STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

IN THE MATTER OF A PROCEEDING ON MOTION
OF THE COMMISSION AS TO THE RATES, CHARGES,
RULES AND REGULATIONS OF

**UNITED WATER OWEGO-NICHOLS INC.**
FOR WATER SERVICE

P.S.C. Case No. 11-W-0082

# REBUTTAL TESTIMONY

OF

PAULINE M. AHERN, CRRA
PRINCIPAL
AUS CONSULTANTS

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## I. INTRODUCTION

**Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.**

A. My name is Pauline M. Ahern and I am a Principal of AUS Consultants. My business address is 155 Gaither Drive, Suite A, Mount Laurel, New Jersey 08054.

**Q. ARE YOU THE SAME PAULINE M. AHERN WHO PREVIOUSLY SUBMITTED PREPARED DIRECT TESTIMONY IN THIS PROCEEDING?**

A. Yes, I am.

**Q. HAVE YOU PREPARED AN EXHIBIT WHICH SUPPORTS YOUR REBUTTAL TESTIMONY?**

A. Yes, I have. It has been marked for identification as Exhibit No. ___ and consists of Schedules PMA-12 through PMA-30.

## II. PURPOSE

**Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?**

A. The purpose of this testimony is to rebut certain aspects of the prepared direct testimony of Kristine A. Prylo, witness for the New York Public Service Commission (NYPSC) concerning capital structure, common equity cost rate and overall rate of return. Specifically, I will address: NYPSC Witness Prylo's recommended capital structure ratios based upon the December 31, 2010 consolidated capitalization of Suez Environnement (SuezE), an indirect parent company of United Water Owego-Nichols, Inc. (UWON); her application of the Discounted Cash Flow Model (DCF) and Capital Asset Pricing Model (CAPM); the inadequacy of her resulting recommended common equity cost rate relative

to current and recently authorized return rates on common equity (ROEs) by various regulatory commissions; and the fact that Ms. Prylo's recommendation does not reflect the additional risk experienced by UWON due to its small size relative to the electric and water companies in her proxy group. I will also respond to Ms. Prylo's comments on my prepared direct testimony.

## III. CAPITAL STRUCTURE

### SuezE and United Water Owego-Nichols, Inc.

**Q Please describe SuezE.**

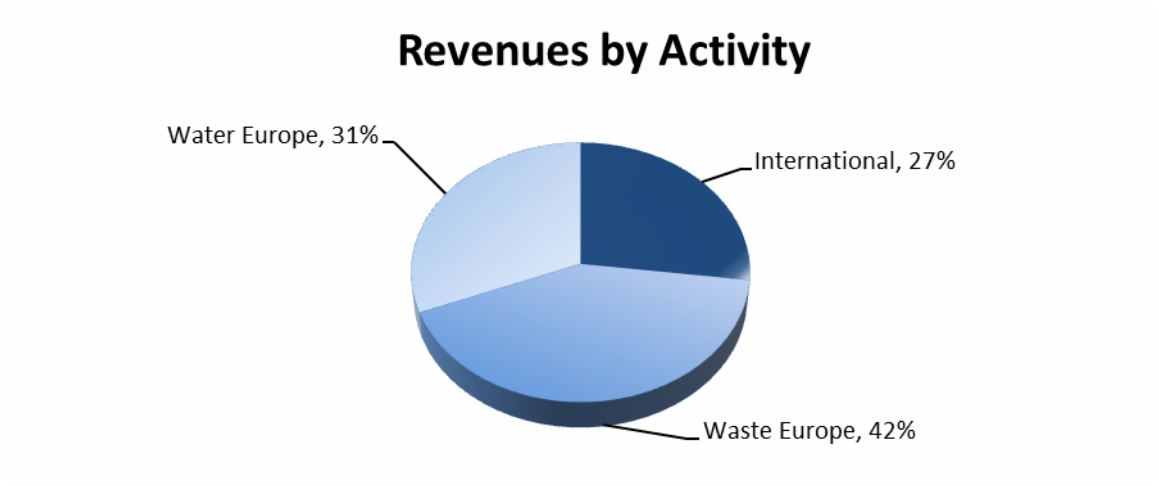
A. SuezE is a world-wide environmental services company dedicated exclusively to water, wastewater and solid waste services, including:

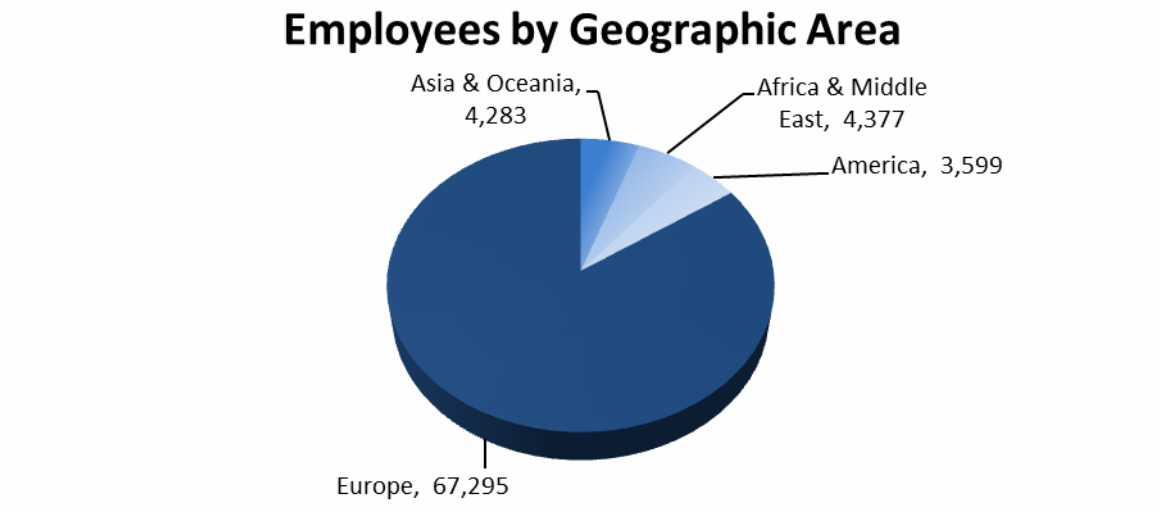
- Waste collection and urban sanitation;
- Material recovery and recycling of non-hazardous waste products;
- Hazardous waste treatment and recovery;
- Medical waste collection and disposal;
- Remediation and conversion of polluted industrial sites;
- Industrial waste services;
- Design, construction and operation of water and wastewater treatment plants and systems;
- Processed water and industrial water treatment; and
- Desalination.

