REBUTTAL TESTIMONY

of

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Rates Department
Financial Analysis Division
Public Utilities Bureau
Illinois Commerce Commission

Aqua Illinois, Inc.

Docket No. 06-0285

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Witness Identification

Q. Please state your name and business address.

A. Mike Luth, Illinois Commerce Commission, 527 East Capitol Avenue, Springfield, Illinois 62701.

Q. Are you the same Mike Luth who filed direct testimony in this docket, which was identified as ICC Staff Exhibit 6.0 with accompanying schedules?

A. Yes, I am.

Introduction to Testimony

Q. What is the subject matter of this testimony?

A. In this phase of the docket I am submitting ICC Staff Exhibit 11.0 and accompanying schedules which present the water service rates for the Aqua Illinois, Inc. ("Aqua" or the "Company") Kankakee Water Division ("Kankakee"). The rates are developed from Staff's revenue requirement from direct testimony shown in Staff witness Mary Everson's ICC Staff Exhibit 1.0, Schedules 1.01 through 1.04. I will also reply to the comments in the rebuttal testimony of Aqua witnesses Thomas Bunosky (Aqua Ex. 6.0), Jack Schreyer (Aqua Ex. 7), and David R. Monie (Aqua Ex. 9.0) regarding the cost of service study, rate design, Aqua's proposed Plant Facilities Charge ("PFC") and adjustments for unaccounted-for water and variable operating revenues that I pre-filed in direct testimony.

Q. Please summarize your rebuttal testimony.

A. In this rebuttal testimony, I present rates based upon Staff's revenue requirement from direct testimony, compared to the rates that I presented in direct testimony which were based upon Aqua's proposed revenue requirement from direct testimony for Kankakee. Additionally, I maintain my recommendations for the Commission to reject the PFC, and to reduce revenue requirement based upon Kankakee's Unaccounted-for Water percentage that exceeds industry standards. I also recommend the elimination of the rates and revenue requirement effects of the City of Kankakee's Franchise tax by removing the expense from revenue requirement and the revenues from miscellaneous operating revenues.

<u>Rate Design</u>

Q. Please describe ICC Staff Exhibit 11.1.

A. ICC Staff Exhibit 11.1 is an update of ICC Staff Exhibit 6.1 that was included in my direct testimony. As in ICC Staff Exhibit 6.1 of my direct testimony, the cost of service study and rates presented in ICC Staff Exhibit 11.1 begin with plant-in-service balances and revenue requirement provided by the Company in its direct testimony and replies to Staff data requests. The effect upon the cost of service study from Staff direct testimony revenue requirement adjustments that continue to be proposed in rebuttal testimony are shown on pages 7, 8 and 9.

Q. Does the Company agree with your proposed rates?

A. No, the Company does not agree with my proposed rates. The Company does not dispute the overall COSS results of ICC Staff Exhibit 4.1, but the Company does not agree with the design of rates that are also contained in ICC Staff Exhibit 6.1 (Aqua Ex. 9.0, page 2, line 35 through page 8, line 166). Generally, the Company believes that my rates do not increase customer charges enough and increase usage charges too much, and that private fire protection charges are too heavily weighted to larger-sized connections.

<u>Private Fire Protection</u>

Q. Have you revised your cost of service study and private fire protection rates as result of a minor error in the number of private fire protection charge billings, as discussed by Mr. Monie (Id., page 3, line 56 through page 4, line 64)?

A. Yes, I have. I inadvertently inputted the number of private fire customers in 2004 rather the Company's forecasted number of private fire customers in 2007. The source for the number of private fire protection billings that I should have used in direct testimony, and am now using in rebuttal testimony, is Table 12 included in Mr. Monie's direct testimony (Aqua Exhibit 4.0, Schedule 4.1). The result is that the Company is forecasting two more 4-inch and two more 6-inch private fire protection customers in 2007 compared to 2004. Revenues from private fire protection customers are approximately two percent more than under the number of private fire customers indicated in the COSS and rate design from my direct testimony.

Q. Have you adjusted the ratios that you used to compare larger diameter private fire protection customers to smaller private fire protection customers so that the ratios are based upon the cross sectional areas of different sized connections, as suggested by Mr. Monie (Aqua Ex. 9.0, page 4, line 65 through page 5, line 89)?

