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July 31, 2008

Luly Massaro, Clerk
Rhode Island Public Utilities Commission
89 Jefferson Blvd.
Warwick, RI 02888

Re: Docket No. 3942

Dear Ms Massaro,

Enclosed please find the direct testimony of Thomas S. Catlin in the above-entitled matter. Thank you for your attention to this matter.

Very truly yours,
John Bell
for
Leo J. Wold
Leo J. Wold
Special Assistant Attorney General

cc: Service List

BEFORE THE

PUBLIC UTILITIES COMMISSION

OF RHODE ISLAND

KENT COUNTY	**)**	
WATER AUTHORITY	**)**	**DOCKET NO. 3942**

DIRECT TESTIMONY

OF

THOMAS S. CATLIN

ON BEHALF OF THE

DIVISION OF PUBLIC UTILITIES AND CARRIERS

JULY 2008

EXETER

ASSOCIATES, INC.

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BEFORE THE

PUBLIC UTILITIES COMMISSION

OF RHODE ISLAND

KENT COUNTY WATER AUTHORITY	))	DOCKET NO. 3942

Direct Testimony of Thomas S. Catlin

Introduction

Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is Thomas S. Catlin. I am a principal with Exeter Associates, Inc. Our offices are located at 5565 Sterrett Place, Suite 310, Columbia, Maryland 21044. Exeter is a firm of consulting economists specializing in issues pertaining to public utilities.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I hold a Master of Science Degree in Water Resources Engineering and Management from Arizona State University (1976). Major areas of study for this degree included pricing policy, economics, and management. I received my Bachelor of Science Degree in Physics and Math from the State University of New York at Stony Brook in 1974. I have also completed graduate courses in financial and management accounting.

Q. WOULD YOU PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE?

A. From August 1976 until June 1977, I was employed by Arthur Beard Engineers in Phoenix, Arizona, where, among other responsibilities, I conducted economic feasibility, financial and implementation analyses in conjunction with utility construction projects. I also served as project engineer for two utility valuation studies.

From June 1977 until September 1981, I was employed by Camp Dresser & McKee, Inc. Prior to transferring to the Management Consulting Division of CDM in April 1978, I was involved in both project administration and design. My project administration responsibilities included budget preparation and labor and cost monitoring and forecasting. As a member of CDM's Management Consulting Division, I performed cost of service, rate, and financial studies on approximately 15 municipal and private water, wastewater and storm drainage utilities. These projects included: determining total costs of service; developing capital asset and depreciation bases; preparing cost allocation studies; evaluating alternative rate structures and designing rates; preparing bill analyses; developing cost and revenue projections; and preparing rate filings and expert testimony.

In September 1981, I accepted a position as a utility rates analyst with Exeter Associates, Inc. I became a principal and vice-president of the firm in 1984. Since joining Exeter, I have continued to be involved in the analysis of the operations of public utilities, with particular emphasis on utility rate regulation. I have been extensively involved in the review and analysis of utility rate filings, as well as other types of proceedings before state and federal regulatory authorities. My work in utility rate filings has focused on revenue requirements issues, but has also addressed service cost and rate design matters. I have also been involved in analyzing affiliate relations, alternative regulatory mechanisms, and regulatory restructuring issues.

This experience has involved electric, natural gas transmission and distribution, and telephone utilities, as well as water and wastewater companies.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY PROCEEDINGS ON UTILITY RATES?

A. Yes. I have previously presented testimony on more than 200 occasions before the Federal Energy Regulatory Commission and the public utility commissions of Arizona, California, Colorado, Delaware, the District of Columbia, Florida, Idaho, Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Montana, Nevada, New Jersey, Ohio, Oklahoma, Pennsylvania, Utah, Virginia and West Virginia, as well as before this Commission. I have also filed rate case evidence by affidavit with the Connecticut Department of Public Utility Control.

Q. ARE YOU A MEMBER OF ANY PROFESSIONAL SOCIETIES?

A. Yes. I am a member of the American Water Works Association (AWWA) and the Chesapeake Section of the AWWA. I serve on the AWWA's Rates and Charges Committee and on the AWWA Water Utility Council's Technical Advisory Group on Economics.

Q. ON WHOSE BEHALF ARE YOU APPEARING?

A. I am presenting testimony on behalf of the Division of Public Utilities and Carriers (the Division).

Q. HAVE YOU PREVIOUSLY TESTIFIED ON WATER UTILITY ISSUES BEFORE THIS COMMISSION?

Yes, I have been asked by the Division to address water utility issues on several occasions. I testified on revenue requirement, cost of service and/or rate design issues in Newport Water Division, Docket Nos. 2029, 2985, 3457, 3578, 3675 and

3818; Providence Water Supply Board, Docket Nos. 2022, 2048, 2304, 2961, 3163, 3446, 3684 and 3832; Kent County Water Authority, Docket No. 2098, Woonsocket Water Department, Docket Nos. 2099 and 2904; United Water Rhode Island, Inc., (formerly Wakefield Water Company), Docket Nos. 2006 and 2873; and Pawtucket Water Supply Board, Docket Nos. 3193, 3378, 3497 and 3674.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. Exeter Associates was retained by the Division to assist it in the evaluation of the rate filing submitted by the Kent County Water Authority (KCWA or the Authority) on March 31, 2008. This testimony presents my findings and recommendations with regard to the overall revenue increase to which KCWA is entitled and with regard to the design of rates to recover those revenues.

Q. HAVE YOU PREPARED SCHEDULES TO ACCOMPANY YOUR TESTIMONY?

A. Yes. I have prepared Schedules TSC-1 through TSC-14. Schedule TSC-1 provides a summary of revenues and expenses under present and proposed rates. Schedules TSC-2 through TSC-13 present my adjustments to KCWA's claimed revenues, operating expenses and debt service costs. Schedule TSC-14 summarizes of the rates necessary to generate the Division's recommended revenues and provides a proof of revenues at proposed rates.

Q. WHAT TIME PERIODS HAVE YOU UTILIZED IN MAKING YOUR DETERMINATION OF KCWA'S REVENUE REQUIREMENTS?

A. Consistent with KCWA's filing, I have utilized a test year that corresponds the fiscal year (FY) ended June 30, 2007 and a rate year that corresponds to the twelve months ending October 31, 2009 as the basis for determining the Authority's revenue requirements and the revenue increase necessary to recover those requirements.

Q. WHAT IS YOUR RECOMMENDATION WITH REGARD TO THE APPROPRIATE INCREASE IN REVENUES IN THIS PROCEEDING?

A. As shown on Schedule TSC-1, it is my recommendation that KCWA receive a revenue increase of $2,622,427 in this proceeding. This amount is $2,842,129 less than the increase of $5,464,556 that KCWA has requested in this proceeding.

Q. WHAT IS YOUR RECOMMENDATION WITH REGARD TO HOW THE RATES NECESSARY TO RECOVER THE ADDITIONAL REVENUES SHOULD BE DEVELOPED?

A. After reviewing the updated cost allocation study presented by Mr. Christopher Woodcock on behalf of the Authority, I have accepted that cost study as appropriate for use in determining cost responsibility and setting rates in this proceeding. Accordingly, I have incorporated my adjustments to the overall cost of service into that study to develop the Division's proposed rates. As I will discuss, I do not oppose implementing rates that include the small seasonal differential presented by KCWA as an alternative. However, I am not advocating the adoption of seasonal rates at this time.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

A. The remainder of my testimony is divided into sections corresponding to the issue being addressed. These sections are set forth in the Table of Contents for this testimony.

Sales Volumes

Q. WHAT ADJUSTMENTS DID KCWA MAKE TO SALES VOLUMES IN ITS FILING

A. In its filing, KCWA made two adjustments to test year sales volumes. First, an adjustment was made to reflect the planned shutdown of Clariant Corporation's pigment manufacturing facility in Coventry at the end of 2008. The second adjustment was to reflect a reduction in the water consumption of Amgen that occurred just after the end of the test year.

