Exhibit No.:	
Issue:	*Rate of Return*
Witness:	*Matthew J. Barnes*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Surrebuttal testimony*
Case No.:	*WR-2006-0425*
Date testimony Prepared:	*January 12, 2007*

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

SURREBUTTAL TESTIMONY

OF

MATTHEW J. BARNES

ALGONQUIN WATER RESOURCES OF MISSOURI, LLC

CASE NOS. WR-2006-0425 and SR-2006-0426

(Consolidated)

Jefferson City, Missouri
January 2007

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Tariff Filing Algonquin Water Resources of Missouri, LLC to Implement a General Rate Increase for Water and Sewer Service Provided to Customers in Its Missouri Service Areas.	)))))	Case No. WR-2006-0425

AFFIDAVIT OF MATTHEW J. BARNES

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Matthew J. Barnes, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Surrebuttal Testimony in question and answer form, consisting of 10 pages to be presented in the above case; that the answers in the foregoing Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

Matthew J. Barnes

Matthew J. Barnes

Subscribed and sworn to before me this 11th day of January 2007.

Ashley M. Harrison

Notary Public

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

ASHLEY M. HARRISON
My Commission Expires
August 31, 2010
Cole County
Commission #06898978

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Q. Please state your name.

A. My name is Matthew J. Barnes.

Q. Are you the same Matthew J. Barnes that filed Direct and Rebuttal testimony in this proceeding for the Staff of the Missouri Public Service Commission (Staff)?

A. Yes I am. I filed Direct testimony on December 1, 2006, and Rebuttal testimony on December 28, 2006, on the cost of capital and capital structure.

Q. What is the purpose of your Surrebuttal testimony?

A. The purpose of my Surrebuttal testimony is to respond to the Rebuttal testimony of Larry W. Loos. Mr. Loos sponsored rate-of-return testimony on behalf of Algonquin Water Resources of Missouri (AlgonquinMO or Company). I will respond to the issues of the capital structure and return on equity (ROE) that Mr. Loos testifies about in his Rebuttal testimony.

EXECUTIVE SUMMARY

Q. Please provide an executive summary of your Surrebuttal testimony.

A. Mr. Loos recommends that the Commission adopt Algonquin Power Income Fund's (Algonquin Power) capital structure to apply to AlgonquinMO's utility operations.

Staff recommends that the Commission adopt Staff's hypothetical capital structure for a couple of reasons. First, Staff relies on a number of financial sources to analyze the capital markets in which utility companies operate, none of which cover the Canadian financial markets. Second, Algonquin Power is incorporated in Canada and is not organized like a typical U.S. water utility company. Third, Mr. Loos' ROE is based on a comparable group of U.S. water utility companies. Staff believes it is important to match an estimated cost of common equity based on U.S. water utility companies with a capital structure that is also based on U.S. water utility companies. Staff recommends that the Commission adopt its hypothetical capital structure as this is based on comparable water utility companies that operate in the U.S., as does AlgonquinMO. This matches U.S. water utility capital costs with U.S. water utility capital structures.

Mr. Loos states in his Rebuttal testimony on Page 7, Line 19 through Line 21, "While there is a difference in the value of the Canadian dollar relative to the US dollar, I believe the relative costs of capital are not materially different." Mr. Loos does not provide any support that shows the "relative costs of capital are not materially different". But Staff does not disagree. Staff will provide support to show that Mr. Loos's ROE of 11.25 percent to 12.00 percent is not consistent with ROE's awarded for utility companies in Canada.

Mr. Loos claims that Staff's DCF model consists of mixing apples and oranges, because Staff adds a projected dividend yield to the growth component of the DCF model that consists of historical and projected growth rates. This is simply not true because historical growth rates were analyzed in conjunction with projected growth rates as a proxy for estimated future growth rates. Mr. Loos does not provide any support for his claim that Staff's methodology is inappropriate to use for AlgonquinMO. Mr. Loos also mixes apples and oranges as the low end of his ROE range (11.25 percent) is based on his historical growth rates, but the upper end of his ROE range (12.00 percent) is based on projected growth rates.

Mr. Loos adds a projected book value dividend yield to a historical growth rate to arrive at the low-end of his DCF range. But Mr. Loos provides no support for his decision to use book value – instead of market value – to calculate the dividend yield component of the DCF model. Mr. Loos does not cite any financial literature that supports his DCF methodology, and the Staff knows of none. His methodology is inappropriate. Dividend yield is the projected dividends an investor expects to receive in the future divided by the current market price per share, not the book value per share. I have recommended a reasonable capital structure and rate-of-return for AlgonquinMO in the range of 7.03 percent to 7.51 percent and an ROE in the range of 8.06 percent to 9.06 percent to be applied to AlgonquinMO's rate base.

<u>RESPONSE TO LARRY W. LOOS' REBUTTAL TESTIMONY</u>

Q. Mr. Loos states in his Rebuttal testimony on Page 7, Line 9 through Line 12, "…The fact that the Staff is not familiar with Canadian markets is no reason to abandon capital structure. If Staff is not comfortable with Canadian markets, Staff should do the research necessary to become reasonably informed." How do you respond to his statement?

