20 - OUTSIDE CITY															
Monthly Charge															
5/8"	12.89	24.36	3.60	**13.65**	**25.57**	**3.60**	15.55	24.00	2.40	**17.50**	**21.92**	**1.20**	19.35	19.74	0.10
3/4"	13.40	35.20	6.70	**16.60**	**38.78**	**6.70**	18.95	40.07	6.00	**21.30**	**40.80**	**5.30**	23.55	41.83	4.70
1"	15.59	52.81	11.40	**20.70**	**56.67**	**11.40**	23.60	57.76	10.10	**26.55**	**58.03**	**8.80**	29.35	58.22	7.50
1.5"	21.16	92.04	21.70	**32.50**	**98.45**	**21.70**	37.00	100.63	19.70	**41.60**	**101.39**	**17.70**	46.00	101.77	15.70
2"	27.84	144.92	35.80	**44.20**	**151.18**	**35.80**	50.40	153.02	32.40	**56.70**	**152.42**	**29.00**	62.60	150.51	25.50
3"	49.00	262.43	65.50	**96.00**	**289.41**	**65.50**	109.50	293.17	58.80	**123.00**	**292.18**	**52.10**	136.00	289.51	45.50
4"	76.86	432.83	108.70	**154.50**	**473.62**	**108.70**	176.00	477.25	97.10	**198.00**	**473.39**	**85.50**	219.00	465.99	74.00
6"	144.78	815.36	205.00	**301.00**	**900.35**	**205.00**	343.00	917.17	186.00	**386.00**	**920.56**	**167.00**	427.00	916.71	148.00
8"	204.03	1,149.00	288.70	**449.00**	**1,291.92**	**288.70**	512.00	1,359.40	275.00	**575.00**	**1,409.43**	**261.30**	635.00	1,451.07	247.50
10"	322.52	1,816.28	456.50	**596.00**	**1,927.22**	**456.50**	679.00	1,997.03	428.30	**763.00**	**2,038.82**	**400.10**	843.00	2,067.43	372.00
12"	471.63	2,655.98	667.00	**682.00**	**2,625.77**	**667.00**	778.00	2,619.47	598.80	**875.00**	**2,565.81**	**530.60**	967.00	2,488.27	462.50
Monthly Volume Charge - $/Ccf															
All Usage	3.275			**0.000**						**0.000**					
First 7 Ccf				**3.310**			3.520			**3.680**			3.890		
Next 153 Ccf				**2.910**			3.070			**3.180**			3.280		
Next 1,840 Ccf				**2.910**			3.070			**3.180**			3.280		
Next 6,000 Ccf				**2.063**			2.063			**2.450**			3.030		
Over 8,000 Ccf				**1.620**			1.990			**2.450**			3.030		

(a) Effective January 1 of each year shown unless otherwise indicated.
(b) Effective June 1, 2010.

Table 19-2
Existing and Proposed Rates

Meter Size	Existing	Proposed Rates (a) 2010 (b)	2011	2012	2013
	$	$	$	$	$
RATE CODE 40 - FIRE PROTECTION					
Monthly Charge					
2"	7.97	7.97	7.97	7.97	7.97
4"	20.44	20.44	20.44	20.44	20.44
6"	49.86	49.86	49.86	49.86	49.86
8"	100.21	100.21	100.21	100.21	100.21
10"	175.95	175.95	175.95	175.95	175.95
12"	281.10	281.10	281.10	281.10	281.10
RATE CODES 31, 32, 33, 34 - WHOLESALE					
Monthly Charge					
All Sizes	160.00	160.00	160.00	160.00	160.00
Monthly Volume Charge - $/Ccf					
All Usage	1.301	1.420	1.530	1.640	1.770
RATE CODE 50 - INTERDEPARTMENTAL					
Monthly Volume Charge - $/Ccf					
All Usage	0.510	0.510	0.510	0.510	0.510

(a) Effective January 1 of each year shown unless otherwise indicated.
(b) Effective June 1, 2010.

Table 20
Comparison of Revenue Under Proposed Rates with Allocated Costs of Service
Test Year 2013

Line No.		(1) Revenue Under Proposed Rates	(2) Adjusted Cost of Service	(3) Revenue As A Percent of Cost of Service	(4) Revenue Under Existing Rates	(5) Indicated Revenue Adjustment
		$	$		$	
1	Residential	24,752,400	24,825,900	99.7%	18,206,800	36.0%
2	Commercial (a)	11,719,300	11,764,100	99.6%	8,982,200	30.5%
3	Industrial	4,397,300	4,498,600	97.7%	3,017,200	45.7%
4	Public Authority	136,600	149,200	91.6%	110,400	23.7%
5	Schools	584,600	586,200	99.7%	437,900	33.5%
6	Private Fire Connections	395,300	158,300	249.7%	395,300	0.0%
7	Total Retail	41,985,500	41,982,300	100.0%	31,149,800	34.8%
8	Wholesale	764,000	764,900	99.9%	563,600	35.6%
9	Total	42,749,500	42,747,200	100.0%	31,713,400	34.8%

(a) Includes Temporary Public Fire (Rate Code 10H).

classification. On a total system wide basis, the proposed rates will result in a revenue increase of 34.8 percent over revenue under existing rates.

