

REBUTTAL TESTIMONY OF
ANNA M. WHITE
BLACK & VEATCH

1 **I. Introduction**

2 Q. Please state your name and business affiliation.

3 A. Anna White, Manager, Black & Veatch Management Consulting.

4 Q. On whose behalf are you appearing?

5 A. I am appearing on behalf of the Board of Public Utilities of the Unified
6 Government of Kansas City, Kansas and Wyandotte County, Kansas (“BPU”).

7 Q. Have you previously provided testimony in this matter?

8 A. Yes. I sponsored testimony initially related to the water cost of service study.

9 Q. What is the purpose of your testimony?

10 A. The purpose of my testimony is to address issues raised by the Industrial Group
11 related to the proposed “Rate Plan” developed by the BPU staff and Black &
12 Veatch working together.

13 Q. Have you had the opportunity to review the expert testimony and report of
14 Michael Gorman on behalf of the Industrial Group?

15 A. Yes, I have.

16 Q. How is your testimony organized?

17 A. My testimony is organized in six sections as follows:

18 I. Introduction

19 II. Proposed Water Capital Budget

20 III. Proposed Water Sales Revenue

21 IV. Proposed Water Operating Expenses

1 V. The Issues Resulting from Current Financial Ratings

2 VI. The Elements of the Rate Plan

3 VII. Water Cost of Service Issues

4 VIII. Revised Rate Plan

5 **II. Proposed Water Capital Budget**

6 Q. Do you agree with the modifications Mr. Gorman recommends to the water
7 capital project budget?

8 A. Mr. Gorman suggests reducing the water capital budget to \$8.5 million per year
9 beginning in 2011 yet he doesn't provide evidence that the capital program is
10 imprudent or unnecessary. I will refer the Board to the rebuttal testimony of H.
11 Edwin Overcast on pages 6 through 9 and his discussion of the standard the Board
12 should use to evaluate the proposed capital budget, the regulatory agencies role in
13 determining capital costs and limiting the amount of capital, the concept of
14 keeping rates as low as possible, and comparing future capital costs to historical
15 costs.

16 **III. Proposed Water Sales Revenue**

17 Q. Do you agree with the adjustments Mr. Gorman recommends to the water sales
18 forecast?

19 A. Mr. Gorman states in his testimony that projected sales revenue for 2011 and
20 2012 are consistent with sales levels in 2008 and 2009 and that sales during these
21 two historical years were low due to cool, wet weather. He recommends that the
22 average use per customer over the 2007 and 2008 period would represent a more
23 normal condition and would increase projected revenue by approximately \$1.7

1 million per year.

2 As explained in the water Rate Plan, projected revenue under existing rates is
3 developed by applying the existing rates to the projected number of customers and
4 water usage. In estimating future water usage, several dynamics have been
5 accounted for. Usage trends for BPU have been affected by climatological events
6 over the past five years, with several periods of substantial rainfall which has
7 served to suppress overall consumption. Based on data from the National
8 Oceanic and Atmospheric Administration (NOAA), precipitation in 2008 was
9 about 6.6 inches higher than the average since 1966 and precipitation in 2009 was
10 about 6.8 inches higher than the average. Mr. Gorman suggests using unit usage
11 from 2007 and 2008 and suggests it would reflect a more normal sales condition;
12 however, based on the information provided by NOAA, 2007 reflects substantial
13 decreased rainfall which would result in water usage greater than normal
14 conditions. Precipitation in 2007 was about 4.9 inches less than the average.
15 Therefore, the period 2007 through 2008 is not representative of normal use
16 conditions.

17 While climatological events do impact historical water usage, other factors need
18 to be taken into consideration as well. A general trend of decreasing usage per
19 account, which has been observed with the inside City retail class beginning in
20 2006, may also be attributed to the combined result of more efficient fixtures and
21 appliances, better water management, and reduced average household size. Such
22 a trend is relatively common for water utilities in the Midwest and needs to be
23 taken into consideration when projecting future water sales.

1 The unit usage projections used in the Rate Plan are based on an analysis of the
2 unit usage patterns since 2004, looking at the most recent 3-year averages and the
3 most recent year historical data as well as discussions with BPU staff regarding
4 trends they are observing.

5 **IV. Proposed Water Operating Expenses**

6 Q. Do you agree with the adjustments Mr. Gorman recommends to the projected
7 operation and maintenance expense?

8 A. Mr. Gorman has suggested adjusted expenses on two bases. First, he proposes to
9 eliminate a number of positions from the budget; and second, he proposes altering
10 the assumption related to the growth in non-payroll O&M. I will refer the Board
11 to the rebuttal testimony of H. Edwin Overcast on pages 2 through 6 and his
12 discussion of the standard the Board should use to review the reasonableness of
13 the expenses in the proposed rate plan and the evidence provided by the BPU staff
14 that the proposed expenses level are reasonable and based on sound analysis. I
15 will also refer the Board to the rebuttal testimony of Lori Austin and her concern
16 with the BPU's capability to provide reliable service with Mr. Gorman's
17 recommended adjustments.