**Q. What are some key operational and financial statistics for SuezE.**

A. SuezE had revenue (turnover) of nearly €14 billion in 2010, or approximately $19 billion, with budgets for Research and Development activities of approximately

€73 million, or over $89 million. Net annual investments were approximately €1.3 billion, or about $1.7 billion, and total assets of nearly €26 billion, or $50 billion. SuezE operates in 36 countries with 79,554 employees. The charts below detail revenues, employees, and operations by activity and geographical area:




**Q. What are key operating statistics for the water and waste segments of SuezE.**

A. Key operating statistics for SuezE for water services include:

- 91 million people supplied with drinking water;
- 61 million people benefit from wastewater treatment services;
- 3.8 billion $m^3$ of drinking water produced;
- 3.0 billion $m^3$ of wastewater treated; and
- 1,200 drinking water production units.

For waste services:

- 1,800 wastewater treatment sites;
- 50 million people benefit from waste management services;
- More than 430,000 industrial and commercial clients;
- 40.0 million tons of waste treated;
- 601 sorting and transfer stations;
- 138 open landfills;
- 118 composting platforms;
- 126 hazardous waste platforms, and
- 48 non-hazardous waste incineration sites.

**Q. Please describe UWON.**

A. As stated in my prepared direct testimony at page 16, lines 4 through 8, UWON is a wholly owned subsidiary of United Waterworks Inc. (United Waterworks or UWW), which in turn is wholly owned by United Water Resources Inc. (UWR). UWON operates in six communities in the Twin Rivers region of upstate New York, and serves approximately 1700 customers. Approximately 84% percent of its customers are residential, 11% percent are commercial, less than 1%

industrial. Although the number of industrial customers, 11, is less than 1% of total customers, UWON derives more than 38% of its total water sales revenues from these customers and sells them more than 65% of total water sold. As indicated in my prepared direct testimony, at lines 4 through 7 on page 17, UWON's relative risk is increased because the loss of these few large customers would have a greater effect on UWON than on SuezE, Ms. Prylo's proxy group or my proxy group, because they are all much larger than UWON.

**Q. What are some key operational and financial statistics for UWON.**

A. UWON had revenues of $1.538 million in 2010 and total assets of $6.882 million. As noted above, UWON operates in six communities in New York with 5 employees. Unlike SuezE, UWON does not have a waste segment.

Key operating statistics for UWON for water services include:

- 1,700 customers supplied with drinking water;
- 467,920,000 gallons of drinking water produced annually;
- Capacity to produce over 2.5 million gallons of drinking water daily;
- 5 sources of supply, all wells;
- 130 fire hydrants;
- 3 wholesale connections;
- 2 booster stations;
- 2 above-ground water storage facilities; and
- 2 in-ground water reservoirs.

It is clear that UWON has a completely different operational, regulatory, geographic and financial profile than SuezE, with correspondingly marked

differences in business, political, and financial risks. The capital structure of SuezE is based upon SuezE's business profile and financial risks, which are quite different from those of UWON as noted by Ms. Prylo in her prepared direct testimony on page 18, lines 16 through 23. Conversely, the capital structure of UWON should reflect its business profile and financial risks**.** As will be discussed subsequently, the cost of capital for ratemaking purposes for a regulated utility should be set based on the risk of investment in that utility, not its ultimate parent, especially when such clear and significant risk differentials exist between the parent and the regulated subsidiary, and when there is no clear link between the regulated utility's rate base and the parent company's own financing.

As will be discussed subsequently, it is the use of funds, not the source, that indicates the risk of investment, and the holder of UWON's common equity is entitled to the opportunity to earn a rate of return commensurate with that being earned on similar investments of corresponding risk. Therefore, it is not appropriate to employ the capital structure of SuezE for ratemaking purposes.

**Ms. Prylo's Recommended Capital Structure Ratios**

**Q. DO YOU AGREE WITH STAFF'S RECOMMENDATION TO USE A DIFFERENT CAPITAL STRUCTURE THAN THE COMPANY HAS PROPOSED?**

A. No. I disagree for several reasons. First, it is inconsistent with accepted ratemaking practice for not only the Commission's precedent for UWW's New York subsidiaries but for all of United Water Resources' regulated subsidiaries. Second, contrary to Ms. Prylo's assertion, at lines 19 through 22 on page 12 of

her prepared direct testimony, SuezE is not the source of UWON's common equity. Third, Ms. Prylo's recommended SuezE capital structure is inconsistent while UWON's proposed capital structure is consistent with both utility company (electric and water) average capital structure ratios and Standard & Poor's (S&P's) financial risk indicative ratios. Fourth, I will discuss the inconsistency of Ms. Prylo's treatment of SuezE's hybrid securities with her testimony relative to Moody's treatment of these hybrids at lines 2 through 5 on page 23 of her prepared direct testimony and in Exhibit ___(KAP-2), I will also address the concept of double leverage.

**Q. WHAT IS NYPSC PRECEDENT RELATIVE TO UWON'S CAPITAL STRUCTURE?**

A. The United Waterworks' or UWW consolidated capital structure has consistently been used by this Commission to set UWON's rates, and no other agency regulating the rates of UWW subsidiaries has used SuezE's or any other parent capital structure or cost rates in setting rate for those subsidiaries. The capital structures of UWW's regulated utilities, including UWON, have conformed to the market based capital structures of the water industry, and have been stable over the years. This is the case both before and after the acquisition of United Water Resources, Inc. (UWR), the parent of UWW, by Suez, and before and after the GDF/Suez merger and the SuezE spinoff. SuezE has been the parent of UWR since 2000, when its parent, Suez, acquired all of UWR shares. In all UWW rate cases subsequent to that acquisition, there was no attempt by this or any other Commission to use the capital structure of Suez or SuezE for ratemaking

purposes until introduced by this Commission Staff in the 2010 rate cases for UWW's New York subsidiaries.

In Docket No. 98-68 re: United Water Delaware, Inc. (UWDE), UWDE appealed a decision of the Superior Court which affirmed the Delaware Public Service Commission's (PSC DE) order that the authorized the use of the capital structure of UWR, UWDE's corporate "grandparent" to the Supreme Court of the State of Delaware. In fact, the Supreme Court of the State of Delaware, in Case No. 176, 1998 (Exhibit PMA-12), overturned the Superior Court's decision which:

> "affirmed a ruling of the Public Service Commission of the State of Delaware (the "Commission") that denied, in part, an increase in rate sought by United Water. The sole claim of error relates to the Commission's determination of the capital structure of United Water. The Superior Court ruled that the Commission, in establishing a rate of return for United Water, correctly imputed to United Water the capital structure of its corporate "grandparent" rather than its corporate parent. We conclude, however, the Commission's imputation of capital analysis is speculative and unsupported by substantial evidence. Accordingly, we reverse."