A. No, I have not. The cross sectional area of a pipe opening is certainly an important consideration in determining the amount of water that can flow through the pipe, as discussed by Mr. Monie, but it is not the only consideration. Another consideration is the resistance of the internal surface of the pipe to the flow of water. The American Water Works Association Manual M1, Principles of Water Rates, Fees, and Charges; applies the Hazen-Williams equation, which includes a measure of the resistance of the inside surfaces of the pipe to carrying water, in determining the flow of water through a pipe. The basic equation to measure the cross sectional area of a pipe raises the measure of the radius of the pipe opening to the second power (squared), but the Hazen-Williams equation raises the measure of the radius by a power of 2.63. The result of the Hazen-Williams equation is that the carrying capacity of larger sized pipe increases faster than if the comparison is based upon the cross sectional area of the pipe opening. The ratios of different sized private fire protection customers in my COSS and rate design are based upon the application of the Hazen-Williams equation and are therefore appropriate for determining private fire protection rates among different sized connections.

Q. Do you continue to recommend the reduction in the private fire protection rate you made in your direct testimony for connections less than 3 inches?

A. No, I am not. In direct testimony, COSS results indicated that the appropriate private fire protection rate for connections less than 3 inches is $5.00. I am now recommending that the rate for private fire connections 3 inches and less remain at the current rates, at $6.00 per month for connections less than 3 inches and $8.00 per month for 3-inch connections. Maintaining current rates will provide a small measure of rate stability and slightly reduce rates for private fire protection customers with 12-inch connections.

Customer Charges

Q. Do you agree with Mr. Monie's contention that revenues from rates should be more heavily concentrated in the monthly customer charge rather than usage charges because a large percentage of the Company's costs are fixed (Aqua Ex. 9.0, page 6, lines 109 and 110)?

A. No, I do not agree that the monthly customer charge should over-recover customer costs and the usage charge should under-recover usage or demand costs, which would be the result of increasing the customer charge above cost of service and reducing usage charges below cost of service. I do not dispute the assertion that a high percentage of the Company's revenue requirement is fixed because water distribution is similar to other utility services in that it is capital-intensive. Separating usage costs, which are typically recovered through usage charges, from customer costs, which are typically recovered through the customer charges, provides a level of assurance that users of the utility service pay their proportionate costs to provide the service. A customer who uses a larger volume of water than another customer should pay more for water service because it is necessary to install shared facilities to provide a larger volume of water. Additionally, the usage of more water indicates that a larger benefit is obtained from the utility service. A larger benefit from the utility service should result in larger payment for the use of shared facilities to provide water service. A COSS provides a measure of the cost of the use of utility facilities in place. Rates should reflect the results of a COSS in the absence of compelling reasons to determine rates based upon other factors or considerations.

The fact that a large percentage of the utility's costs are fixed is not sufficient reason to overweight customer charge revenues in relation to customer costs and underweight usage charge revenues in relation to usage or demand costs. The COSS indicates that costs to provide service have increased more than costs to connect individual customers and administer customer accounts. Revenues from rates established through this docket should therefore be more usage-based than customer-based when compared to current rates.

<u>Unaccounted-for Water</u>

Q. Are you continuing to recommend an adjustment to Power and Chemicals as a result of Kankakee's high percentage of Unaccounted-for Water after reviewing Aqua witness Bunosky's rebuttal testimony?

A. Yes, I am. Mr. Bunosky's rebuttal testimony provides a somewhat detailed explanation of what Unaccounted-for Water is, how it occurs, and why Unaccounted-for Water should be expected. Mr. Bunosky's rebuttal testimony does not, however, explain or document why the Kankakee system cannot be expected to perform at the industry norm or rule-of-thumb of 15 percent. Each of the 10 factors discussed by Mr. Bunosky are incorporated into the 15 percent industry standard. Mr. Bunosky does not present any information demonstrating that the Kankakee system should be expected to perform at a lower level than the industry rule-of-thumb of 15 percent Unaccounted-for Water (Aqua Exhibit 10.0, page 2 line 30 through page 14, line 310).

Q. Have you asked Aqua about any studies they have completed to address Unaccounted-for Water?

A. Yes, I have. In Staff data request ML-2.01, the Company was asked about industry standards for the 10 components of Unaccounted-for Water that Mr. Bunosky discussed in his rebuttal testimony and whether Kankakee surpassed or could not meet those standards. In data request ML-2.02, the Company was asked to provide any preliminary or final reports addressing Kankakee's performance in comparison to industry standards for

Unaccounted-for Water. The Company indicated in their responses to both data requests that they had not completed their review of industry standards or Kankakee's performance in comparison to industry standards for Unaccounted-for Water, and stated that it was not required to file this information until the end of this year (2006).