18 **V. The Issues Resulting from Current Financial Ratings**

19 Q. Please discuss the current financial ratings for the BPU.

20 A. The BPU currently has a bond rating from each of three major rating agencies –
21 Fitch Ratings, Moody's Investor Service and Standard and Poor's. The utility
22 rating is one of the factors that influence both the cost of debt and the access to
23 the capital markets. The table below shows the actual cost of debt for 2009 as a

1 percentage of revenues and the forecast cost of debt for 2010 – 2014 as a percent
2 of the forecast revenue requirements.

Table 1

Cost of Debt as a % of Total Revenue Requirements

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
Debt Service						
Existing	9,523,700	9,632,600	10,262,800	10,262,900	10,255,000	10,266,000
Proposed	0	726,900	1,453,700	2,292,400	3,131,100	3,252,300
Total	<u>9,523,700</u>	<u>10,359,500</u>	<u>11,716,500</u>	<u>12,555,300</u>	<u>13,386,100</u>	<u>13,518,300</u>
Revenue Requirements						
	31,318,600	31,411,000	40,466,400	44,259,600	47,730,700	51,473,400
Debt Service %						
	30.4%	33.0%	29.0%	28.4%	28.0%	26.3%

3
4 As the table illustrates, the cost of debt represents an average of almost 30% of
5 revenue requirements and is a significant element of the costs on which rates are
6 based. It is important to understand how rating agencies evaluate the utility to
7 determine the rating and to be aware of these requirements in analyzing the BPU
8 staff plan and the plan presented by Mr. Gorman on behalf of the Industrial
9 Group. I will refer the Board to the rebuttal testimony of H. Edwin Overcast on
10 pages 10 through 13 regarding the elements considered by the rating agencies in
11 determining bond ratings and the financial metrics that the BPU staff has included
12 in the rate plan.

13 **VI. The Elements of the Rate Plan**

14 Q. Please summarize the elements of the BPU proposed rate plan.

15 A. The proposed rate plan is a carefully crafted plan designed to restore financial
16 metrics to levels consistent with maintaining the current bond rating. Restoring
17 the financial metrics occurs through a series of annual rate adjustments designed

1 to recover the expected costs for each year of the plan from the number of
2 customers and sales in that year which form the basis for the expense levels in
3 that year. In addition to restoring the financial health of the utility, the plan
4 correctly recognizes that ultimately dollars to restore the financial metrics are
5 residual dollars after the payment of all expenses including debt service costs and
6 raising adequate dollars retained to maintain a sound capital structure to support
7 new investment.

8 Q. Would it have been possible to restore the financial metrics on a one year test
9 period?

10 A. Yes. The BPU staff could have proposed to restore the financial metrics in a
11 single year. This would have necessitated a single large increase followed by
12 annual adjustments designed to maintain those targets in subsequent years as new
13 debt was issued and additional operating expenses incurred. Such an option
14 would be more expensive due to the costs of annual rate proceedings.
15 Additionally, that option would have meant far larger a rate increase in the initial
16 year than under the plan and would adversely impact customers who faced such a
17 large increase in that year.

18 Q. Is it common for utilities to propose plans that phase in large rate increases over
19 several years rather than increase rates all at once?

20 A. Yes. Utilities recognize that under some circumstances large rate increases may
21 need to be phased in over time to permit customers to adjust gradually to higher
22 rates. The BPU staff proposed just such a phase in of increases in the Rate Plan.
23 Instead of restoring the financial metrics in the first year the Rate Plan does so

1 over a future, reasonably long period. Specifically, the BPU staff recognizes that
2 there is no ideal time to raise rates to customers. However, without the proposed
3 Rate Plan to do so the cost of financing new capital requirements will increase
4 and the quality of service will deteriorate. As described by the BPU staff in
5 detail, the Rate Plan sets minimum requirements for maintaining a favorable
6 financial rating and operating a reliable, efficient and safe system over the Rate
7 Plan period. The Rate Plan is the best option for managing the BPU system over
8 the next few years while minimizing the cost for customers consistent with Board
9 policies on financial metrics and operating the system to meet customer
10 requirements.

11 **VII. Water Cost of Service Issues**

12 Q. Do you have any concerns regarding Mr. Gorman's statements presented in his
13 testimony regarding the water cost of service study?