The Supreme Court further stated:

> Since United Water, a wholly owned subsidiary, has no capital structure of its own, it concedes that the Commission may select, or impute to it, the capital structure of its owner. The nub of this dispute is whether that owner should be its corporate parent or its corporate grandparent.

The Court noted that United Water argued that UWW's capital structure should be used because "i) Waterworks furnishes "the capital components actually employed to finance United Water's plant: and ii) Waterworks has a capital structure typical of publicly traded water companies." UWDE presented evidence before the PSC DE that no capital had been or was expected to be

contributed to UWDE by UWR. The Court noted that the PSC DE "offered no direct evidence to the contrary but argues that since only Resources stock is publicly traded the sole source for purchasing an equity interest in United Water is through the purchase of the stock of its grandparent, Resources." In response, the Supreme Court stated:

> Both the Commission and the Superior Court justified the selection of the grandparent's, Resources, capital structure on the assumption that United Water's future financial needs will be met by Resources. But the record is devoid of evidence that this will occur and the mere change in corporate ownership through the 1994 realignment cannot, in itself, provide a basis for such an imputation.

The Supreme Court concluded when it states it "REMANDED with direction that the Superior Court FURTHER REMAND this matter to the Commission for further proceedings consistent with this opinion." The final outcome was a stipulation agreed to by all parties that the rates allowed under bond placed into effect by Order No. 4327 on October 15, 1996 be made permanent.[1] In all of United Water Delaware, Inc.'s subsequent rate cases, the Commission has consistently authorized that the UWW capital structure be used for setting rates.

It is clear that there are significant similarities between the rationale for the PSC DE's decision to set rates based upon UWR and Ms. Prylo's rationale for recommending SuezE's capital structure ratios for UWON. It is also clear that the Supreme Court of the State of Delaware's rationale for rejecting UWR's capital structure ratios for UWDE is applicable to this proceeding as well.

[1] Public Service Commission of the State of Delaware, PSC Docket No. 96-164 Order No. 5144 in re: United Water Delaware.

**Q. DOES MS. PRYLO PROVIDE A FACTUAL BASIS FOR SUCH A MAJOR CHANGE IN REGULATORY TREATMENT?**

A. No. Ms. Prylo cites no substantive reason for this major change in regulation other than a general and erroneous assumption that SuezE has become the sole supplier of all capital for UWON. UWON's cost of service should not change simply because of a change in ultimate corporate structure, without some clear and compelling evidence showing that such a significant regulatory change is justified.

**Q. ON PAGE 13, LINE 1 THROUGH PAGE 14, LINE 6, MS. PRYLO DISCUSSES THE HOLDING COMPANY STRUCTURE OF SUEZE. PLEASE COMMENT.**

A. Ms. Prylo does not understand the corporate structure of SuezE and UWON, nor does she understand the nature of the equity contributions from SuezE to UWI as she notes on page 13, lines 20 through 22 that "UWON stated that it raises capital through infusions from the parent, United Waterworks, Inc." She then cites a 2008 $150 million contribution from SuezE to United Water Inc. which was then provided to United Water Resources. She further states on page 14, lines 1 through 3, that "there is not any evidence that United waterworks, Inc.'s capital structure and financial standing are isolated from SuezE." In making such a statement, she has ignored the Standard & Poor's (S&P) comments on the $150 million contribution. S&P states:

> We treat these equity infusions like equity issuances by a public company and do not link the rating to Suez Environnement.[2]

[2] Exhibit___(KAP-8), page 3.

Moreover, as noted previously, none of the $150 million contribution is financing UWON's New York jurisdictional rate base. Clearly, UWW's capital structure and financial standing are isolated from SuezE.

**Q. WHAT IS THE HISTORY OF CAPITAL INFUSIONS FROM SuezE TO UNITED WATER INC. (UWI)?**

A. As background, SuezE's North American operations are held by Suez Environnement North America (SENA). One of SENA's subsidiaries is United Water Inc. (UWI), which holds regulated, contract service and real estate operations in UWR, and holds the unregulated or contract services operations in United Water Services Inc. (UWS; recently renamed United Water Environmental Services). In addition to its regulated operations, UWR also holds some contract service operations where they are in proximity to regulated operations, and United Properties Group, which holds land and land rights. GDF Suez owns 35% of SuezE, and the rest of its shares are publicly traded.

Ms. Prylo states on page 12, at lines 19 through 22 of her prepared direct testimony: "UWON does not issue its own common equity; it receives equity contributions from its ultimate parent, SuezE, the publicly issuing entity." She provides no proof to support this conclusion and the facts contradict her assumption that it is SuezE's capital which supports UWON's entire rate base. SuezE equity infusions are shown on Exhibit PMA-13, which is derived directly from the audited financial statements of the companies. The analysis compares the common equity (paid in capital) sections of the balance sheets on a quarterly

basis from 2004 to 2010[3] to determine the amounts of equity infused by the parent corporations. As shown in Exhibit PMA-13, from 2004 through 2010, SuezE has infused about $355 million into SENA, which kept $35M and infused $320M into UWI. Of this $320M, UWI kept $245M, sending $75M to UWS. Thus, all of the $355 capital infusion was made into SENA, UWI, and UWS. None of this capital was contributed into UWR or UWW. In March of 2010, UWI recapitalized $100M of borrowings from UWR into equity.

In fact, UWON's rate base is supported by its own internally generated funds and capital infusions from its parent, UWW. The funding stream shown on Schedule PMA-13, shows that there is no direct financial link between the rate base of UWON and SuezE.

**Q. HOW ARE CAPITAL INFUSIONS INTO UWON AUTHORIZED?**

A. The Company informs me that UWR's Board of Directors (which includes 3 independent Board members out of 8) authorize and approve capital infusions into UWW. The infusions are made periodically to insure that UWW retains a capital structure consistent with its peer group of water utilities. Decisions and authorizations of equity infusions to UWW's subsidiaries are made at the UWW level. Therefore, they are independent of any funds from SuezE.