Q. WHAT IS YOUR POSITION WITH REGARD TO THESE TWO ADJUSTMENTS?

A. I have accepted KCWA's adjustment to reflect the loss of sales to Clariant Corporation at the end of 2008. However, I do not agree that the adjustment to reflect a decline in the sales to Amgen is appropriate. While I agree that the Amgen's consumption has declined subsequent to the test year, that decrease has been offset by an increase in the sales to other new and existing customers. Compared to test year sales of 390.3 million cubic feet, sales for the 12 months ended April 2008 were 391.7 million cubic feet. Given that overall sales have increased despite the decline in sales to Amgen, I have eliminated KCWA's adjustment to reflect reduced purchases by Amgen. As shown on Schedule TSC-3, this adjustment increases test year revenues at present rates by $162,302. In addition, consistent with the manner in which Mr. Woodcock calculated Water Protection Fee revenue, I have also reflected the impact of reinstating the Amgen volumes on those revenues. As shown on Schedule TSC-3, the increase in Water Protection Fee revenues is $857.

Service Charge and Fire Protection Revenue

Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO THE REVENUES THAT KCWA REALIZES FROM SERVICE CHARGES AND FIRE PROTECTION CHARGES?

A. I am proposing to adjust the revenue that KCWA receives from monthly and quarterly service charges and public and private fire protection charges to reflect the number of units of service as of June 30, 2008, the most recent date available. This is consistent with the numerous other adjustments that KCWA has made to update test year costs to projected rate year levels. As shown on Schedule TSC-4, this adjustment increases revenues at present rates by $12,374. In developing this adjustment, I have reduced the number of monthly bills to reflect the loss of two 5/8-inch, one 3-inch and one 6-inch meter at the Clariant facility that is expected to close at the end of 2008, consistent with Mr. Woodcock's analysis on behalf of KCWA.

Enforcement Charges

Q. PLEASE SUMMARIZE KCWA'S PROPOSAL WITH REGARD TO ENFORCEMENT CHARGES.

A. KCWA is proposing to adopt a new set of enforcement charges for violations of moratoriums on use of water and violations of water use restrictions called for in an emergency. Under this proposals, the following series of charges would apply for violations of the same moratorium of restriction event:

1. Notice of Violation by KCWA employee through direct contact or door hanger with no charge.

2. 2nd Notice of Violation with service termination and assessment of turn off ($55) and turn on ($45) charges to reactivate service.

3. 3rd Notice of Violation with service termination and flat charge of $250 to reactivate service.

4. 4th Notice of Violation with service termination and flat charge of $500 to reactivate service.

5. 5th Notice of Violation with service terminated until event has been rescinded. Turn off and turn on charges to be assessed.

Service would be restored after the second, third and fourth violations when the applicable charges are paid.

Q. WHAT CONCERNS DO YOU HAVE?

A. In general, I am concerned that the proposed penalties for the fourth and fifth violations are excessive. I am also concerned about the specific application of those penalties for the violation of odd-even water restrictions.

Q. PLEASE EXPLAIN.

A. According to the responses to Division data requests set 1, number 3 (DIV 1-3) KCWA's odd-even water restrictions are a permanent regulation that is in effect year round and for which KCWA sees no conditions that warrant lifting the restrictions. In addition, according to DIV 1-5, violation of the odd-even restrictions will be subject to the proposed enforcement charges. Because these restrictions are permanent and are in effect on a continuous basis, it would appear that KCWA's enforcement charges would apply cumulatively even if the violations occurred months or even years apart. That is, a first violation could occur this year and another violation in 2009 would be the second violation under the terms of the proposed tariff. (Violations apply consecutively for the same moratorium or water use restriction.) Taken to the extreme, as written, the tariff could result in the permanent loss of water service on the fifth violation of the permanent odd-even watering restriction even if that violation occurred years after the first violation.

Q. WHAT ARE YOUR RECOMMENDATIONS?

A. First, it is my recommendation on behalf of the Division that the enforcement charges as proposed not apply to the odd-even watering restriction. As noted by KCWA, these restrictions are a permanent demand management tool. They are not a water use moratorium or water use restrictions that result from an emergency. Instead, it is the Division's recommendation that the first violation of the odd-even restrictions in a calendar year be subject to a notice of violation by direct contact from a KCWA employee or a door hanger with no charge. Second and subsequent violations would be subject to service termination with turn-off and turn-on charges being paid to reinstate service.

With regard to violations of emergency moratoriums and restrictions, it is my recommendation on behalf of the Division that the proposed penalties for fourth and fifth violations be eliminated from the tariff and that the proposed penalty for third violations be applied to third and subsequent violations. In addition, after a fourth violation, KCWA would be allowed to apply for a shut-off for the remainder of the emergency through a Division proceeding.

Q. DO YOU HAVE ANY OTHER RECOMMENDATIONS WITH REGARD TO THE PROPOSED ENFORCEMENT CHARGES?

Yes. In response to DIV 1-6, KCWA indicated that it does not expect to receive any revenue from this new tariff because customers will not violate the restrictions due to the severity of the penalties. It is my recommendation that KCWA track the amount of any revenue it does receive from these tariffs and report the amounts annually to the Commission and Division. In addition, any revenues that are received from these charges should be deposited in the restricted operating reserve fund that I will discuss subsequently.

Labor Costs

Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO LABOR COSTS.

A. In its filing, KCWA increased wages for the test year ended June 2007 to reflect wage rate increases of four percent per year for 2.33 years to arrive at projected wages for existing employees in the rate year. (Wages for one new employee were also added) According to the response to Commission 1-12 and 1-13, four percent wage rate increases were the targeted levels for the fiscal years ended June 2008 and June 2009. However, the overall average increases in each year were only 3.2 percent. Accordingly, I have adjusted the wages for existing employees in the rate year to include wage rate increases of 3.2 percent for 2.33 years.

Q. HAVE YOU PREPARED A SCHEDULE SHOWING THE DEVELOPMENT OF YOUR ADJUSTMENT?

A. Yes. The calculation of my adjustment is presented on Schedule TSC-5. As indicated there, including 3.2 percent rather than 4.0 percent wage rate increases reduces total labor costs by $35,468 and labor costs charged to O&M by $34,984.

The associated reduction in payroll taxes is $2,714, for a total reduction to O&M payroll and related costs of $37,697.

Health Insurance Costs

Q. WHAT ADJUSTMENTS ARE YOU PROPOSING TO KCWA'S CLAIM FOR HEALTH INSURANCE COSTS?

A. I am proposing to make two adjustments to KCWA's claimed allowance for medical and dental insurance costs. First, I am proposing to reflect an updated estimate of the rate year level of these premiums based on the actual premiums that went into effect on May 1, 2008 as provided in response to DIV 1-23. As shown on Schedule TSC-6, medical and dental premiums are projected to be $20,577 lower than KCWA estimated at the time of its filing. However, because retiree insurance premiums increased by $22,155, the overall effect of updating the premium levels is to increase rate year costs slightly.

The second adjustment that I am proposing is to reduce the employee insurance costs (but not retirees) to be included in rates to reflect a ten percent employee contribution toward medical insurance premiums. Currently, KCWA does not require employees to make any contribution toward either medical or dental insurance premiums. Requiring employee contributions toward health insurance premiums has become more and more prevalent in recent years as insurance premiums have increased dramatically. As an example, Rhode Island's largest non-investor owned utility, the Narragansett Bay Commission (NBC), began requiring employee contributions several years ago. Because NBC has a significant unionized employee composition, the phase-in of contributions has been required. However, as of the current fiscal year, the limit on employee contributions, which are based on a percent of salary, is up to 7.5 percent of premiums and that percentage increases to 10 percent on July 1, 2009. Similarly, employees of the State of Rhode Island are being required to pay increasing percentages of their insurance premiums. For FY 2009, most state employees will be required to pay for between 12 and 15 percent of their medical, dental and vision premiums.

Q. IS IT YOUR POSITION THAT KCWA MUST REQUIRE ITS EMPLOYEES TO PAY TEN PERCENT OF THEIR MEDICAL INSURANCE PREMIUMS?

A. No. It is my recommendation that only 90 percent of the cost be recognized as an expense for ratemaking. To the extent that KCWA elects not to require employee contributions, it would cover the differential through the operating revenue allowance.

