

FILE

BEFORE  
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Ohio )  
American Water Company to Increase its )  
Rates for Water and Sewer Service ) Case No. 11-4161-WS-AIR  
Provided to its Entire Service Area. )

PUCO

2012 MAR 19 PM 2:52

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TESTIMONY  
OF  
SHAHID MAHMUD  
CAPITAL RECOVERY AND FINANCIAL ANALYSIS DIVISION  
UTILITIES DEPARTMENT  
THE PUBLIC UTILITIES COMMISSION OF OHIO

STAFF EXHIBIT \_\_\_\_\_

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1 Q. Please state your name and business address.

2  
3 A. My name is Shahid U. Mahmud. My business address is 180 East Broad  
4 Street, Columbus, OH 43215.

5  
6 2. Q. By whom are you employed?

7 A. I am employed by the Public Utilities Commission of Ohio (PUCO).

8  
9 3. Q. What is your current position with the Public Utilities Commission of Ohio  
10 and what are your duties?

11  
12 A. My current position is Senior Utility Specialist in the Capital Recovery and  
13 Financial Analysis Division of the Utilities Department. My duties include  
14 processing: (1) applications to issue securities, (2) applications for  
15 certifications of providers of Competitive Retail Electric and Gas Service  
16 (3) applications for emergency rate increase, (4) applications to increase  
17 rates, (5) applications for transfer of assets, and (6) participating in other  
18 inter-divisional reviews and projects.

19  
20 4. Q. Would you briefly state your educational background and work experience?

21  
22 A. I have an undergraduate degree in Accounting and a Masters Degree in  
23 Business Management from the University of Chittagong, Bangladesh. I  
24 have a Masters Degree in Business Administration (International Business)  
25 from the Ohio State University, Columbus, Ohio and a Masters Degree in  
26 Development Studies (International Affairs) from Ohio University, Athens,  
27 Ohio. I have been awarded the professional designation "Certified Rate of  
28 Return Analysts" ("CRRA") by the Society of Utility and Regulatory  
29 Financial Analysts. This designation is based upon education, experience  
30 and the successful completion of a comprehensive written examination.

31  
32 I was employed by this Commission as a Utility Rate Analyst in the  
33 Performance Analysis Division in May 1990 and became a Utility Rate  
34 Analyst Coordinator in September 1996. In February 1999, I became a  
35 Utility Specialist in the Electricity Division. In December 2008, I became a  
36 Senior Utility Specialist in the Capital Recovery and Financial Analysis  
37 Division. During the course of my employment with PUCO, I have  
38 undergone several training courses and have attended many utility  
39 regulatory seminars and conferences.

40  
41 I primarily review and analyze applications for issuance of securities,  
42 certification of competitive retail electric and gas service providers, and  
43 transactions related to the transfer of assets.

1  
2 I assisted in the review, analysis and in the preparation of Staff Comments  
3 and Recommendations of the Lakeland Utilities Company's application for  
4 an emergency rate increase (Case No. 90-1613-WS-AEM), Akron Thermal,  
5 Limited Partnership's application for an emergency rate increase (Case No.  
6 00-2260-HT-AEM), and Southeastern Natural Gas Company's application  
7 for an emergency rate increase (Case No. 01-140-GA-AEM). I prepared  
8 the Rate of Return section in the Staff Reports for Ohio Cumberland Gas  
9 Company (Case No. 10-868-GA-AIR) and, Water and Sewer, LLC. (Case  
10 No. 11-4509-ST-AIR) for an increase in their rates and charges.  
11

12 5. Q. What are your responsibilities in this proceeding?  
13

14 A. The purpose of my testimony is to address the objections to the rate-of-  
15 return to the rate base (ROR) analysis included in the Staff Report docketed  
16 in this proceeding on January 31, 2012. Objections to the Staff's ROR  
17 were submitted by Ohio American Water Company (the Company or Ohio  
18 American), and jointly by the Office of the Ohio Consumers' Counsel  
19 (OCC) and the City of Marion (Marion).  
20