**Q. NEVERTHELESS, DOES THE DOUBLE LEVERAGE CONCEPT DESCRIBED BY STAFF APPLY TO UWON?**

A. No. Based upon all of the foregoing, it is clear that SuezE has not supplied any of UWON's common equity. Therefore, no double leveraging exists.

[3] There have been no equity infusions since March 2010.

**Q. WHY IS THE CONCEPT OF DOUBLE LEVERAGE INAPPLICABLE IN GENERAL?**

A. The double leverage concept assumes that all of the capital employed by the parent holding company is proportionately invested in all of its subsidiaries. Such an assumption is at odds with reality and clearly at odds with the facts described above relative to SuezE capital infusions to UWI. In addition, the Order Authorizing Reorganization and Associated Transactions (Order) of June 25, 2008, authorizing the merger of Gaz de France (GDF) and SuezSA, makes it clear that SuezE's capital cannot finance UWON's rate base. Moreover, as a practical matter, the double leverage concept is inappropriate because 1) it is discriminatory; and, 2) its application disregards the fundamental concept of rate base/rate of return regulation.

**Q. WHY IS DOUBLE LEVERAGE DISCRIMINATORY?**

A. It is discriminatory because it singles out a sole corporate shareholder. Double leverage can only be claimed to exist in a situation where there is but one corporate shareholder. However, in the case of UWI, UWR, UWW and UWON, SuezE is not the sole shareholder because GDF retains 35% controlling ownership of SuezE.

**Q. PLEASE EXPLAIN GDF'S ACTION TO RETAIN A CONTROLLING OWNERSHIP INTEREST IN SUEZE.**

A. In the Order authorizing the merger of GDF and SuezE, the Commission noted that GDF Suez "wanted to retain some ownership interest in the water and wastewater business. As a result, it decided not to fully spin off the environment

business but instead to maintain control of SE through its 35% interest and the Shareholders Agreement it has entered into with certain other major shareholders of SE who will hold 12% of its shares after the proposed transaction."[4]

The controlling interest in SuezE by GDF continues. As recently as May 9, 2011, Moody's noted that:

> As part of the merger of Suez with GDF (to create the GDF SUEZ Group, rated A1) 65% of SE was spun off to Suez shareholders and simultaneously listed on the Euronext Paris and Brussels stock exchanges through an IPO in July 2008. The company remains controlled through a shareholder agreement (until July 2013) by GDF SUEZ which itself retains 35.4% of the capital.[5]

**Q. WERE THERE ANY OTHER ASPECTS OF THE GDF AND SuezE MERGER THAT WOULD PREVENT SuezE FROM ENGAGING IN DOUBLE LEVERAGING?**

A. Yes. In the aforementioned Order, the Commission stated: "Staff confirmed that no asset of UWR's regulated subsidiaries will be pledged or used as collateral by SE North America, the proposed GDF Suez or any other affiliation in connection with the merger"[6], providing further evidence that SuezE's capital is not available for investment in UWON's jurisdictional rate base.

**Q. DID THE COMMISSION TAKE ANY ACTIONS THAT WOULD FINANCIALLY INSULATE UWON FROM SUEZE?**

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[4] Order, 4.

[5] Exhibit___(KAP-7), page 1.

[6] Order, 5.

A. Yes. As further protection from any possible financial distress of SuezE, the Commission reserved the "right to impose any restriction upon UW and its New York affiliates that we deem necessary to return the companies to investment grade should the credit ratings of SE or UW fall below investment grade."[7] Although the Order addressed such a downgrade within six months of the closing of the merger, it is my opinion that, should such a downgrade occur, even now, the Commission would make every effort to assist the companies to return to investment grade. As the Order states: "[t]his may include adjustments to the cost of capital in future rate proceedings and future AFUDC rate in order to protect ratepayers from any negative effects associated with a downgrading."[8]

In view of the foregoing, the Commission is aware that none of UWON's assets were pledged or used as collateral by any affiliate in connection with the merger, that SuezE is 35% controlled by GDF and not 100% publicly-traded and the Commission, should the need ever arise in the future, is prepared to provide additional ring-fencing mechanisms to maintain the financial integrity of UWON and its ability to attract capital at reasonable rates.

**Q. WHY DOES APPLICATION OF DOUBLE LEVERAGE DISREGARD THE BASIC FUNDAMENTAL PRINCIPLE OF RATE BASE/RATE OF RETURN REGULATION?**

A. Double leverage ignores the risk rate to which the common equity investment in a subsidiary's property rate base is exposed. Only coincidentally could the risk rate of common equity investment in UWON's rate base be equal to the SuezE's

[7] Order, 6.
[8] Order, 6.

composite overall cost of capital. Such an equivalence is not the case for SuezE and UWON.

**Q. GIVEN THE INAPPROPRIATENESS OF APPLICATION OF DOUBLE LEVERAGE, HOW SHOULD UWON BE EVALUATED?**

A. It is the rate base of UWON, and UWON alone, to which the overall rate of return set in this proceeding will be applied. Hence, UWON should be evaluated as a stand-alone utility. To do otherwise would be discriminatory, confiscatory and inaccurate. It is a generally accepted financial principle that the risk of any investment is directly related to the assets in which that capital is invested. Just as with any other utility under its jurisdiction, the Commission must focus on the risk and return on the common equity investment in UWON's jurisdictional rate base because it is UWON's rates alone which will be set in this proceeding and it is UWON's rate base alone which serves its ratepayers.

The risk of investment in UWON's rate base is independent of the ownership or "loaners" of the capital used to finance that rate base. As I previously stated, it is a basic financial principle that it is the use of the funds invested which gives rise to the risk of the investment, not the source of the funds. As Richard A. Brealey and Stewart C. Myers state in Principles of Corporate Finance[9], an excerpt of which can be found in Schedule PMA-14:

> *The true cost of capital depends on the use to which the capital is put.*
>
> * * *

[9] Brealey, R.A. and Myers, S.C., Principles of Corporate Finance (McGraw-Hill Publications, Inc., 1996) 173 198.

> ***Each project should be evaluated at its own opportunity cost of capital; the true cost of capital depends on the use to which the capital is put.*** (italics and bold in original)

Morin[10] confirms Brealey and Myers when he states (see page 7 of Schedule PMA-15):

> The double leverage approach contradicts the core of the cost of capital concept. Financial theory clearly establishes that the cost of equity is the risk-adjusted opportunity cost of the investors and not the cost of the specific capital sources employed by the investors. The true cost of capital depends on the use to which the capital is put and not on its source. The Hope and Bluefield doctrines have made clear that the relevant considerations in calculating a company's cost of capital are the alternatives available to investors and the returns and risks associated with those alternatives. The specific source of funding and the cost of these funds to the investor are irrelevant considerations.