Q. WHAT IS THE OVERALL EFFECT OF YOUR ADJUSTMENTS TO HEALTH INSURANCE COSTS?

A. As shown on Schedule TSC-6, the effect of my adjustments to update health insurance premiums and reflect a ten percent employee contribution to medical insurance premiums is to reduce health insurance expense by $45,145.

Chemicals Expense

Q. HOW DID KCWA DETERMINE ITS CLAIM FOR THE COST OF CHEMICALS?

A. Mr. Woodcock developed the rate year allowance for chemicals by multiplying the test year quantity of each chemical used by the unit cost as of the end of the test year.

He then applied an escalation factor of 16.16 percent to account for 2.33 years of price increases at twice the rate of general inflation.

Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO KCWA'S CLAIMED CHEMICAL COSTS?

A. As shown in the following table, the quantities of chemicals used in the test year are significantly higher than either FY 2005, FY 2006 or FY 2008.

TABLE A

Chemical Usage

	FY 2005	FY 2006	Test Year FY 2007	FY 2008
Chlorine (Gallons)	825	625	1,085	548
Phosphate* (Gallons)	--	360	480	240
Potassium Hydroxide (lbs)	344,482	366,458	546,366	357,874

*Tetra Potassium Pyrophosphate

These data clearly indicate that chemical usage in the test year was not representative of normal ongoing requirements. Therefore, I am proposing to adjust chemical expense to reflect the average quantities of chemicals utilized over the last four years. Because the volume of water sold and treated in FY 2005 and FY 2006 was higher than the test year, the use of this four-year average is likely to be conservative.

In addition to using a four-year average to normalize chemical usage, I have also updated chemical prices to reflect the most recent purchase price for each chemical used. Because these prices are more recent, I have applied KCWA's growth rate of 6.64 percent for only one year rather than 2.33 years.[1] As shown on Schedule

[1] The phosphate price was as of March 2008, or 13 months from the mid-point of the rate year. The chlorine and potassium hydroxide prices are as of May 2008, or 11 months from the midpoint of the rate year.

TSC-7, these revisions result in a reduction in projected rate year chemical costs of $29,989.

T&D Mains Maintenance

Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO TRANSMISSION AND DISTRIBUTION MAINS MAINTENANCE EXPENSE.

A. During the test year, KCWA recorded transmission and distribution (T&D) mains maintenance expense of $912,017, including $371,581 of labor and $540,436 of non-labor costs. As shown in the following table, the FY 2007 test year non-labor costs are significantly in excess of the costs incurred in the two prior years and in FY 2008. According to the response to DIV 2-2, the increase in FY 2007 was largely due to costs associated with water main breaks, including almost $94,000 for one break in December 2006.

TABLE B

Comparison of T&D Mains Maintenance Costs
FY 2005 - FY 2008

	Labor	Non-Labor	Total
FY 2005	$330,881	$143,611	$474,092
FY 2006	330,025	239,653*	570,678
Test Year	371,581	540,436	912,071
FY 2008	369,303	223,002**	592,304

* Excludes $191,000 obsolete inventory audit adjustment.
** Includes only 10 months of materials costs in the amount of $22,138.

Considering that the non-labor costs incurred in the FY 2007 test year were more than double the non-labor costs incurred in any of the other three years, T&D mains maintenance costs in the test year are clearly not representative of the ongoing costs that can be expected to be incurred in the rate year. In order to develop a normalized level of costs, I have adjusted T&D mains maintenance expense to reflect an average of the costs incurred in FY 2005 through FY 2008.

Q. HAVE YOU PREPARED A SCHEDULE SHOWING THE DEVELOPMENT OF YOUR ADJUSTMENT?

A. Yes. Schedule TSC-8 shows the calculation of my adjustment. As indicated on that schedule utilizing a four-year average of non-labor costs results in normalized expense level of $287,932. This represents a reduction of $252,504 in T&D mains maintenance expense. In developing the four-year average, I have adjusted FY 2008, material costs to include two additional months of costs based on the average monthly expense in the first ten months. This calculation should be updated when the actual May and June 2008 materials costs are known.

Q. DO YOU HAVE ANY OTHER COMMENTS WITH REGARD TO T&D MAINS MAINTENANCE EXPENSE?

A. Yes, as discussed subsequently, KCWA has made a general inflation adjustment to those elements of O&M expense that were not separately adjusted from test year to rate year levels. Included in the costs to which an inflation factor was applied was non-labor T&D mains maintenance expense. This resulted in the test year expense for these costs being increased by $42,732, from $540,436 to $583,168. In developing my revised adjustment for general inflation, which I discuss in the next section of my testimony, I have excluded T&D mains maintenance costs. I have been conservative by including FY 2007 in a four-year average, as indicated by the fact that the normalized non-labor costs that I have allowed are well above the level of such costs in each of the three years other than FY 2007. Moreover, these costs are clearly a function of a variety of factors and do not show a trend due to inflation. Therefore, I have excluded these costs from my calculation of my adjustment for general inflation.

General Inflation

Q. PLEASE EXPLAIN THE ADJUSTMENT THAT KCWA MADE FOR GENERAL INFLATION.

A. In its filing, KCWA separately adjusted various elements of O&M expense to reflect projected price increases or other changes. For those O&M costs that were not separately adjusted, KCWA made a general inflation adjustment based on the average increase in the Consumer Price Index (CPI) Northeast for the years 2003 through 2007. KCWA applied this inflation factor of 3.32 percent per year for 2.33 years, the interval between the test year and the rate year.

Q. DO YOU AGREE WITH THE USE OF THE CPI TO ADJUST FOR GENERAL INFLATION?

A. No. The CPI is a measure of the change in prices for the goods and services purchased by the reference population (in this case, consumers in the Northeast). Among the major categories of goods and services are food, housing (including energy), apparel, transportation and medical care. These categories are largely either not applicable to KCWA or have already accounted for by separate adjustments at rates greater than the rate of inflation. (Such items include labor costs, medical and dental insurance, worker’s compensation insurance, liability and property insurance, chemical costs, and power costs.)

Q. WHAT MEASURE OF INFLATION ARE YOU PROPOSING TO UTILIZE IN LIEU OF THE CPI?

A. I am proposing to utilize the Gross Domestic Product Price Index (GDP-PI) to account for general inflation. The GDP-PI is a broad based measure of inflation or price changes that is based on all of the goods and services that make up the U.S. gross domestic product. As such, the GDP-PI is more representative of the types of costs to which a general price escalator is being applied in this proceeding.

To determine the appropriate escalation factor to be applied to adjust costs from the test year to the rate year, I have utilized the projected increase in the GDP-PI according to the July 10, 2008 Blue Chip Economic Indicators consensus forecast. For the 2.25-year period from the first quarter of 2007 to the second quarter of 2009, the Blue Chip consensus forecast is for an increase in the GDP-PI of 2.32 percent per year. This translates to an overall increase of 5.5 percent for the 2.33 years from the test year to the rate year.

Q. WHAT IS THE EFFECT OF YOUR ADJUSTMENT ON RATE YEAR O&M COSTS?

A. As shown on Schedule TSC-9, I am recommending a general inflation adjustment of $41,732 based on projected increase in the GDP-PI of 5.5 percent from the test year to the rate year. This is $60,995 less than the general inflation increase of $102,727 proposed by KCWA. Of this total reduction, $42,732 is due to my exclusion of non-labor T&D mains maintenance expense from the calculation for the reasons explained previously.

Purchased Water Costs

Q. HOW DID KCWA DETERMINE ITS RATE YEAR CLAIM FOR PURCHASED WATER COSTS?

A. To determine KCWA's claimed allowance for the cost of purchased water, Mr. Woodcock multiplied the actual test year purchases by the current rate paid to the Providence Water Supply Board (PWSB). Mr. Woodcock notes that the test year volumes, rather than a four-year historical average, have been used to be consistent with KCWA's use of the "(adjusted) test year sales." (Woodcock Direct at p. 11.)

Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO PURCHASED WATER COSTS?

A. Had KCWA not adjusted test year sales, I agree that the use of test year purchased water volumes would be reasonable. However, KCWA's adjustment to reflect the loss of sales to Clariant Corporation results in a reduction of 4.14 percent in KCWA's total sales (and a loss of revenue of over $481,000). I am proposing to adjust purchased water costs to reflect this significant reduction in water sales volumes. To calculate the appropriate adjustment, I have reduced the net volume of water purchases by 4.14 percent, the percentage of total test year sales volumes to be lost due to the reduction in volumes purchased by Clariant Corporation. I have multiplied this reduction by the current rate paid to purchase water from PWSB. As shown on Schedule TSC-10, this results in a reduction in purchased water costs of $172,742.

I would note that if KCWA's adjustment to reduce test year sales for a reduction in purchases by Amgen is accepted, the concomitant reduction in water purchases should also be made. Based on KCWA's proposed reduction in sales volumes of 59,670 Hcf, the resulting reduction in purchased water costs would be $63,798.

Insurance Costs

Q. ARE YOU PROPOSING TO MAKE TO AN ADJUSTMENT TO KCWA'S CLAIMED COSTS FOR WORKER'S COMPENSATION, AND LIABILITY/PROPERTY INSURANCE?

A. No. The Authority has now received its FY 2009 quote for Worker's Compensation insurance that is higher than the projected for the rate year by approximately $7,000. However, KCWA's FY 2009 budgeted expense for liability/property insurance indicates that the premium for that insurance will be below KCWA's claim by a similar amount. Accordingly, I am not proposing an adjustment at this time. However, I will review whether an adjustment is appropriate when the actual FY 2009 liability/property insurance premium becomes available.

PUC Assessment

Q. HOW DID KCWA PROJECT THE PUC ASSESSMENT INCLUDED IN ITS FILING?

A. The PUC Assessment included in KCWA's claimed cost of service was projected by escalating the FY 2008 assessment by 15.61 percent, the average annual increase in the PUC assessment from FY 2006 to FY 2008. As shown on Mr. Woodcock's Schedule 1E, assessments were projected for FY 2009 and FY 2010. The average of these two amounts was used as the estimated assessment for calendar year 2010, which is the claimed assessment included as a rate year expense.

Q. WHAT ADJUSTMENT ARE PROPOSING TO MAKE TO THIS CLAIMED PUC ASSESSMENT?

A. Based on information provided by the Division, I am proposing to include a PUC assessment of $54,800. This amount is based on increasing the FY 2008 assessment at the rate of 3.0 percent per year for 1.33 years. As shown on Schedule TSC-11, this results in a reduction of $10,855 compared to KCWA's projection.

Q. WHAT IS THE BASIS FOR THE THREE PERCENT ANNUAL INCREASE?

A. For FY 2008, the total PUC assessment to all utilities was $5.858 million, of which $52,680 was allocated to KCWA based on its FY 2006 revenues of $16,860,260. For FY 2009, the total PUC assessment for all utilities is now expected to be $6.041 million, an increase of 3.1 percent. The allocation to KCWA will be based on its FY 2007 revenues of $16,112,488, a reduction compared to the revenues used to allocate the FY 2008 PUC assessment. While the revenues of all utilities have not been tabulated, it is expected that the total revenues used to allocate the FY 2009 assessment will be at least equal to those utilized for the FY 2008 assessment.[2] Accordingly, I have utilized a slightly lower increase for KCWA than the overall increase in the total PUC assessment.

[2] Overall revenues utilized include fuel and purchased power cost recovery revenues and purchased gas cost revenues for electric and gas utilities, respectively. Given the increases in these costs, it is expected the total revenue base will increase.

O&M Reserve Funding

Q. PLEASE SUMMARIZE KCWA'S CLAIM FOR O&M RESERVE FUNDING.

A. Pursuant to the terms of its bond indenture, KCWA is required to bring its O&M reserve to a level equal to 25 percent of its operating budget by the end of each fiscal year. In this proceeding, the Authority is requesting a funding allowance in rates that would bring the reserve to 25 percent of its rate year operating costs. Because KCWA was significantly behind on funding the reserve at the time of the filing, the funding allowance that KCWA has requested in rates is $500,668.

Q. WHAT ADJUSTMENTS ARE PROPOSING TO MAKE TO THE AMOUNT INCLUDED IN THE COST OF SERVICE FOR O&M RESERVE FUNDING?

A. I have adjusted the allowance for O&M Reserve funding to be included in rates to reflect two changes. First, I have revised the required reserve balance to equal 25 percent of the Division's recommended level of operating expenses. Second, I have updated the existing balance to reflect the projected O&M Reserve balance as of the beginning of the rate year. As shown on Schedule TSC-12, the required funding based on the Division's operating expenses is $2,246,436 and the reserve balance is projected to be $2,153,575. As a result, the required funding for the rate year is $92,861. This is $407,807 less than the funding level of $500,668 requested by KCWA in its filing.

Q. DO YOU HAVE ANY ADDITIONAL COMMENTS WITH REGARD TO THE REQUIRED LEVEL OF FUNDING?

A. Yes. Of the total reduction in the required O&M Reserve funding, the Division's adjustments to operating expenses account for approximately $152,000 of the overall reduction in the required O&M Reserve funding allowance. The remaining $255,325 is due to an increase in the projected level of funding as of the beginning of the rate year. I have included this increase based on the response to DIV 2-5. Part b of that request asked KCWA to "[p]lease indicate whether any additional deposits are expected to be made to either reserve [O&M or R&R] prior to October 31, 2008. If no, explain why not. If yes, identify the projected addition." KCWA responded that the O&M "[r]eserve should be increased by $255,335 if funds become available." I recognize that this response does not definitively indicate that the deposit will be made. However, I believe it is appropriate to expect that the deposit will be made unless KCWA affirmatively demonstrates that it is financially not possible to do so. To do otherwise would result in an additional $255,325 to be included in rates until the completion of the Authority's next rate case, whether or not the funding is required.

R&R Reserve Funding

Q. PLEASE SUMMARIZE KCWA'S CLAIM FOR RENEWAL AND REPLACEMENT (R&R) RESERVE FUNDING.

Similar to the O&M Reserve, the Authority bond indenture requires KCWA to maintain an R&R Reserve Fund. The balance in this reserve is required to be equal to one percent of the Authority's net plant as of the end of each fiscal year. Like the

O&M reserve, KCWA was significantly behind on funding the R&R Reserve at the time of the filing. As a result, KCWA included a funding requirement of $463,332 in its claimed revenue requirements. This was the amount necessary to bring the reserve from its balance at the time of the filing of $521,820 to the projected requirement of $985,152 as of the end of the rate year.

Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO KCWA'S REQUESTED FUNDING ALLOWANCE?

A. Since the time of its filing, KCWA made a deposit to the R&R Reserve of $263,332, which brought the reserve to the required balance as of June 30, 2007. This reduces the funding necessary to bring the R&R Reserve to required balance as of the end of the rate year to $200,000. Accordingly, I have adjusted the funding allowance to reflect this change, as shown on Schedule TSC-13.

Q. ARE YOU PROPOSING TO MAKE AN ADJUSTMENT TO RECOGNIZE ANY ADDITIONAL FUNDING OF THE R&R RESERVE PRIOR TO THE BEGINNING OF THE RATE YEAR?

A. No. I have not reflected any additional funding of the R&R Reserve prior to the rate year. I have assumed that the funding of the O&M Reserve will take precedence over funding of the R&R Reserve.

Q. DO YOU HAVE ANY OTHER RECOMMENDATIONS WITH REGARD TO THE R&R RESERVE FUNDING?

A. Yes. The R&R Reserve funding allowance of $200,000 per year that I have recommended is greater than the funding that KCWA is likely to require on an annual basis in the near future. To the extent that this funding allowance exceeds that required, KCWA should be required to set the funds aside so that the appropriate disposition can be determined in the Authority's next rate case.