Typical Bills

To illustrate the impact of the proposed rates on different levels of customer's bills, a comparison of water bills at various levels of water usage under existing and proposed rates is shown in Table 21. The average inside city residential customer using 7 Ccf of water per month will see an increase of $3.42 in 2010, $3.37 in 2011, $3.07 in 2012, and $3.32 in 2013. The typical bills shown in Table 21 do not include PILOT.

Table 21
Comparison of Typical Monthly Bills
Under Existing and Proposed Rates

Meter Size	Monthly Usage	Existing Rates	Typieal Water Bills				Annual Increase			
			2010	2011	2012	2013	2010	2011	2012	2013
Inches	Ccf	$	$	$	$	$				
RATE CODE 10 - INSIDE CITY										
Residential										
5/8"	2	18.61	20.27	22.59	24.86	27.13	8.93%	11.45%	10.05%	9.13%
5/8"	5	27.49	30.20	33.15	35.90	38.80	9.88%	9.77%	8.30%	8.08%
5/8"	7	33.40	36.82	40.19	43.26	46.58	10.23%	9.15%	7.64%	7.67%
5/8"	10	42.24	45.55	49.40	52.80	56.42	7.84%	8.45%	6.88%	6.86%
5/8"	15	56.96	60.10	64.75	68.70	72.82	5.51%	7.74%	6.10%	6.00%
Commercial										
5/8"	50	160.04	161.95	172.20	180.00	187.62	1.19%	6.33%	4.53%	4.23%
5/8"	100	307.29	307.45	325.70	339.00	351.62	0.05%	5.94%	4.08%	3.72%
1"	50	162.62	169.00	180.25	189.05	197.62	3.92%	6.66%	4.88%	4.53%
1"	100	309.87	314.50	333.75	348.05	361.62	1.49%	6.12%	4.28%	3.90%
1.5"	50	167.93	180.80	193.65	204.10	214.27	7.67%	7.11%	5.40%	4.98%
1.5"	100	315.18	326.30	347.15	363.10	378.27	3.53%	6.39%	4.59%	4.18%
2"	100	321.55	338.00	360.55	378.20	394.87	5.12%	6.67%	4.90%	4.41%
2"	150	468.80	483.50	514.05	537.20	558.87	3.14%	6.32%	4.50%	4.03%
Industrial										
2"	100	321.55	338.00	360.55	378.20	394.87	5.12%	6.67%	4.90%	4.41%
2"	150	468.80	483.50	514.05	537.20	558.87	3.14%	6.32%	4.50%	4.03%
4"	500	1,479.92	1,612.30	1,714.15	1,791.50	1,863.27	8.95%	6.32%	4.51%	4.01%
4"	1,000	2,854.92	3,067.30	3,249.15	3,381.50	3,503.27	7.44%	5.93%	4.07%	3.60%
6"	2,500	6,705.35	7,155.30	7,517.65	7,974.50	8,506.27	6.71%	5.06%	6.08%	6.67%
6"	5,000	11,862.85	12,312.80	12,675.15	14,099.50	16,081.27	3.79%	2.94%	11.24%	14.06%
6"	10,000	20,691.85	21,741.80	22,844.15	26,349.50	31,231.27	5.07%	5.07%	15.34%	18.53%
RATE CODE 20 - OUTSIDE CITY										
Residential										
5/8"	2	24.36	25.57	24.00	24.86	27.13	4.97%	-6.14%	3.58%	9.13%
5/8"	5	29.27	30.20	33.15	35.90	38.80	3.19%	9.77%	8.30%	8.08%
5/8"	7	35.82	36.82	40.19	43.26	46.58	2.81%	9.15%	7.64%	7.67%
5/8"	10	45.64	45.55	49.40	52.80	56.42	-0.20%	8.45%	6.88%	6.86%
5/8"	15	62.02	60.10	64.75	68.70	72.82	-3.09%	7.74%	6.10%	6.00%
Commercial										
5/8"	50	176.64	161.95	172.20	180.00	187.62	-8.32%	6.33%	4.53%	4.23%
5/8"	100	340.39	307.45	325.70	339.00	351.62	-9.68%	5.94%	4.08%	3.72%
1"	50	179.34	169.00	180.25	189.05	197.62	-5.77%	6.66%	4.88%	4.53%
1"	100	343.09	314.50	333.75	348.05	361.62	-8.33%	6.12%	4.28%	3.90%
1.5"	50	184.91	180.80	193.65	204.10	214.27	-2.22%	7.11%	5.40%	4.98%
1.5"	100	348.66	326.30	347.15	363.10	378.27	-6.41%	6.39%	4.59%	4.18%
2"	100	355.34	338.00	360.55	378.20	394.87	-4.88%	6.67%	4.90%	4.41%
2"	150	519.09	483.50	514.05	537.20	558.87	-6.86%	6.32%	4.50%	4.03%

BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

In the Matter of the Application of Suburban Water, Inc., d/b/a Suburban Water Company for Approval of a Purchase Water Adjustment (WPA)	)))	Docket No. 10-SUBW-602-TAR

CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that a true and correct copy of the Direct Testimony of Gregory L. Wilson was served by electronic service this 4th day of June, 2010, to the following parties who have waived receipt of follow-up hard copies.

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