Q. Should Aqua be excused for an Unaccounted-for Water percentage that exceeds the industry standard of 15 percent simply because it is not required to file its statement of Unaccounted-for Water percentage until the end of this year?

A. No, Aqua should not be excused for a failure to adequately explain and document why Kankakee should be not be required to meet the industry standard for Unaccounted-for Water. Rates for Kankakee are being established in this docket. Aqua is proposing a level of Chemicals and Purchased Power expense based, in part, upon treating and moving through the distribution system approximately 1/3rd more water than the amount recorded at customer meters (1 divided by .745 metered water). The industry standard for Unaccounted-for water can be assumed to be reasonable. Unaccounted-for water beyond the industry standard should be properly explained and documented in a timely manner during this docket, or the Company's revenue requirement should be adjusted to reflect the industry standard. Aqua has not adequately explained and documented its deviation from the industry standard for Unaccounted-for water, therefore, an adjustment to Chemicals and Purchased Power is warranted.

Q. Do you agree with Mr. Bunosky's assertion that you are basing your adjustment to Chemicals and Purchased Power based upon an erroneous Unaccounted-for Water percentage of 27 percent?

A. No, I do not agree that my adjustment to Chemicals and Purchased Power based upon an Unaccounted-for Water percentage of 27 percent. Though 27 percent is not radically distinct from the 25.467 percent Unaccounted-for Water that is presented on ICC Staff Exhibit 6.3, the 27 percent Unaccounted-for Water percentage that Mr. Bunosky attributes to Staff, however, neither appears nor is referenced anywhere on ICC Staff Exhibit 6.1. Based upon the Company's response to Staff data request ML 2.03, it appears that the Company believes that because I adjusted Power and Chemicals expense by 12.31 percent, the conclusion is that I am suggesting that the Company's Unaccounted for Water percentage is 27 percent by subtracting 12.31 percent from the 85 percent accounted-for water industry standard. Rounded to full percentages, 85 percent minus 12.31 percent equals 73 percent. The Company's understanding of the mathematical relationships is incorrect. The 25.467 percent Unaccounted-for Water percentage that is detailed in ICC Staff Exhibit 6.3 results in a metered water percentage that is 74.533 percent, which is 12.31 percent lower than the industry standard of 85 percent (1 minus 15 percent Unaccounted-for water). The adjustment is based upon the requirement that, at a metered water percentage of only 74.533 percent, Aqua must treat and pump 12.31 percent more water than if the Company met the industry standard of 85 percent metered water. If I had calculated an Unaccounted-for Water percentage of 27 percent, the adjustment would have been 14.12 percent of total Chemicals and Power expenses, based upon 73 percent Kankakee Metered Water divided by industry standard metered water of 85 percent.

Q. Have you reviewed any industry literature that indicates Unaccounted-for Water should be less than 15 percent?

A. Yes, I have reviewed an article from the July 1996 Journal of the American Water Works Association ("AWWA") which was labeled AG/HG Exhibit 1.12 and attached to prefiled testimony in Docket No. 06-0196.. I have attached the article to this rebuttal testimony as ICC Staff Exhibit 11.4. The article explains that a report by the AWWA Leak Detection and Water Accountability Committee concludes that "[a]dvances in technology and expertise should make it possible to reduce lost and unaccounted-for water to less than 10 percent." As explained in the article, an Unaccounted-for Water percentage of less than 10 percent considers the components, i.e., bulk water sales, tank drainage, storage tank overflows, line flushing, fire protection, bleeding or blowoff done for taste and odor episodes, and municipal uses, of authorized but unmetered uses of water that make up the basis for Mr. Bunosky's criticisms of my Unaccounted-for Water adjustment. Thus, my comparison of the Kankakee Unaccounted-for Water, or as Mr. Bunosky prefers, Unmetered Water, percentage to an industry standard of 15 percent is not overly restrictive. The Commission should reduce Aqua's proposed test year level of Chemicals and Purchased Power expense to allow 15 percent Unaccounted-for Water instead of Kankakee's recent level of more than 25 percent.