14 A. Yes, I do. I disagree with his statement that the Black & Veatch water cost of
15 service study has material deficiencies and substantially over-allocated costs to
16 large retail customers.

17 The first alleged deficiency that Mr. Gorman identifies is the allocation of
18 distribution mains to all retail customers irrespective of the customer's size and
19 annual volumetric usage. Mr. Gorman's position is that large customers, such as
20 the Industrial Group he is representing, cannot physically be served by water
21 mains smaller than 6 inches.

22 Q. Why do you disagree with Mr. Gorman's statements?

23 A. The BPU's distribution system is a grid/looped system, which consists of

1 connected pipe loops throughout the service area. With this type of system, there
2 are several pathways that water can follow from the source to the consumer. As a
3 result, it cannot be shown that water from smaller mains is not periodically drawn
4 into larger mains that directly serve the larger customers and help stabilize water
5 pressure in the distribution system.

6 Because the determination of which mains benefit which customers is difficult if
7 not impossible, the general industry practice, as illustrated in the American Water
8 Works Association (AWWA) Manual M1 *Principles of Water Rates, Fees, and*
9 *Charges*, is to allocate both transmission and distribution mains serving retail
10 customers on a common-to-all basis as currently indicated in the Rate Plan.

11 Q. Do you have any other concerns regarding Mr. Gorman remarks?

12 A. Yes, I do. Mr. Gorman asserts that the water cost of service study is flawed
13 because it does not allocate any portion of distribution pipe or transmission pipe
14 to the max hour demand factor. Mr. Gorman states that Black & Veatch only
15 allocated portions of the distribution pipe to the max day function, with no
16 allocation to max hour demands.

17 Q. Are these statements correct?

18 A. No, they are not. All water mains considered to be part of the distribution system
19 are allocated on a maximum hour extra capacity basis. The tables on pages 30,
20 32, and 33 of exhibit AMW-3 reflect the allocation of capital and operating
21 expenses to the functional cost components. These tables reflect the allocation of
22 costs associated with distribution mains (those 3 through 6 inches in diameter) to
23 the common-to-retail max hour component.

1 Q. Are the costs associated with transmission mains allocated to the max hour as
2 well?

3 A. No, they are not. Transmission mains are typically designed to transport water
4 from treatment plants, which are designed on a maximum day basis, to storage
5 facilities in the distribution system where these storage facilities are used to
6 stabilize pressure in the system, help meet fire demands, and meet maximum hour
7 extra capacity requirements. Although transmission mains may be partially relied
8 on to meet a portion of maximum hour demands, they primarily serve to meet
9 maximum day demands and are allocated to base and maximum day extra
10 capacity demands as indicated in the water rate study.

11 Q. Why are distribution mains allocated to maximum hour extra capacity demand?

12 A. Distribution mains are interconnected with the storage facilities and customers
13 and as such must be able to meet base, maximum day extra capacity and
14 maximum hour extra capacity demands. Therefore, these mains are allocated on a
15 maximum hour extra capacity basis while transmission mains are allocated on a
16 maximum day extra capacity basis resulting in the entire transmission and
17 distribution system being allocated to base, maximum day and maximum hour
18 capacity. In the Rate Plan, distribution mains are defined as pipe larger than 2.5
19 inches and smaller than 8 inches. Pipe 8 inches and larger is defined as
20 transmission mains and pipe 2.5 inches and smaller is defined as service lines.

21 Q. Do you have any other concerns regarding Mr. Gorman remarks?

22 A. Yes, I do. Mr. Gorman states that the water cost of service study should be
23 modified to allocate a portion of electric pumping and power to the maximum

1 hour extra capacity demand.

2 Electric power is primarily used for treatment and pumping water into the
3 transmission system. Both treatment and transmission system facilities are
4 designed and used on a maximum day basis and as such electric power
5 consumption is also allocated on a maximum day extra capacity basis.

6 Q. Can you explain how the capital costs associated with the water portion of the
7 proposed automated meter reading (AMR) project have been allocated?

8 A. Consistent with the methodology presented in the AWWA Manual M1, customer
9 costs associated with meters and services (both capital and operating costs) are
10 distributed to customer classes on the basis on equivalent meter and service cost
11 factors.

12 Q. What conclusions do you reach related to the cost of service study that has been
13 used to develop rates?

14 A. The Black & Veatch cost study is reliable for moving rates in the direction of cost
15 of service. The changes suggested by Mr. Gorman are not consistent with cost
16 causation as demonstrated in the content of the report, my original testimony and
17 in this rebuttal.

18 **VIII. Revised Rate Plan**

19 Q. Have you considered how the changes suggested by Mr. Gorman will affect the
20 BPU's financial guidelines?

21 A. Yes, I have. I have updated our operating cash flow to reflect the following
22 revisions:

23 1. Reduce the non-labor escalation factor for operating and maintenance expense

1 from 4% to 2% per year beginning in 2011.