Infrastructure Replacement Funding

Q. WHAT LEVEL OF FUNDING HAS KCWA SOUGHT FOR ITS INFRASTRUCTURE REPLACEMENT (IFR) PLAN?

A. KCWA has requested annual funding for its IFR plan of $6,000,000 per year. This represents an increase of $1,194,626 over the currently authorized funding allowance. Because IFR funding was reduced in the test year due to revenue levels, the $6,000,000 annual allowance represents an increase of $1,995,522 over actual test year IFR funding.

Q. WHAT IS YOUR RECOMMENDATION?

In order to moderate the rate increase in this proceeding, I am recommending that the IFR funding be increased to $5.4 million rather than to $6.0 million as requested by KCWA. As shown in the response to Commission 1-15, KCWA's IFR spending plan for FY 2009 includes final payments for its 2005 and 2006 IFR construction, expenditures for its 2006, 2007, and 2009 IFR plans, and expenditures for the Quaker booster refurbishment and Tiogue service area conversion projects. In addition to these construction projects requiring funding of $15.65 million, KCWA also has $21 million of capital improvements scheduled in FY 2009 and FY 2010 from its 2002 General Project Fund. Given the current economic strains on consumers from high energy prices as well as general economic conditions. I believe it appropriate to moderate the increase in IFR funding. Even at a level of $5.4 million for IFR funding, KCWA will have $18.1 million in IFR funds and $21 million in capital improvement funds available in FY 2009 and FY 2010.

Q. DO YOU HAVE ANY OTHER RECOMMENDATIONS WITH REGARD TO FINANCING KCWA'S CAPITAL COSTS?

A. KCWA has indicated that in addition to its IFR program, it intends to seek rate funding of a meter replacement program in its next rate case. According to the response to DIV 1-18, that program is expected to cost well over $5 million. This program will not be eligible for bond funding because KCWA does not take ownership of customer meters. Accordingly, KCWA should evaluate the feasibility of utilizing bond funding for other projects in order to reduce the costs that are funded from current revenues and spread the costs over time to the future customers that will benefit from the facilities.

Operating Revenue Allowance

Q. WHAT HAS KCWA REQUESTED WITH REGARD TO THE OPERATING REVENUE ALLOWANCE THAT THE COMMISSION HAS HISTORICALLY ALLOWED FOR MUNICIPAL UTILITIES?

A. KCWA has requested an operating revenue allowance equal to five percent of total rate revenues. KCWA has proposed that an amount equal to 1.5 percent of revenue be unrestricted and that the remaining 3.5 percent be restricted for use in the event that revenues are below expected levels. To make use of the 3.5 percent restricted allowance, KCWA would make a filing with the Commission requesting access and KCWA is asking the Commission to rule on any such request within 60 days.

Q. WHAT IS YOUR RECOMMENDATION WITH REGARD TO KCWA'S REQUEST FOR A FIVE PERCENT OPERATING REVENUE ALLOWANCE?

A. It is my recommendation that the operating revenue allowance continue to be set at the historical level of 1.5 percent of rate revenues. In developing rate year expenses, KCWA has not only made adjustments for known and measurable changes to bring expenses to rate year levels, it has also applied an inflation factor to all other expenses for which known and measurable changes were not made. In addition, the amounts included as contributions to the O&M reserve and the R&R reserve include amounts in excess of the normal annual requirements in order to bring those reserves to the required levels. Finally, test year sales, which were already below those in any of the last five years, have been reduced to reflect the full annual revenue loss of a major customer even though that customer is not scheduled to discontinue service until after the first two months of the rate year. Therefore, I do not believe an increase in the operating revenue allowance is necessary in this proceeding.

Q. WHAT IS YOUR RECOMMENDATION IF THE COMMISSION ELECTS TO INCREASE THE OPERATING REVENUE ALLOWANCE CONSISTENT WITH ITS DECISION IN THE PROVIDENCE WATER SUPPLY (PWSB) RATE PROCEEDING IN DOCKET NO. 3832.

A. In the PWSB proceeding, the Commission approved an operating revenue allowance equal to three percent of net operating expenses, along with requiring PWSB to file a rate proposal by July 1, 2009 which includes proposed conservation rates. If the Commission elects to approve an operating revenue allowance for KCWA in excess of traditional 1.5 percent, I do not believe an operating revenue allowance of five percent or approximately $1 million should be approved. Instead, consistent with the Commission's decision in the PWSB proceeding it would be my recommendation that an operating revenue allowance of three percent of rate revenues be allowed. Of the total, it would be my recommendation that 1.5 percent of revenue be unrestricted and that the remaining 1.5 percent be restricted in the event revenues are more than 0.5 percent below the allowed level. To access the restricted allowance, I agree that KCWA should be required to seek Commission approval, but I leave it to the Commission to identify the time period that it would require to rule on such requests.

Q. IN ITS DECISION IN DOCKET NO. 3832, THE COMMISSION SET THE UNRESTRICTED ALLOWANCE AT ONE PERCENT AND RESTRICTED THE REMAINING TWO PERCENT. WHY WOULD YOU RECOMMEND THAT BOTH THE RESTRICTED AND UNRESTRICTED ALLOWANCES BE SET AT 1.5 PERCENT OF REVENUE?

Traditionally, the 1.5 percent operating revenue allowance has been allowed to address both expense overruns and revenue shortfalls. Therefore, if all revenue shortfalls are to be addressed through the restricted allowance, it would be reasonable to utilize a one percent unrestricted allowance to address expense overruns and a two percent restricted allowance to address revenue shortfalls. However, to minimize the number of filings that are necessary to utilize restricted funds and to provide KCWA with additional flexibility, I would recommend that the unrestricted allowance be set at 1.5 percent and for KCWA to utilize that allowance to address expense overruns and/or revenue shortfalls of up to 0.5 percent of rate revenue. The restricted allowance would only be accessed if the revenue shortfall exceeded 0.5 percent of rate revenue.

Q. DO YOU HAVE ANY OTHER RECOMMENDATIONS IF THE COMMISSION DECIDES TO INCREASE THE OPERATING REVENUE ALLOWANCE?

A. Yes. I have two additional recommendations with regard to any approval of an increase in the operating revenue allowance and the resulting restricted funds. First, it would be my recommendation that a limit equal to six percent of rate revenues be set on the level to which the restricted revenue allowance monies are allowed to accumulate. Assuming that 1.5 of revenue is restricted, this would be equal to approximately four years of restricted revenue allowance collections if the monies are not used to meet revenue shortfalls. At such time as the funds reach that level, the need to continue the full 1.5 percent restricted revenue allowance should be reevaluated.

My second recommendation relates to the situation where KCWA realizes a significant revenue surplus rather than a revenue shortfall. For example, an adjustment has been made in this case to reflect the expected closing of Clariant Corporation's pigment manufacturing facility, with a resulting annual revenue loss of over $481,000. Should that facility not close or the closing be delayed, KCWA could realize a significant revenue windfall. In seeking an increase in its operating revenue allowance, KCWA has focused on the potential for revenue shortfalls. However, it is also possible that customer additions or other increase in sales could create a revenue surplus. Therefore, in order to provide balance, it would be my recommendation that if revenues exceed the allowed level by more than 1.0 percent in the rate year, any revenues above that level be added to the restricted operating revenue allowance. For years subsequent to the rate year, I would recommend that the allowed revenues used to calculate any revenue surplus be adjusted by the change in the GDP-PI for the year.

Cost Allocation/Rate Design

Q. HAVE YOU REVIEWED THE COST ALLOCATION STUDY SUBMITTED BY KCWA IN THIS PROCEEDING?

A. Yes. I have reviewed the cost allocation study presented by Mr. Woodcock on behalf of KCWA and agree with Mr. Woodcock's description that the study follows the procedures that have been accepted in the past.