Plant Facilities Charge

Q. Are you continuing to recommend that the Commission reject Aqua's proposed Plant Facilities Charge ("PFC")?

A. Yes, I am. Aqua is presenting this proposal as beneficial to current ratepayers, but the benefit will be funded by new customers and is unfair to those new customers. The PFC charges new customers for the use of existing facilities that Aqua witness Monie properly indicates have been paid for by existing customers (Aqua Ex. 9.0, page 9, lines 181-183). Mr. Monie does not explain, however, that new customers have not been benefiting from the use of existing facilities as have existing customers. Mr. Monie also states that existing facilities were built to provide service for more than the then existing level of demand from customers at the time of installation (Id., lines 186 and 187). That may be accurate, but the PFC is not based upon the incremental cost to construct facilities in the past to provide additional service at future levels, and is instead based upon the net depreciated cost of existing facilities. Customers who pay the PFC will then pay for the continuing depreciation of the existing facilities through rates until the existing facilities are retired. Moreover, if the existing facilities are replaced before those facilities are fully depreciated, the PFC will overcharge those customers who have paid it. New customers who pay the PFC will have paid the full amount of their share of the net depreciated cost of facilities existing at the time of connecting to the Aqua system and then will also pay for the construction of replacement facilities from the time the new facilities are added to rate base or are included in the calculation of QIPS charges. Additionally, even though customers who have paid the PFC will have paid the full amount of their share of the net depreciated cost of facilities existing at the time of their connection to the Kankakee system, they will continue to pay a return and depreciation on those same facilities through rates because their rates will not have been adjusted to recognize their having paid the PFC.

Q. Do you agree with Mr. Monie's statement that Aqua already has several charges similar to the PFC in effect in other districts?

A. No, I do not agree that the PFC is similar to Aqua tariffs in effect in other districts. The money from the Water and Sewer Plant Funds that Mr. Monie references is to be reserved for the construction of new additional facilities for water supply and treatment, or sewage treatment. In contrast, the PFC is solely for the use of existing facilities and is not reserved for the construction of additional facilities. Since the PFC is not based upon the incremental costs to construct additional capacity in existing facilities at the time of installation, which would appear to be difficult to determine, the Commission should reject Aqua's proposed PFC.

Miscellaneous Revenues, including Taxes Other than Income

Q. Have you adjusted Miscellaneous Revenues consistent with the recommendations in the rebuttal testimony of Aqua witness Schreyer?

A. Mr. Schreyer pointed out a mismatch between the Company's proposed level of Taxes Other than Income and the Company's forecast of Miscellaneous Revenues from the City of Kankakee Franchise Tax (Aqua Exhibit No. 7, page 40, line 885 through page 41, line 915). I have reviewed Aqua schedules C-1 and C-18 and the Company's response to Staff data request ML-2.04. The Company's statement of test year Revenues appears to be inconsistent with Taxes Other than Income associated with the City of Kankakee's Franchise tax. To correct this inconsistency, the Company's estimate of test year City of Kankakee franchise taxes should be eliminated from test year revenues and expenses. Revenue and expense from the City of Kankakee's franchise tax are appropriately removed from the test year because Aqua has a separate, add-on charge of 5.15 percent of the customer's bill to collect the City of Kankakee franchise tax from customers. As a result, City of Kankakee franchise is not an operating expense subject to recovery through base rates to be established through the Order in this docket. Therefore, I recommend a reduction of Taxes Other than Income of $39,379 and a reduction of Other Operating Revenues of $52,431.

The reduction of Other Operating Revenues is $1,573 less than $54,004, which is the amount that Aqua included in Other Operating Revenues according to its response to Staff data request ML-2.04. I have retained

$1,573 in Other Operating Revenues because it is three percent of the amount that Aqua has estimated it will collect for the City of Kankakee franchise tax. The Company is authorized to add three percent of the amount of the franchise tax to be paid out for expenses associated with the administration of the franchise tax. These expenses should be included in operating expenses for payroll and other miscellaneous expense. Consistent with that authorization, the Company adds 5.15 percent to a customer's bill to collect the five percent Kankakee municipal tax. As a result, three percent of the amount of the tax should be included in test year revenues for the excess of the amount collected over the amount remitted to the City of Kankakee.

Q. Have you adjusted non-metered, variable operating revenues consistent with the recommendations in the rebuttal testimony of Mr. Monie?

A. The amount of $96,302 included in Mr. Monie's discussion of non-metered, variable operating revenues (Aqua Ex. 9.0, page 9, lines 146 and 147) includes the City of Kankakee franchise tax also addressed by Aqua witness Schreyer. Since I am recommending the removal of the tax from operating expense and the removal of the revenues collected and remitted for the tax, I have eliminated $52,431 from non-metered, variable operating revenues. In addition, the percentage of increase in revenue requirement serves as the basis for the test year increase in revenues remaining from the amount Aqua is authorized to add to the Kankakee franchise tax charge for administrative costs and the test year increase in revenues from late payment fees. As a result, the amount of non-metered, variable revenues is less than the amount discussed by Mr. Monie.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.