A. The Commission needs to determine what returns are generally being made in this part of the country by companies with risks and uncertainties that are similar to those that Algonquin faces when it provides water and sewer services to its customers in Missouri. The Commission does not need to know what returns are being made in Canada. Nor does it need to know what returns are being made by companies that are organized and capitalized far differently than AlgonquinMO is organized and capitalized.

Staff is not familiar with the Canadian financial markets because Staff does not have access to information about them. Staff relies on a number of sources to determine the capital structure and rate-of-return that utility companies in this general part of the country should earn. But none of these sources cover the Canadian financial markets. Staff does not need to become familiar with Canadian markets, because this Commission is setting rates for a water and sewer utility company that operates in the United States -- specifically, in Missouri.

Q. Please explain why Mr. Loos' capital structure is inappropriate to use in this proceeding.

A. The Commission relies on two cases decided by the U.S. Supreme Court when it determines the fair and reasonable rate-of-return for a utility company. Mr. Loos's capital structure (Algonquin Power) does not comply with the requirements of those two cases, as I understand them. The cases are the *Bluefield Water Works and Improvement Company* (1923) (Bluefield) and the *Hope Natural Gas Company* (1944) (Hope) cases.

Q. Did you cite these cases in your Direct testimony?

A. Yes, I did and I will repeat those cases again. Beginning on Page 5, Line 2 through Page 6, Line 18, I cited the *Bluefield* and *Hope* cases:

> Q. What legal principles do you understand constitute the basis for the assessment of the justness and reasonableness of rate-of-return recommendations?
>
> A. I understand that the *Bluefield Water Works and Improvement Company* (1923) (*Bluefield*) and the *Hope Natural Gas Company* (1944) (*Hope*) cases have been cited as the two most influential cases for the legal framework to determine a fair and reasonable rate of return.
>
> Q. What do you understand to be the teachings of the *Bluefield* case?
>
> A. In the *Bluefield* case the Supreme Court ruled that a fair return would be:

> 1. A return "generally being made at the same time" in that "general part of the country;"
>
> 2. A return achieved by other companies with "corresponding risks and uncertainties;" and
>
> 3. A return "sufficient to assure confidence in the financial soundness of the utility."

The Court specifically stated:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.

Q. What do you understand to be the teachings of the *Hope* case?

A. In the *Hope* case, the Court stated that:

> The rate-making process . . . , *i.e.*, the fixing of "just and reasonable" rates, involves a balancing of the investor and the consumer interests. Thus we stated . . . that "regulation does not insure that the business shall produce net revenues" . . . it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock . . . . By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

The *Hope* case restates the concept of comparable returns to include those achieved by other enterprises that have "corresponding risks." The Supreme Court also noted in this case that regulation does not guarantee profits to a utility company.

Q. Is it appropriate to use the capital structure of a company that is incorporated in a different country, with an ROE that is based on a group of U.S. utility companies?

A. No it is not. Mr. Loos's ROE is based on a group of comparable U.S. water utility companies. Staff believes it is important to match an estimated cost of common equity that is based on U.S. water utility companies with a capital structure that is also based on U.S. water utility companies.

Q. Are there any water utility companies in Missouri that are owned by a parent company who is incorporated in another country?

A. Yes. Missouri American Water Company (MOAWC) is a subsidiary of American Water Company, whose parent is RWE AG (Essen, Germany).

Q. In MOAWC's last rate case (No. WR-2003-0500), did MOAWC recommend the use of its parent's capital structure for rate-making purposes?

A. No, they did not.

Q. Did the Staff recommend the use of RWE AG's capital structure for rate-making purposes?

A. No, they did not.

Q. What capital structure did Staff recommend in the MOAWC case?

A. Staff recommended 37.76 percent common equity, 7.88 percent preferred stock, and 54.36 percent long-term debt for American Water Capital Corporation's (AWCC) consolidated capital structure. MOAWC is a subsidiary of AWCC.

Q. Has the Commission ever adopted the capital structure of a company whose parent was incorporated in another country?

A. Staff does not believe so. Staff does not know of any case where the Commission has adopted the capital structure of a company whose parent was incorporated in another country.

Q. Mr. Loos states in his Rebuttal testimony on Page 7, Line 19 through Line 21: "While there is a difference in the value of the Canadian dollar relative to the US dollar, I believe the relative costs of capital are not materially different." How do you respond?

A. I do not disagree with Mr. Loos' statement. However, he did not provide any evidence to support his claim.

Q. Are you aware of any sources that compare the costs of capital of U.S. and Canadian utility companies?

A. Yes. Staff acquired a copy of the *Notice of Application and Direct Evidence of NSPI* from the Nova Scotia Utility and Review Board, dated October 2006, in which Dr. Roger A. Morin testified on behalf of the utility, Nova Scotia Power, Inc., in support of a 9.55 percent return on equity.