Q. DO YOU HAVE ANY COMMENTS WITH REGARD TO POSSIBLE REVISIONS TO THE COST ALLOCATION PROCEDURES?

A. Yes. In his testimony, Mr. Woodcock provided a comparison of KCWA's meter equivalency factors with those utilized by three other Rhode Island water utilities in recent filings. He notes that KCWA has not proposed any change in the factors it utilizes, but suggested that the Division may want to comment while there are differences from utility to utility, I do not view the factors utilized by KCWA as inconsistent with those of the other Rhode Island water utilities. Absent new information that indicates that the current factors are not representative of meter and service line costs for KCWA, I see no need to revise the current equivalency ratios.

I would also like to raise one addition potential revision that should be considered in future cost studies. Currently, KCWA utilizes asset replacement value to allocate both IFR costs and debt service costs. Allocating IFR costs based on the cost of replacing existing investment is reasonable. However, it would appear to be more appropriate to allocate debt service and related costs on the basis of the per books investment because those costs are consistent with the investment that was financed with the bonds. I do not believe that any change this would produce would have a significant effect on the cost study results in this proceeding. However, it could be important in the future if KCWA issues more debt.

Q. WHAT CONCLUSION HAVE YOU REACHED WITH REGARD TO THE COST STUDY PRESENTED BY THE AUTHORITY?

A. I have concluded that the cost allocation methodology presented by Mr. Woodcock on behalf of KCWA is appropriate for use in determining cost responsibility and setting rates in this proceeding. Accordingly, I have incorporated my adjustments to KCWA's claimed overall cost of service into that cost allocation study to develop the Division's proposed rates.

Q. HAVE YOU PREPARED A SCHEDULE THAT SUMMARIZES THE RATES THAT YOU ARE PROPOSING BASED ON THE DIVISION'S RECOMMENDED OVERALL REVENUE ALLOWANCE?

Yes. Schedule TSC-14 summarizes the rates that I am recommending. Page 1 of Schedule TSC-14 provides a comparison of the existing and proposed rates. Page 2 of that schedule identifies the effect of the proposed rates on various types of customers with differing levels of consumption. Finally, page 3 of Schedule TSC-14 provides a proof of revenue at existing and proposed rates. I would note that the cost study results for a 4-inch private fire service and the billing charge for public fire service resulted in nominal reductions in the proposed rates compared to the existing rates. To avoid some rates going down when there is an overall increase of over 16 percent, I am recommending that those rates remain at the current level.

Q. WHAT PROPOSAL HAS KCWA MADE WITH REGARD TO SEASONAL RATES?

A. KCWA has indicated that it would be prepared to adopt an alternative seasonal rate structure only if an operating revenue allowance of five percent is approved. Two variations of seasonal rates have been presented: one in which the seasonal rate differential varies among small, medium and large customers and one in which the differential is the same across all classes. In both cases, the size of the seasonal differential is small (less than $0.37 per Hcf in all instances).

Q. WHAT IS YOUR POSITION WITH REGARD TO THIS PROPOSAL?

A. As a general matter, I do not believe that it is appropriate to adopt seasonal rates when customers are billed quarterly because the period for which consumption is measured will not be consistent for all customers. However, I do not oppose the small differential that KCWA has proposed in this case if the Commission determines that adopting such a proposal is a reasonable first step toward conservation oriented rates. I also recognize that given the Division's position with regard to the operating revenue allowance, KCWA may no longer wish to propose to adopt seasonal rates.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes, it does.

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BEFORE THE

PUBLIC UTILITIES COMMISSION

OF RHODE ISLAND

KENT COUNTY	**)**	
WATER AUTHORITY	**)**	**DOCKET NO. 3942**

SCHEDULES ACCOMPANYING THE

DIRECT TESTIMONY

OF

THOMAS S. CATLIN

ON BEHALF OF THE

DIVISION OF PUBLIC UTILITIES AND CARRIERS

JULY 2008

EXETER

ASSOCIATES, INC.

5565 Sterrett Place

Suite 310

Columbia, Maryland 20904

KENT COUNTY WATER AUTHORITY

Summary of Revenues and Expenses at
Present and Proposed Rates
Rate Year Ended October 31, 2009

	Rate Year Amount Per KCWA	Division Adjustments	Rate Year at Present Rates	Increase from Proposed Rates	Rate Year at Proposed Rates
Revenue					
Metered Water Sales	$ 14,568,794	169,037	14,737,831	$ -	$ 14,737,831
Private Fire Protection	178,981	(3,298)	175,683	-	175,683
Public Fire Protection	1,097,559	8,997	1,106,556	-	1,106,556
Miscellaneous	347,207	857	348,064	-	348,064
Total Revenue	$ 16,192,541	175,593	16,368,134	$ 2,622,427	$ 18,990,561
Expenses					
O&M Expense	9,417,322	(607,214)	8,810,108	-	8,810,108
Payroll Taxes	155,226	(2,713)	152,513	-	152,513
PILOT	23,123	-	23,123	-	23,123
Net Operations	$ 9,595,671	(609,927)	8,985,744	$ -	$ 8,985,744
Debt Service	3,932,319	-	3,932,319		3,932,319
O&M Reserve	500,668	(407,807)	92,861		92,861
R&R Reserve	463,332	(263,332)	200,000	-	200,000
Equipment Replacement	100,000	-	100,000	-	100,000
Infrastructure Replacement	6,000,000	(600,000)	5,400,000	-	5,400,000
Net Restricted	$ 10,996,319	(1,271,139)	9,725,180	$ -	$ 9,725,180
Total Expenses	$ 20,591,990	(1,881,066)	18,710,924	$ -	$ 18,710,924
Operating Revenue Allowance	1,065,107	(785,470)	279,637	-	279,637
Total Cost of Service	$ 21,657,097	(2,666,536)	18,990,561	$ -	$ 18,990,561
Revenue Surplus/(Deficiency)	$ (5,464,556)	2,842,129	(2,622,427)	$ -	$ -

KENT COUNTY WATER AUTHORITY

Summary of Division Adjustments to
Rate Year Revenues and Expenses at Present Rates
Rate Year Ended October 31, 2009

Description	Amount	Source
Reverse Adjustment for Amgen Sales Loss	$ 162,362	Schedule TSC-3
Water Protection Fee Revenue	857	Schedule TSC-3
Service Charge and Fire Protection Billing Units	12,374	Schedule TSC-4
Total Revenue Adjustments	$ 175,593	
Labor Costs	(37,697.0)	Schedule TSC-5
Health Insurance	(45,145.0)	Schedule TSC-6
Chemicals	(29,989.0)	Schedule TSC-7
T&D Mains Maintenance Expense	(252,504.0)	Schedule TSC-8
General Inflation	(60,995.0)	Schedule TSC-9
Purchased Water	(172,742.0)	Schedule TSC-10
PUC Assessment	(10,855.0)	Schedule TSC-11
O&M Reserve Funding	(407,807.0)	Schedule TSC-12
R&R Reserve Funding	(263,332.0)	Schedule TSC-13
Infrastructure Replacement	(600,000.0)	See Note (1)
Operating Revenue Allowance	(785,470.0)	See Note (2)
Total Expense Adjustments	$ (2,666,536)	
Total Revenue Requirement Effect of Division Adjustments at Present Rates	$ (2,842,129)	

Note:
(1) Refer to testimony.

(2) Based on 3% of total revenue minus miscellaneous revenue.

KENT COUNTY WATER AUTHORITY

Adjustment to Eliminate Reduced Sales to Amgen
Rate Year Ended October 31, 2009

Rate Revenue	
Sales Volume Reduction by KCWA (Hcf/year) (1)	59,670
Existing Rate for Large Meter Class	$ 2.721
Total Adjustment to Revenue at Present Rates	$ 162,362
Water Protection Fee Revenue	
Adjustment to Non-Exempt Volumes (2)	56,687
Rate per Hcf	$ 0.01511
Adjustment to Water Protection Fee Revenue	857

Notes:
(1) Per Woodcock Schedule 2.

(2) Per Woodcock Schedule 1A.