Hence, UWON must be viewed on its own merits, regardless of the source of its equity capital, i.e., UWW, or SuezE.

For example, if one were to inherit money, free of charge, and then invest it in a given utility's common stock, one would require a rate of return on that stock commensurate with the risks to which that common stock investment is exposed. It would be illogical to require a zero return on one's investment in the utility's common stock just because there was zero cost in acquiring the capital, i.e., inherited money, which was the source of the investment. Even the Internal Revenue Service places the cost basis of an inheritor on the market value of the inherited common stock on the date of death of the person who willed the stock

[10] Morin, Roger A., New Regulatory Finance, Public Utilities Reports, Inc., 2006, 523.

to the inheritor and not on zero cost to the inheritor. As *Bluefield*[11] so clearly states:

> 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; . . .

In other words, it is the "risks and uncertainties" surrounding the property employed for the "convenience of the public" which determines the appropriate level of rates and not the source of the capital financing that property. In this proceeding, the property employed "for the convenience of the public" is the rate base of UWON. And as discussed previously, SuezE is not the source of UWON's capital, nor can UWON's assets be pledged or used as collateral by SuezE. Therefore, it is only the risk of investment in UWON's rate base that is relevant to the determination of a cost rate of common equity to be applied to the common equity financed portion of that rate base.

Morin[12] concludes on page 12 of Schedule PMA-15:

> The double leverage approach has serious conceptual and practical limitations and is not consistent with basic financial theory and the notion of fairness. The assumptions and logic underlying the method are questionable. <u>The double leverage argument violates the core notion that an investment's required return depends on its particular risks</u>. The Double Leverage approach has no place in regulatory practice and should be discarded. (emphasis added)

[11] <u>Bluefield Water Works Improvement Co. v. Public Serv. Comm'n</u>, 252 U.S. 679 (1922).

[12] Morin 528.

**Q. DOES THE FINANCIAL LITERATURE SUPPORT THE USE OF ACTUAL CAPITAL STRUCTURE UNLESS IT IS CLEARLY UNSOUND?**

A. Yes. Bonbright[13] states:

> [t]he use of a hypothetical or 'typical' capitalization substitutes an estimate of what a capital cost would be under non-existing conditions for what it *actually is* or *will soon be* under prevailing conditions. However, if the existing capital structure is clearly unsound or is extravagantly conservative, the rule may need to be modified in the public interest. (italics in original)

In essence, Ms. Prylo is using a hypothetical capital structure when she recommends that SuezE's capital structure ratios be used for ratemaking purposes for UWON. Bonbright suggests that the only time the use of a hypothetical capital structure should be employed is if the actual capital structure is "clearly unsound or extravagantly conservative."

**Q. HOW DOES THE COMPANY'S PROPOSED COMMON EQUITY RATIO AT SEPTEMBER 30, 2010 COMPARE WITH THOSE MAINTAINED BY MS. PRYLO'S PROXY GROUP OF THIRTY-ONE ELECTRIC AND WATER COMPANIES AND YOUR PROXY GROUP OF SIX WATER COMPANIES?**

A. The Company's proposed September 30, 2010 common equity ratio of 52.20% is slightly higher but within the range of those maintained, on average, by both Ms. Prylo's thirty-one electric and water companies as well as my six water companies. As shown on page 1 of Exhibit __ (KAP-3), the average common equity ratio of the thirty-one electric and water companies is 49.82%, ranging from 43.50% to 62.00% with a midpoint of 52.75% while, as shown on Schedule

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[13] Bonbright, James C., Danielsen, Albert L. and Kamerschen, David R., Principles of Public Utility Rates (Public Utilities Reports, Inc., 1988) 309.

PMA-16, the common equity ratio, based upon permanent capital of my proxy group of six water companies averaged 48.53% for the year 2010 ranging from 42.93% to 55.70%, with a midpoint of 49.32% and an average 50.11% for the five years ending 2010 ranging from 44.88% to 54.07% with a midpoint of 49.48%. Thus, UWON's ratemaking common equity ratio at September 30, 2010 of 52.20% is consistent with, but slightly less financially risky than that of both Ms. Prylo's electric and water companies and my water proxy companies.

Ms. Prylo is correct that I did not make a downward financial risk adjustment to my recommended common equity cost rate. Had I done so, following the Hamada equation and a 35% income tax rate, a downward adjustment of approximately 20 basis points (0.20%) is warranted. Thus, my originally recommended common equity cost rate of 10.90% would be 10.70% to reflect the lower financial risk inherent in UWON's proposed capital structure ratios.

In addition, Phillips[14] supports the use of actual capital structure ratios for ratemaking purposes under such conditions, i.e., when they are consistent with those of other similar utilities, and not a hypothetical one such as the consolidated SuezE capital structure when he states:

> Debt ratios began to rise during the late 1960s and early 1970s, and the financial condition of the public utility sector began to deteriorate. It became the common practice to use actual or expected capitalizations; actual where a historic test year is used, expected when a projected or future test year is used.[83] (footnote omitted)

[14] Phillips, Jr., Charles F., The Regulation of Public Utilities-Theory and Practice (Public Utility Reports, Inc., 1993) 391.

> The objective, in short, shifted from minimization of the short-term cost of capital to protection of a utility's ability "to raise capital at all times. This objective requires that a public utility make every effort to keep indebtedness at a prudent and conservative level."[84] (footnote omitted)
>
> A hypothetical capital structure is used only where a utility's actual capitalization is clearly out of line with those of other utilities in its industry or where a utility is diversified."[85] (footnote omitted) (emphasis added).

In view of the foregoing, since UWON's September 30, 2010 capital structure ratios are consistent with those maintained on average by the companies in both Ms. Prylo's electric and water-company and my water company proxy groups, the Company's proposed capital structure is the only proper one to use for ratemaking purposes in this proceeding.