2 2. Assume that 18 positions that are currently unfilled and being held will be
3 filled by 2014 so that the number of filled positions in 2014 will be 635.

4 3. Limit the amount of capital improvement projects to \$8,500,000 beginning in
5 2011.

6 4. Assume an 8% revenue increase July 1, 2010; 8% January 1, 2011; 3%
7 January 1, 2012; 0% January 1, 2013; and 4.1% January 1, 2014.

8 Q. Did you increase the projected revenue under existing rates as Mr. Gorman
9 suggested in his testimony?

10 A. No, I did not. As mentioned earlier in my rebuttal testimony, I do not feel that
11 there is justification for increasing projected water usage based on historical
12 usage, climatological data, and usage trends currently occurring in the water
13 industry.

14 Q. Will the BPU's financial guidelines be achieved with these revised revenue
15 adjustments?

16 A. No. The BPU has established a financial guideline for the water utility that the
17 net cumulative fund balance available at the end of the year should meet or
18 exceed 45 days of operation and maintenance expense. A revised operating cash
19 flow (Table 9-Alternative 1) and summary of coverage requirements (Table 10-
20 Alternative 1) is included with this testimony as Exhibit AMW-5. As indicated
21 on Line 32 of Table 9, the operating reserve target will be achieved beginning in
22 2011. In addition, the BPU has established a financial guideline that net revenue,
23 excluding PILOT revenue, should be equal to 140 percent of the maximum annual

1 debt service by 2014. Line 11 of Table 10 indicates that the debt service coverage
2 ratio will not meet the BPU's target during the study period.

3 Q. Have you been advised by BPU staff to make any modifications to the revenue
4 requirements that would affect the Rate Plan?

5 A. Yes, we have. We have been directed by BPU staff to develop a proposed Rate
6 Plan that reflects the following revisions:

7 1. Reduce the non-labor escalation factor for operating and maintenance expense
8 from 4% to 3% per year from 2011 through 2014.

9 2. Assume that 18 positions that are currently unfilled and being held will be
10 filled by 2014 so that the number of filled positions in 2014 will be 635. In
11 the Rate Plan it was assumed that the staff level in 2014 would reflect 681
12 filled positions which is the current number of approved positions.

13 3. We have not made any changes to the timing or costs of the proposed capital
14 projects; however, due to the rate hearing schedule, the BPU was not able to
15 issue revenue bonds in July of 2010 as indicated in our Rate Plan. We have
16 moved the first proposed bond issue to January 2011. As a result, the BPU
17 may need to delay some 2010 projects until the funds are available in 2011.

18 4. Move the effective date of the 2010 revenue increase from June 1 to July 1.

19 5. Evaluate the effect of deferring the construction of the 4MG reservoir for 2
20 years, from 2011 and 2012 to 2013 and 2014.

21 Q. Have you prepared revised tables that reflect the 5 revisions to revenue
22 requirements mentioned above?

23 A. I am currently preparing revised tables and rate schedules to reflect these 5

1 revisions and will present them in future testimony.

2 Q. Does this complete your testimony?

3 A. Yes, it does.

4

**Kansas City Board of Public Utilities
Water Utility**

**Table 10 - Alternative 1
Coverage Requirements**

Line No.		<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
	Rate Covenant						
1	Net Revenue including PILOT Revenue (a)	12,771,600	14,071,800	17,852,100	17,848,000	17,500,400	18,529,000
2	Maximum Annual Debt Service Requirements - Total Debt	10,313,172	11,300,972	11,300,972	12,102,372	12,102,372	12,519,872
3	Coverage Ratio including PILOT Revenue	1.24	1.25	1.58	1.47	1.45	1.48
4	Target	1.20					
	Financial Guideline						
5	Net Revenue including PILOT Revenue (a)	12,771,600	14,071,800	17,852,100	17,848,000	17,500,400	18,529,000
6	Maximum Annual Debt Service Requirements - Total Debt	10,313,172	11,300,972	11,300,972	12,102,372	12,102,372	12,519,872
7	Coverage Ratio including PILOT Revenue	1.24	1.25	1.58	1.47	1.45	1.48
8	Target	1.60					
9	Net Revenue excluding PILOT Revenue (a)	9,183,700	9,672,100	13,249,600	13,877,300	13,508,100	14,374,200
10	Maximum Annual Debt Service Requirements - Total Debt	10,313,172	11,300,972	11,300,972	12,102,372	12,102,372	12,519,872
11	Coverage Ratio excluding PILOT Revenue	0.89	0.86	1.17	1.15	1.12	1.15
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.