KENT COUNTY WATER AUTHORITY

Adjustment to Revenues to Reflect Updated
Service Charge and Fire Protection Billing Units
Rate Year Ended October 31, 2009

Billing Unit	Units of Service	Unit Rate	Annual Revenue
Quarterly Service Charges			
5/8" and 3/4"	22,146	$ 8.20	$ 726,389
1"	3,573	9.84	140,633
1.5"	320	12.92	16,538
2"	530	15.58	33,030
3"	19	19.07	1,449
4"	72	25.84	7,442
6"	76	40.82	12,409
8" & larger	61	66.87	16,316
Total	26,797		$ 954,206
Monthly Service Charges			
5/8" and 3/4"	2	$ 6.83	$ 164
1"	1	7.38	89
1.5"	8	8.40	806
2"	12	9.29	1,338
3"	-	10.46	-
4"	6	12.71	915
6"	6	17.70	1,274
8" & larger	4	26.39	1,267
Total	39		$ 5,853
Total Service Charge Revenue			$ 960,059
Private Fire Service Charges			
4"	15	$ 206.68	$ 3,100
6"	104	543.92	56,568
8"	27	1,122.28	30,302
10"	1	2,000.60	2,001
12"	1	3,213.28	3,213
Hydrant	148	543.92	80,500
Total	296		$ 175,683
Public Fire Service Charges			
Hydrants	2,336	$ 473.56	1,106,236
Bills	13	$ 6.15	320
			$ 1,106,556
Total Revenue			$ 2,242,298
Amount per KCWA			$ 2,229,924
Adjustment to Revenue			$ 12,374

KENT COUNTY WATER AUTHORITY

Adjustment to Labor and Related Costs
Rate Year Ended October 31, 2009

Total Test Year Labor Expense (1)	$	1,815,388
Increase to Reflect 3.2% Increase for 2.33 Years (2)		138,246
Rate Year Labor Expense	$	1,953,634
Amount per KCWA excluding New GIS Operator (1)		1,989,102
Adjustment to Total Salaries and Wages	$	(35,468)
Portion of Adjustment Capitalized (3)		(484)
Adjustment to Labor Charged to O&M	$	(34,984)
Payroll Tax Effect at 7.65%		(2,713)
Total Adjustment to O&M Labor and Related Costs	$	(37,697)

Notes:

(1) Per Woodcock Schedule 1B.

(2) Based on overall average increases for FY 2008 and FY 2009 per response to COMM 1-13.

(3) Calculated based on 3.2% increase for 2.33 years in test year capitalized labor of $24,788 less increase of $2,372 per Woodcock Schedule 1B.

Docket No. 3942
Schedule TSC-6

KENT COUNTY WATER AUTHORITY

Adjustment to Health Insurance Costs
Rate Year Ended October 31, 2009

Account	Amount per Division (1)	Rate Year Amount per KCWA (2)	Adjustment to Rate Year Expense
Medical-Blue Cross	$ 467,227	$ 472,753	$ (5,526)
Less: Employee Contribution @ 10%	(46,723)	-	(46,723)
Subtotal	$ 420,504	$ 472,753	$ (52,249)
Dental-Delta Dental	37,092	52,143	(15,051)
Group P-65 Retirees	79,333	57,178	22,155
Total Health Insurance Expense	$ 536,929	$ 582,074	$ (45,145)

Notes:
(1) Premium amounts per response to DIV 1-23.

(2) Per Woodcock Schedule 1D.

KENT COUNTY WATER AUTHORITY

Adjustment to Chemical Costs
Rate Year Ended October 31, 2009

Year (1)		Chlorine (gal)		Tetra Potassium Pyrophosphate (gal)		Potassium Hydroxide (lbs)
FY 2005 (1)		825		-		344,482
FY 2006 (1)		625		360		366,458
FY 2007 (2)		1,085		480		546,366
FY 2008 (2)		548		240		357,874
Four Year Average (3)		771		360		403,795
Unit Price (4)	$	1.60	$	11.46	$	0.2006
Annual Chemical Cost	$	1,233	$	4,126	$	81,001
Total Cost for All Chemicals					$	86,360
Transportation Charges (5)						3,123
Total Cost					$	89,483
Escalation to Rate Year at 6.64%						5,942
Rate Year Expense					$	95,425
Amount per KCWA (5)					$	125,414
Adjustment to Rate Year Expense					$	(29,989)

Notes:
(1) Quanities per DIV 1-15.
(2) Quanities per DIV 2-3.
(3) Three year average for Tetra Potassium Pyrophosphate.
(4) Per DIV 1-16.

Docket No. 3942
Schedule TSC-8

KENT COUNTY WATER AUTHORITY

Adjustment to T & D Mains Maintenace Expense
Rate Year Ended October 31, 2009

Non-Labor Costs (1)		
FY 2005	$	143,211
FY 2006 (2)		240,653
FY 2007		540,436
FY 2008 (3)		227,430
Total	$	1,151,730
Four Year Average	$	287,932
Amount per KCWA		540,436
Adjustment to T& D Mains Maintenance Expense	$	(252,504)

Notes:

(1) Per response to DIV3-1.

(2) Excludes Audit Inventory Adjustment of $191,000.

(3) Includes 2 months estimated materials costs at average level for first ten months of year.

KENT COUNTY WATER AUTHORITY

Adjustment for General Inflation
Rate Year Ended October 31, 2009

Costs Subject to General Inflation per KCWA (1)	$	1,299,193
Less: T & D Mains Maintenance Non-Labor Costs (1)		540,436
Costs Subject to General Inflation per Division	$	758,757
Inflation Factor Based on GDP-PI (2)		5.50%
General Inflation from Test Year to Rate Year	$	41,732
Amount per KCWA (2)	$	102,727
Adjustment to General Inflation Allowance	$	(60,995)

Notes:

(1) Per Woodcock Schedule 1.

(2) Per Woodcock Schedule 1. Excludes amounts for fuel and power for pumping.

KENT COUNTY WATER AUTHORITY

Adjustment to Purchased Water Costs
Rate Year Ended October 31, 2009

Projected Loss of Test Year Sales to Clariant Corporation (1)	Hcf	161,567
Total Test Year Sales Volumes (1)	Hcf	3,902,574
Percentage of Sales Lost		4.140%
Net Purchased Water Volumes (2)	MG	2,866.21
Reduction in Purchased Volumes		118.66
PWSB Rate per MG		$ 1,455.77
Reduction in Purchased Water Costs		$ (172,742)

Note:

(1) Per Woodcock Schedule 1.

KENT COUNTY WATER AUTHORITY

Adjustment to PUC Assessment
Rate Year Ended October 31, 2009

FY 2008 PUC Assessment to KCWA (1)	$	52,680
Rate Year Assessment Based on 3.0% Increase for 1.33 Years	$	54,792
PUC Assessment Per Division (Rounded)	$	54,800
PUC Assessment per KCWA (1)		65,655
Adjustment to Rate Year Expense	$	(10,855)

Note:

(1) Per Woodcock Schedule 1E.

Docket No. 3942
Schedule TSC-12

KENT COUNTY WATER AUTHORITY

Adjustment to O&M Reserve Funding Allowance
Rate Year Ended October 31, 2009

O&M Costs (1)	$ 8,810,108
Payroll Taxes (1)	152,513
Payment in Lieu of Taxes (1)	23,123
Operating Expense per Division	$ 8,985,744
Required Reserve at 25% of Operating Expense	$ 2,246,436
Balance as of Beginning of Rate Year (2)	2,153,575
Required Funding Allowance	$ 92,861
Funding Allowance per KCWA (3)	500,668
Adjustment to O&M Reserve Funding Allowance	$ (407,807)

Notes:
(1) Amounts per Division as shown on Schedule TSC-1.

(2) Per respnse to DIV 2-5.

(3) Per Woodcock Schedule 1D.

Docket No. 3942
Schedule TSC-13

KENT COUNTY WATER AUTHORITY

Adjustment to R&R Reserve Funding Allowance
Rate Year Ended October 31, 2009

Projected Net Utility Plant (1)	$ 98,515,214
Required Reserve at 25% of Operating Expense	$ 985,152
Balance as of Beginning of Rate Year (2)	785,152
Required Funding Allowance	$ 200,000
Funding Allowance per KCWA (1)	463,332
Adjustment to R&R Reserve Funding Allowance	$ (263,332)

Notes:
(1) Per Woodcock Schedule 1D.