**Q. HOW DO THE COMPANY'S PROPOSED CAPITAL STRUCTURE RATIOS COMPARE WITH S&P'S BUSINESS RISK/FINANCIAL RISK INDICATIVE FRAMEWORK?**

A. UWW, upon whose capital structure ratios UWON's requested overall rate of return is based, has been assigned an A- bond and credit rating by S&P and "Excellent" business and "Significant" financial profiles[15]. In contrast, based upon S&P's business risk/financial risk matrix shown on page 4 of Schedule PMA-3 of Exhibit No. __ and notwithstanding Moody's assignment of an A3 rating to SuezE, in my opinion, S&P would not assign an A- bond or credit rating to SuezE. As can be gleaned from Table 2 on page 4 of Schedule PMA-3, SuezE's debt ratio of 55.65% on December 30, 2010 falls into S&P's "Aggressive" financial risk indicative ratio category. Likewise, based upon the information

contained in SuezE's December 30, 2010 Consolidated Financial Statements, SuezE's funds from operations/total debt of 19.50% place SuezE in S&P's "Aggressive" financial risk indicative ratio category, while total debt/EBITDA (Earnings Before Income Taxes and Depreciation/Amortization) of 3.55%, place SuezE in S&P's "Significant" financial risk indicative ratio category. As shown in Table 1 on page 2 of Schedule PMA-3 of Exhibit No. __, the credit rating associated with S&P's "Excellent" business risk profile and an "Aggressive" financial risk profile is BBB. While S&P notes that the rating matrix indicative ratios are a guide and not a guarantee of a rating opinion, S&P also notes that positive and negative nuances in their analyses could lead to "a notch higher or lower than the outcomes indicated in the various cells of the matrix." (see page 17, line 4 through page 18, line 11 of my prepared direct testimony).

**Q. PREVIOUSLY YOU MENTIONED THAT MS. PRYLO'S TREATMENT OF SuezE's HYBRID SECURITIES IS INCONSISTENT WITH MOODY'S TREATMENT OF THE SECURITIES. PLEASE COMMENT.**

A. On page 21, line 21 through page 23, line 18 of her prepared direct testimony, Ms. Prylo discusses what she believes to be a mischaracterization by SuezE of the $750 million hybrid securities issued in 2010. She is correct that SuezE has recognized these securities in accordance with the International Financial Accounting Standards (IFAS), but does not agree that they should be included in the common equity ratio of SuezE for ratemaking purposes. As noted in SuezE's 2010 Consolidated Financial Statements: "In accordance with IAS 32, and taking

[15] Standard & Poor's Issue Ranking: U.S. Investor-Owned Gas and Water Utilities, Strongest to weakest, June 20, 2011.

into account its characteristics (no obligation to repay, no obligation to pay a coupon[1] (footnote omitted) unless a dividend is paid out to shareholders), this instruments is recognized in equity."

Ms. Prylo also notes on page 23, line 2 through 4 of her prepared direct testimony that "Moody's considers half of SuezE's $750 million issuance of hybrids as equity for rating purposes. Nevertheless, Ms. Prylo has substituted her own judgment for that of either the IFAS or Moody's by removing 100% rather than 50% of the $750 million of hybrid securities from SuezE's common equity at December 30, 2010 in developing her recommended capital structure ratios for UWON.

**Q. GIVEN ALL IF THE FOREGOING, SHOULD THE COMMISSION ADOPT STAFF WITNESS PRYLO'S RECOMMENDED CAPITAL STRUCTURE RATIOS?**

A. No. In view of all the foregoing, Ms. Prylo's recommended consolidated capital structure ratios should be rejected by the NYPSC. The Company's ratemaking capital structure ratios based upon the UWW December 30, 2010 capital structure consisting of 47.80% long-term debt and 52.20% common equity are the only appropriate capital structure ratios to use for ratemaking purposes. They should be adopted by the NYPSC.

**Ms. Prylo's Proposed Debt Cost Rate**

**Q. DO YOU AGREE WITH MS. PRYLO'S USE OF UWW'S DEBT COST RATE IN DEVELOPING HER RECOMMENDED OVERALL RATE OF RETURN FOR UWON?**

A. No. Ms. Prylo's use of SuezE's capital structure which is more highly leveraged than the Company's proposed capital structure is inconsistent with her recommendation that UWW's debt cost rate be applied to that capital structure. Thus, her recommendation is internally inconsistent and violates basic financial theory. Capital structure and the cost of capital are interdependent; the higher the leverage in capital structure, the more earnings are exposed to interest payments, and default risk, and the higher the cost of both debt and equity. Ms. Prylo's use SuezE's capital structure, while employing the cost of debt of UWW to determine the overall rate of return, creates a clear and inappropriate mismatch. The cost of debt and the capital structure should be determined by reference to UWW, as has consistently been the case in rate proceedings involving UWON and all UWW subsidiaries as discussed previously, because that is the source of financing and because the capital structure and cost rates are representative of and consistent with the water utility industry in the US. Ms. Prylo's recommended return on equity is based upon a proxy group with a capital structure consisting of approximately 50.00% debt (see page 1 of Exhibit___(KAP-3), but applied to SuezE's capital structure consisting of 55.65% debt. Although Ms. Prylo, recognized the higher cost of common equity associated with her more financially risky recommended capital structure, by using UWW's cost of debt she has not recognized the higher cost of debt associated with a greater degree of financial risk. Not to do so is inconsistent with the basic financial precept of risk and return, i.e., that an investor requires a

higher return in compensation for bearing greater risk, be it financial or business risk.

## IV. COMMON EQUITY COST RATE

**Q. DO YOU AGREE WITH MS. PRYLO'S RECOMMENDED COMMON EQUITY COST RATE OF 10.00% BASED UPON AN 8.96% COMMON EQUITY COST RATE UNADJUSTED FOR THE INCREASED FINANCIAL RISK OF HER RECOMMENDED CAPITAL STRUCTURE?**

A. No. Ms. Prylo's unadjusted common equity cost rate of 8.96% is based upon a two-thirds (2/3) / one-third (1/3) weighting to the results of her Discounted Cash Flow (DCF) analysis and her Capital Asset Pricing Analysis (CAPM). By placing greater weight, i.e., 2 / 3 weight, on the results of the application of the DCF, the Staff's methodology is inconsistent with the Efficient Market Hypothesis (EMH) upon which the DCF is predicated, as discussed in my prepared direct testimony at page 17, line 15 through page 18, line 14. Moreover, giving 2/3 weight to a DCF derived cost rate exacerbates its tendency to understate the investors' true required return in the current market environment where market-to-book ratios significantly exceed one, especially when combined with the results of but one additional cost of common equity model, CAPM. In addition, such a cost rate does not adequately reflect the additional risk experienced by UWON due to its small size relative to the companies in her proxy group.