21 6. Q. Ohio American's objections on proxy groups (comparable group) read that  
22 the Company has several objections to the Staff's Rate of Return section as  
23 regards the proxy group. First, the Staff selected proxy group does not  
24 reflect the increased business risk faced by Ohio American relative to its  
25 comparable group of water utilities. Second, the proxy group does not  
26 reflect the slightly less financial risk of Ohio American. Third, Staff's  
27 selection criteria of including water utilities with market capitalization  
28 greater than \$500 million excludes two water utilities which are closer in  
29 the size to Ohio American than the four companies Staff has relied upon  
30 and, therefore, closer in business risk. How do you respond?  
31

32 A. Ohio American's objection on comparable companies concerning the size  
33 of the Company and its recommendation for an adjustment range of 0.22%  
34 (negative 22 basis points) of financial risk adjustment, a 0.12% (positive 12  
35 basis points) floatation cost adjustment, and a 0.60% (positive 60 basis  
36 points) of business risk adjustment should be made to reflect the financial  
37 and business risk differential between the Company and the proxy group is  
38 erroneous. Ohio American has no publicly traded stock, and it depends on  
39 its parent, American Water Works Company, for its equity funding.  
40 American Water Works Company is a large publicly traded company which  
41 meets the selection criteria for Staff's comparable group. It would be  
42 inaccurate to characterize Ohio American as a stand alone small company  
43 when it is actually part of the corporate structure of the American Water

1 Works Company, which serves approximately 15 million customers in  
2 more than 30 U.S. States, as well of parts of Canada.<sup>1</sup>  
3

4 The adjustments proposed by Ohio American are unnecessary because the  
5 Company receives its equity funding at a low cost from its parent American  
6 Water Works Company whose cost of equity is the cost of equity to Ohio  
7 American. Staff's selection of the proxy group with market capitalization  
8 over \$500 million consists of four companies while Ohio American listed  
9 two other companies in the proxy group whose market capitalization is  
10 below \$500 million. The Staff's selection of the proxy group is consistent  
11 with the ROR determination in the most recent rate case proceeding of the  
12 Company (Case No. 09-391-WS-AIR) where the Commission adopted the  
13 Staff's position on the selection of the proxy group.  
14

15 7. Q. Ohio American's first objection on "Capital Asset Pricing Model" (CAPM)  
16 states that, "Staff utilized a historical yield on US Treasury Bonds as the  
17 risk-free rate instead of the more appropriate forecasted rate". Ohio  
18 American's fourth objection on "Capital Asset Pricing Model" states that,  
19 "Staff incorrectly utilized only the historical market equity risk premium  
20 without also evaluating a prospective market equity risk premium". Please  
21 explain the Staff's response to these objections?

22 A. The Staff will not predict economic conditions for the rate period when  
23 formulating its Capital Asset Pricing Model (CAPM) recommendation.  
24 Staff believes that growth rates occur in a manner independent of the  
25 preceding growth rate. Short term forecasts involve arbitrarily selective  
26 guesses as to which conditions that have occurred before will be prevalent  
27 in the near-term. Staff cannot predict the future and, thus, incorporates  
28 parameters that reflect broad general conditions in its analysis.  
29

30 8. Q. Ohio American's "Capital Asset Pricing Model" second objection, states,  
31 that "Staff inappropriately averaged the historical yield on 10-year U.S.  
32 Treasury bonds with the historical yield on 30-year U.S. Treasury bonds."  
33 What is your response to Ohio American's concern?

34 A. Staff's average of the historical yield on 10-year U.S. Treasury bonds with  
35 the historical yield on 30-year U.S. Treasury bonds accommodates the use  
36 of Ibbotson data to calculate a market to risk free rate spread for CAPM.

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<sup>1</sup> <http://amwater.com/About-Us/Corporate-Information/company-history.html>

Staff uses Ibbotson's data for long term government bonds and for large company stock for its spread. Ibbotson's 2011 SBBI Valuation Yearbook states that long term government bonds are those with an approximate twenty year maturity (on pages 22 and 200). In the CAPM calculation, the yield and the spread should be consistent with respect to maturity.

9. Q. Ohio American's "Capital Asset Pricing Model" Objection 5, states, "Staff did not include an empirical CAPM analysis to reflect the fact that the empirical Security Market Line ("SML") described by the CAPM is not as steeply sloped as the predicted SML." How does Staff address this issue?