(2) Per respnse to DIV 1-18.

KENT COUNTY WATER AUTHORITY

Comparison of Existing and Proposed Rates
Rate Year Ending October 31, 2009

		Current	Proposed	% Change
Metered Rates				
Small (5/8-2" meters)		$3.790	$4.438	17.10%
Medium (3&4" meters)		$3.210	$3.756	17.01%
Large (6" & up meters)		$2.721	$3.175	16.69%
Service Charges				
Quarterly	5/8 & 3/4	$8.20	$9.43	15.00%
	1	$9.84	$12.47	26.73%
	1 1/2	$12.92	$18.17	40.63%
	2	$15.58	$23.11	48.33%
	3	$19.07	$29.56	55.01%
	4	$25.84	$42.10	62.93%
	6	$40.82	$69.84	71.09%
	8 & up	$66.87	$118.09	76.60%
Monthly	5/8 & 3/4	$6.83	$6.90	1.02%
	1	$7.38	$7.91	7.18%
	1 1/2	$8.40	$9.81	16.79%
	2	$9.29	$11.45	23.25%
	3	$10.46	$13.61	30.11%
	4	$12.71	$17.79	39.97%
	6	$17.70	$27.03	52.71%
	8 & up	$26.39	$43.12	63.40%
Fire Service (per quarter)				
Public	/hydrant	$118.39	$126.28	6.66%
	/bill	$6.15	$6.15	0.00%
Private (per quarter)				
	4 in	$51.67	$51.67	0.00%
	6 in	$135.98	$136.23	0.18%
	8 in	$280.57	$283.95	1.20%
	10 in	$500.15	$506.15	1.20%
	12 in	$803.32	$814.10	1.34%
	hydrant	$135.98	$136.23	0.18%

KENT COUNTY WATER AUTHORITY

Typical Bill Impacts
Rate Year Ending October 31, 2009

METER SIZE	QUARTERLY USE - CU FT	CURRENT RATES	<-------------- PROPOSED ---------------> NEW BILL	$ INCREASE	% INCREASE
Small					
5/8	2,000	$84.00	$98.19	$14.19	16.9%
5/8	2,500	$102.95	$120.38	$17.43	16.9%
5/8	***2,730***	***$111.67***	***$130.59***	***$18.92***	***16.9%***
5/8	3,500	$140.85	$164.76	$23.91	17.0%
5/8	4,000	$159.80	$186.95	$27.15	17.0%
5/8	5,000	$197.70	$231.33	$33.63	17.0%
5/8	6,000	$235.60	$275.71	$40.11	17.0%
5/8	6,666	$260.84	$305.27	$44.43	17.0%
5/8	8,000	$311.40	$364.47	$53.07	17.0%
5/8	10,000	$387.20	$453.23	$66.03	17.1%
5/8	12,000	$463.00	$541.99	$78.99	17.1%
5/8	14,000	$538.80	$630.75	$91.95	17.1%
5/8	15,000	$576.70	$675.13	$98.43	17.1%
5/8	20,000	$766.20	$897.03	$130.83	17.1%
5/8	25,000	$955.70	$1,118.93	$163.23	17.1%
1	30,000	$1,146.84	$1,343.87	$197.03	17.2%
1	40,000	$1,525.84	$1,787.67	$261.83	17.2%
1	46,666	$1,778.48	$2,083.51	$305.03	17.2%
1	75,000	$2,852.34	$3,340.97	$488.63	17.1%
2	100,000	$3,805.58	$4,461.11	$655.53	17.2%
2	200,000	$7,595.58	$8,899.11	$1,303.53	17.2%
2	300,000	$11,385.58	$13,337.11	$1,951.53	17.1%
2	400,000	$15,175.58	$17,775.11	$2,599.53	17.1%
2	600,000	$22,755.58	$26,651.11	$3,895.53	17.1%
Medium					
3	200,000	$6,439.07	$7,541.56	$1,102.49	17.1%
3	400,000	$12,859.07	$15,053.56	$2,194.49	17.1%
3	600,000	$19,279.07	$22,565.56	$3,286.49	17.0%
4	800,000	$25,705.84	$30,090.10	$4,384.26	17.1%
4	1,000,000	$32,125.84	$37,602.10	$5,476.26	17.0%
4	1,200,000	$38,545.84	$45,114.10	$6,568.26	17.0%
Large					
6	400,000	$10,924.82	$12,769.84	$1,845.02	16.9%
6	600,000	$16,366.82	$19,119.84	$2,753.02	16.8%
6	800,000	$21,808.82	$25,469.84	$3,661.02	16.8%
6	1,200,000	$32,692.82	$38,169.84	$5,477.02	16.8%
6	1,333,333	$36,320.81	$42,403.16	$6,082.35	16.7%
8	2,000,000	$54,486.87	$63,618.09	$9,131.22	16.8%
8	5,000,000	$136,116.87	$158,868.09	$22,751.22	16.7%
8	10,000,000	$272,166.87	$317,618.09	$45,451.22	16.7%
8	24,000,000	$653,106.87	$762,118.09	$109,011.22	16.7%
Municipal Fire Service	300 hydrants	$35,523.15	$37,890.15	$2,367.00	6.7%
Private Fire Service	6 Inch Service	$135.98	$136.23	$0.25	0.2%

KENT COUNTY WATER AUTHORITY

Proof of Revenues
Rate Year Ending October 31, 2009

Service Charges:	<------- Current ------->			<-------- Proposed -------->	
Quarterly	Number	Rate	Revenue	Rate	Revenue
5/8 & 3/4	88,584	$8.20	$726,389	$9.43	$835,347
1	14,292	$9.84	$140,633	$12.47	$178,221
1 1/2	1,280	$12.92	$16,538	$18.17	$23,258
2	2,120	$15.58	$33,030	$23.11	$48,993
3	76	$19.07	$1,449	$29.56	$2,247
4	288	$25.84	$7,442	$42.10	$12,125
6	304	$40.82	$12,409	$69.84	$21,231
8 & up	244	$66.87	$16,316	$118.09	$28,814
Monthly					
5/8 & 3/4	24	$6.83	$164	$6.90	$166
1	12	$7.38	$89	$7.91	$95
1 1/2	96	$8.40	$806	$9.81	$942
2	144	$9.29	$1,338	$11.45	$1,649
3	0	$10.46	$0	$13.61	$0
4	72	$12.71	$915	$17.79	$1,281
6	72	$17.70	$1,274	$27.03	$1,946
8 & up	48	$26.39	$1,267	$43.12	$2,070
Consumption Charge:	100/cu.ft.				
Small (5/8-2" meters)	3,296,872	$3.79	$12,495,144	$4.438	$14,631,517
Medium (3&4" meters)	151,608	$3.21	$486,662	$3.756	$569,440
Large (6" & up meters)	292,527	$2.721	$795,967	$3.175	$928,775
Fire Protection	Number				
Public Hydrants	2,336	$473.56	$1,106,236	$505.12	$1,179,960
# bills	52	$6.15	$320	$6.15	$320
Private Fire Protection					
4 in	15	$206.68	$3,100	$206.68	$3,100
6 in	104	$543.92	$56,568	$544.92	$56,672
8 in	27	$1,122.28	$30,302	$1,135.80	$30,667
10 in	1	$2,000.60	$2,001	$2,024.60	$2,025
12 in	1	$3,213.28	$3,213	$3,256.40	$3,256
hydrant	148	$543.92	$80,500	$544.92	$80,648
Total Rate Revenue			$16,020,072		$18,644,764
Plus: Misc Revenues			$348,064		$348,064
Pro Forma Revenue			$16,368,136		$18,992,827
Required Revenue			$18,990,562		$18,990,562
Difference			-2,622,426		2,266
					0.01%
Increase in Rate Revenues					$2,624,692
Percent Increase in Total Revenues					16.04%
Percent increase in Rate Revenues					16.38%