**Q. WHY IS PLACING GREATER WEIGHT ON THE DCF INCONSISTENT WITH THE EMH?**

A. The DCF model utilized by Ms. Prylo is market-based and therefore based upon the EMH since market prices are employed in its application. As discussed on page 18, line 17 through page 19, line 8 of my prepared direct testimony, the CAPM, Risk Premium Model (RPM) and Comparable Earnings Model (CEM) are also based on the EMH, which is the foundation of modern investment theory. The EMH was pioneered by Eugene F. Fama[16] in 1970. According to the EMH, an efficient market is one in which security prices reflect all relevant information all the time. This implies that prices adjust instantaneously to new information, thus reflecting the intrinsic fundamental economic value of a security.[17]

As noted on page 18, lines 2 through 4 of my prepared direct testimony, the "semistrong" form of the EMH is generally held to be true because the use of insider information often enables investors to "outperform the market" and earn excessive returns in the short-run. The generally-accepted "semistrong" form of the EMH means that all perceived risks, based upon publicly available information, are taken into account by investors in the prices they pay for securities. In addition, investors are aware of such information, including bond ratings, discussions about companies by bond rating agencies and investment analysts, as well as the various cost of common equity methodologies (models) discussed in the financial literature and utilized in ratemaking. This means that no single common equity cost rate model should be relied upon exclusively in

[16] Fama, Eugene F., "Efficient Capital Markets: A Review of Theory and Empirical Work" (Journal of Finance, May 1970) 383-417.

[17] Brigham, Eugene F., Financial Management – Theory and Practice, 5th Ed. (The Dryden Press, 1985) 225.

determining a common equity cost rate and that the results of multiple cost of common equity cost rate models should be taken into account.

In addition, footnote 14 on page 18 of my prepared direct testimony provides several citations from the academic literature indicating the need to rely upon multiple, independent cost of common equity models in arriving at a recommended common equity cost rate.

**Q. PLEASE DESCRIBE THIS ACADEMIC LITERATURE.**

A. The literature cited in footnote 14 on page 18 of my prepared direct testimony states the following. For example, Morin[18] states:

> Each methodology requires the exercise of considerable judgment on the reasonableness of the assumptions underlying the methodology and on the reasonableness of the proxies used to validate a theory. *The inability of the DCF model to account for changes in relative market valuation, discussed below, is a vivid example of the potential shortcomings of the DCF model when applied to a given company.* Similarly, the inability of the CAPM to account for variables that affect security returns other than beta tarnishes its use. (italics added)
>
> No one individual method provides the necessary level of precision for determining a fair return, but each method provides useful evidence to facilitate the exercise of an informed judgment. Reliance on any single method or preset formula is inappropriate when dealing with investor expectations because of possible measurement difficulties and vagaries in individual companies' market data. (Morin, p. 428)
>
> * * *
>
> The financial literature supports the use of multiple methods. Professor Eugene Brigham, a widely respected scholar and finance academician, asserts:[1](footnote omitted)

[18] Roger A. Morin, New Regulatory Finance (Public Utility Reports, Inc., 2006) 428-431.

> Three methods typically are used: (1) the Capital Asset Pricing Model (CAPM), (2) the discounted cash flow (DCF) method, and (3) the bond-yield-plus-risk-premium approach. These methods are not mutually exclusive – no method dominates the others, and all are subject to error when used in practice. Therefore, when faced with the task of estimating a company's cost of equity, we generally use all three methods and then choose among them on the basis of our confidence in the data used for each in the specific case at hand.

Another prominent finance scholar, Professor Stewart Myers, in an early pioneering article on regulatory finance, stated:[2](footnote omitted)

> Use more than one model when you can. Because estimating the opportunity cost of capital is difficult, only a fool throws away useful information. That means you should not use any one model or measure mechanically and exclusively. Beta is helpful as one tool in a kit, to be used in parallel with DCF models or other techniques for interpreting capital market data.

Reliance on multiple tests recognizes that no single methodology produces a precise definitive estimate of the cost of equity. As stated in Bonbright, Danielsen, and Kamerschen (1988), '*no single or group test or technique is conclusive*.' Only a fool discards relevant evidence. (italics in original) (Morin, p. 430)

* * *

While it is certainly appropriate to use the DCF methodology to estimate the cost of equity, there is no proof that the DCF produces a more accurate estimate of the cost of equity than other methodologies. Sole reliance on the DCF model ignores the capital market evidence and financial theory formalized in the CAPM and other risk premium methods. The DCF model is one of many tools to be employed in conjunction with other methods to estimate the cost of equity. *It is not a superior methodology that supplants other financial theory and market evidence. The broad usage of the DCF methodology in regulatory proceedings in contrast to its virtual disappearance in academic textbooks does not make it superior to other methods. The same is true of the Risk Premium and CAPM methodologies.* (italics added) (Morin, p. 431)

Brigham and Gapenski[19] state:

> In practical work, *it is often best to use all three methods* – CAPM, bond yield plus risk premium, and DCF – and then apply judgment when the methods produce different results. People experienced in estimating equity capital costs recognize that both careful analysis and some very fine judgments are required. It would be nice to pretend that these judgments are un necessary and to specify an easy, precise way of determining the exact cost of equity capital. Unfortunately, this is not possible. Finance is in large part a matter of judgment, and we simply must face this fact. (italics in original)

Finally, Brigham and Daves[20] reiterate Brigham and Gapenski's comments when they state:

> Recent surveys found that the CAPM approach is by far the most widely used method. Although most firms use more than one method, almost 74 percent of respondents in one survey, and 85 percent in the other, used the CAPM.[12] (footnote omitted)
>
> * * *
>
> Approximately 16 percent now use the DCF approach, down from 31 percent in 1982. The bond-yield-plus-risk-premium is used primarily by companies that are not publicly traded.
>
> People experienced in estimating the cost of equity recognize that both careful analysis and sound judgment are required. It would be nice to pretend that judgment is unnecessary and to specify an easy, precise way of determining the exact cost of equity capital. Unfortunately, this is not possible – finance is in large part a matter of judgment, and we simply must face this fact.

In view of all of the foregoing, it is clear that investors are or should be aware of all of the models available for use in determining a common equity cost rate. Thus, implicit in the EMH is the assumption that, collectively, investors

[19] Brigham, Eugene F. and Gapenski, Louis C., Financial Management – Theory and Practice Fourth Edition, (The Dryden Press, 1985) 256.

consider them all. Hence, Ms. Prylo's significantly greater reliance upon the DCF model is at odds with the very foundation, i.e., the EMH, upon which the DCF is predicated. In addition, absent empirical evidence to the contrary, there is no evidence, under the EMH, that investors place such degrees of weight upon the DCF (2/3) and CAPM (1/3) to the exclusion of other models such as the RPM and CEM. Therefore, it is appropriate for Ms. Prylo to consider the results of the models equally.