Q. Please provide Dr. Morin's recommendation for Nova Scotia Power, Inc.

A. On Page 131, Line 16 through Line 29 of the *Notice of Application and Direct Evidence of NSPI,* Dr. Morin states the following:

> In short, the integration and linkages between the U.S. and Canadian capital markets have greatly solidified in the last decade, and *U.S. data*

> *are clearly relevant to both Canadian and U.S. investors.* Given the escalating degree of integration of the U.S. and Canadian capital markets, regulators should be even more cognizant of the allowed returns and allowed equity ratios for U.S. utilities. Allowed ROEs on comparable risk U.S. utilities are far more attractive than those allowed Canadian utilities; on average, they are about 150 basis points higher, averaging about 10.5 percent, while allowed common equity ratios are close to 50 percent in contrast to the 40 percent allowed Canadian utilities. Once more, the Company's request to retain the authorized ROE of 9.55 percent and deemed equity ratio of 37.5 percent pales in comparison to such benchmarks. (Emphasis supplied.)

It is interesting to note that Dr. Morin recommended an ROE of 9.55 percent for a company that had an equity ratio of 37.5 percent. Other things being equal, when the equity ratio increases, the required ROE decreases, because the equity holders face less risk. In the present case, Algonquin recommends an equity ratio of 58 percent. Accordingly, its required ROE should be less than it have to be if it had an equity ratio of only 40 percent, as is typical for Canadian companies, according to Dr. Morin.

Q. How did Staff obtain this information?

A. Staff hired Stephen G. Hill from Hill and Associates to sponsor rate-of-return testimony in the current AmerenUE Case (No. ER-2007-0002). Mr. Hill notified Staff that Dr. Morin had filed testimony that supported an ROE of 9.55 percent in a Canadian utility proceeding, *Notice of Application and Direct Evidence of NSPI* from the Nova Scotia Utility and Review Board, dated October 2006. Mr. Hill informed Staff that it could obtain Dr. Morin's testimony from Nova Scotia Power Inc.'s website www.nspower.ca.

Q. Are you now recommending that the Commission adopt Mr. Loos' capital structure?

A. No. I am not. I'm merely pointing out that Mr. Loos' statement that "the relative costs of capital are not materially different" between the U.S. and Canada. If so, his recommended ROE of 11.25 percent to 12.00 percent is severely overstated for a water utility company, as compared to Dr. Morin's support for a ROE of 9.55 percent for a Canadian electric utility company.

Q. On Page 11, Line 10 through Line 13, Mr. Loos states, "Mr. Barnes combines a dividend yield based on market price (2.88%) with a growth term (5.18% to 6.18%) that is based on book measures. I develop dividend yield and growth terms on the basis of both book and market measures." Then on Page 12, Line 6 through Line 8, Mr. Loos states, "Thus by eliminating the classical mixing apples and oranges that Mr. Barnes relies upon in making his recommendation, I get a value within the relatively narrow range of 11.25% to 12.00%." How do you respond to these two statements?

A. Mr. Loos complains that I have mixed a term that is based on market values (the dividend yield) with a second term that is based on book values (the growth term). In his Direct testimony in this case, Mr. Loos said the following, at Page 31, Lines 19-23:

> The [DCF] theory suggest (sic) that when an investor buys a stock, the investor expects a return derived from cash flows received in the form of dividends plus appreciation in market price (the expected growth rate). Thus the dividend (*sic*) yield on market price plus a growth rate equals the return on equity expected by investors.

In this testimony, he supported a "dividend yield on market price," just as I have. To this, he would add "a growth rate," specifically the appreciation in market price. My analysis also adds a growth rate, but relies primarily upon the historical and projected growth in earnings per share, which is a well-recognized proxy for the expected change in the stock's market value.

Q. Do you have any support for your claim that investors rely on historical and projected growth rates?

A. Yes. In his book, *The Cost of Capital – A Practitioner's Guide,* David C. Parcell states as follows, on Page 8-28:

> Conroy and Harris (1987) found that analysts' forecasts were better predictors than historic growth over the very short term, but the advantage declined steadily over time. They conclude that combinations of analysts' forecasts and historic growth provide the best forecasting results. Avera and Fairchild (1982) and Newbolt, Zumwalt, and Kannan (1987) reached similar conclusions.

<u>SUMMARY AND CONCLUSIONS</u>

Q. Please summarize your conclusions.

A. Staff recommends that the Commission adopt its hypothetical capital structure, because it is similar to the capital structure of comparable water utility companies that operate in the U.S., as does AlgonquinMO. Algonquin's risks and uncertainties are similar to the risks and uncertainties that these comparable companies face. Mr. Loos does not provide any support that Staff's DCF and ROE recommendations are inappropriate to use in this proceeding. Nor does Mr. Loos provide any support for his claim that Canadian and U.S. financial markets are similar; he merely assumes that they are similar and that is one reason he chooses to use the capital structure of Algonquin's Canadian parent company. Finally, Mr. Loos does not rely on the *Hope* and *Bluefield* cases that provide legal framework for the Commission to determine a fair and reasonable rate-of-return for a company that operates in the *same general part of the country,* not Canada.

Staff believes that a ROE in the range of 8.06 percent to 9.06 percent and an overall rate of return in the range of 7.03 percent to 7.51 percent is just and reasonable for AlgonquinMO.

Q. Does this conclude your Surrebuttal testimony?

A. Yes it does.