A. The Staff used of Value Line betas, which vary less with risk and compensate for these shortcomings.

10. Q. Ohio American's Objection to Staff's use of Discounted Cash Flow ("DCF") method on the ground that that such method is flawed on the following respects: 1) Staff's exclusive use of the non-constant version of the DCF; 2) Staff's inappropriate reliance on historical growth in the Gross National Product (GNP); 3) Staff's implicit rejection of the constant growth DCF results; and 4) Staff's use of erroneous date in its DCF analysis. How does Staff address these issues?

A. The Staff has used the non-constant version of DCF growth result and has also used the historical growth in the GNP as measures of growth as such measures has been accepted by the Commission in previous base rate cases (Case Numbers: 06-433-WS-AIR and 07-1112-WS-AIR). This is consistent with the most recent rate case proceeding of the Company in Case No. 09-391-WS-AIR, where the Commission adopted the Staff position on the stated growth measures used. In regards to the allegation of erroneous data in Staff's DCF analysis, the Staff has updated the data from January 1, 2011 to December 31, 2011 and analyzed those to include the adjusted closing price of the stocks of the proxy group for dividends and for the stock splits of one particular company in the proxy group.

11. Q. OCC and Marion's Objection 5 states, "The OCC and Marion object to the PUCO Staff's inappropriate increase of the cost of equity by allowing an adjustment for flotation or equity issuance costs even though OAW provided no proof that the Company incurred any flotation costs and OAW

1 did not provide proof of the magnitude of flotation costs the Company will  
2 incur in the reasonably near future. Consumers should not have to pay for  
3 such costs that OAW will not necessarily incur." How does Staff address  
4 this issue?

5 A. It should be noted that Staff adjusts for issuance costs and not flotation  
6 costs. Staff assumes no prospective issuances by the company. And Staff's  
7 adjustment is generic; it is based on issuance costs to the utility industry as  
8 a whole.

9 The issue is not relevant if the Company or its parent or affiliates have  
10 plans to issue new equity. Staff makes its equity issuance adjustment to  
11 support the portion of the embedded balance of equity that was raised from  
12 equity issuance and not generated internally. The Staff's adjustment is  
13 merely structured to support this balance on an annual basis. The Staff has  
14 no intention on reflecting issuance costs as annual operating expense in the  
15 revenue requirement.

16 OCC and Marion misconstrue Staff's issuance adjustment as including  
17 flotation costs. Staff's adjustment in no way reflects flotation costs, if such a  
18 term is meant to refer to dilution or price pressure. Staff's adjustment  
19 reflects only properly included issuance cost.

20 12. Q. The OCC and Marion objection states "The OCC and Marion object to the  
21 PUCO Staff's utilization in its Capital Asset Pricing Model of a risk  
22 premium inappropriately based on the spread of arithmetic mean total  
23 returns between large companies stocks and long-term government bonds,  
24 thereby artificially increasing the common equity cost that consumers will  
25 pay. The use of the arithmetic mean of annual returns inflated the  
26 estimated cost of equity because it unrealistically assumed that the relevant  
27 horizon was only one year, even though investors were expected to hold  
28 their stocks for longer term horizons." Why does the Staff disagree with  
29 this approach?

30  
31 A. Use of Capital Asset Pricing Model (CAPM) spread based on the geometric  
32 mean, as advocated by OCC and Marion, would be misapplied. The Staff  
33 correctly uses an arithmetic mean instead. Ibbotson, on pages 56-57 of  
34 2011 SBBI Valuation Yearbook, states that because the CAPM is an

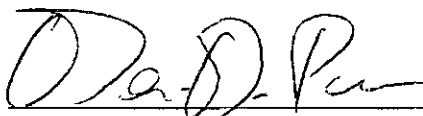
1 additive model, the arithmetic mean is more appropriate than the geometric  
2 mean in the DCF approach, and "the geometric average is more appropriate  
3 for reporting past performance...". The CAPM estimates current cost of  
4 equity. It does not report past performance.

5 13. Q. Does this conclude your testimony?

6 A. Yes, it does.

## PROOF OF SERVICE

I hereby certify that a true copy of the foregoing Testimony, submitted on behalf of the Staff of the Public Utilities Commission of Ohio, was served by regular U.S. mail, postage prepaid, or hand-delivered, upon the following parties of record, this 19<sup>th</sup> day of March, 2012.



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