**Q. HOW DOES MS. PRYLO'S RECOMMENDED COMMON EQUITY COST RATE COMPARE WITH AUTHORIZED RETURN RATES ON COMMON EQUITY FOR OTHER UTILITIES, BOTH ELECTRIC AND WATER?**

A. Ms. Prylo's recommended unadjusted common equity cost rate of 8.96% and financial risk adjusted common equity cost rate of 10.00% are not consistent with authorized ROEs for electric utilities from January 14, 2009 through June 17, 2011. As shown on Schedule PMA-17, the average authorized ROE for an electric utility from January 14, 2009 though June 17, 2011 was 10.40% relative to a common equity ratio of 48.42%. As shown in Column 11, the average award of 10.40% in these cases represented an average equity risk premium of 470 basis points (4.70%) (based upon the difference between the authorized ROE and the most recent monthly average yield on Moody's A rated public utility bonds prior to each Order, as explained in note (1) on Schedule PMA-17. A recent (July 6, 2011) yield on Moody's A rated public utility bonds was 5.40%[21]. Coupling this with an average equity risk premium of 4.70%, the currently

[20] Brigham, Eugene F. and Daves, Phillip R., Intermediate Financial Management, (Thomson-Southwestern, 2007) 332-333.

indicated common equity cost rate based upon recently authorized ROEs in litigated electric utility rate cases is 10.10%.

However, an ROE of 10.10% still understates the common equity cost rate for UWON because it neither recognizes the greater financial risk of Ms. Prylo's proposed capital structure ratios or UWON's smaller relative size. Both the 10.40% average authorized ROE shown on Schedule PMA-17 and the10.10% indicated current ROE are relative to the less financially risky electric companies as evidenced by the average authorized common equity ratio of 48.42%. Therefore, it cannot be directly compared with either Ms. Prylo's unadjusted common equity cost rate of 8.96% nor her financial risk adjusted common equity cost rate of 10.00%. Using the Hamada formula, a tax rate of 35%, Ms. Prylo's market equity risk premium, beta and risk free rate as shown on Exhibit ___(KAP-4), page 3 as well as her recommended common equity ratio of 39.33%, a financial risk adjustment of 91 basis points (0.91%) is necessary in order for the average authorized ROE for electric companies shown on Schedule ___(PMA-17) to appropriately reflect her recommended common equity ratio of 39.33% for UWON. Adding 91 basis points (0.91%) to the 10.40% average authorized electric company ROE shown on Schedule ___(PMA-17) and the 10.10% indicated current ROE results in common equity cost rates of 11.31% and 11.01%, respectively, which reflects the greater relative financial risk of Ms. Prylo's recommended common equity ratio of 39.33%. In addition, adding a conservative 40 basis points (0.40%) to reflect UWON's smaller relative size, results in ROEs of 11.71% and 11.41%, respectively.

[21] Value Line Selection & Opinion, Value Line Investment Survey, July 15, 2011, p. 2133.

In view of all the foregoing, Ms. Prylo's recommended unadjusted common equity cost rate of 8.96% and financial risk adjusted common equity cost rate of 10.00% are clearly out of line when compared with recent authorized ROEs for electric companies and especially when those recent authorized ROEs are adjusted for the greater financial risk inherent in her recommended common equity ratio and UWON's smaller relative size.

**Ms. Prylo's Proxy Group of Thirty-one Electric and Water Companies**

**Q. DO YOU HAVE ANY COMMENT ON MS. PRYLO'S RELIANCE UPON A PROXY GROUP OF THIRTY-ONE ELECTRIC AND WATER COMPANIES?**

A. Yes. Ms. Prylo's explanation on page 35, lines 10 through 14, of her prepared testimony that she did not select a separate proxy group of water companies because "[t]here are not enough publicly traded water companies to use for developing a proxy group that would produce reliable results" is misleading. She states at lines 13 and 14 on page 35 of her prepared direct testimony that "*Value Line* only covers five water companies." That is not entirely true. Value Line Investment Survey's (Value Line) Standard Edition only covers five water companies. However, Value Line's Small- and Mid-Cap Edition provides financial data on an additional five water companies. See pages 1 and 2 of Schedule PMA-18. Thus, Value Line covers ten water utilities which represent the entire universe of publicly-traded water utilities. While the Small- and Mid-Cap Edition does not provide Value Line projected growth rates, it does provide consensus 5-year earnings growth rates as well as betas as shown on pages 3 through 12 of Schedule PMA-18. Projected growth rates in earnings per share

(EPS) are also available from sources such as ThomsonFN First Call (which reflect the consensus estimates of I/B/E/S), Zacks, and Reuters, for example. Thus, the data do exist with which to apply both a DCF analysis and a CAPM analysis to the market data of water companies. This is evidenced by my cost of common equity analysis based upon water companies contained in Schedules PMA-1 through Schedules PMA-11 of Exhibit No. __ and as discussed in my prepared direct testimony. Investors, consistent with the EMH discussed previously, are aware of the small universe of publicly traded water companies, as well as the sources of market data and analysts estimates for these companies. In my opinion, investors would look to other water companies, even with limited data, in arriving at their pricing decisions and required return rates on common equity for water companies, rather than look to a group of electric and water companies. Investors would then perform a relative risk analysis relative to other publicly traded water companies to determine a company specific investor required return. Rate of return analysts, such as Ms. Prylo and myself, should emulate investor behavior when arriving at a recommended cost rate of common equity applicable to UWON. Therefore, in my opinion, Ms. Prylo should not have relied upon a group of electric and water companies, but rather a group of water companies in determining a recommended common equity cost rate for UWON.

**Q. CAN YOU PROVIDE SOME EVIDENCE THAT THE RISK OF WATER UTILITIES DIFFERS SIGNIFICANTLY FROM THAT OF ELECTRIC, COMBINATION ELECTRIC AND GAS AND NATURAL GAS DISTRIBUTION UTILITIES?**

A. Page 6, line 14, through page 11, line 30 of my prepared direct testimony discuss some of the differences in risk between water utilities and the electric, combination electric and gas and natural gas distribution utilities, specifically in regard to the extraordinary expected capital expenditures necessary to repair, replace and install new water utility plant, capital intensive nature of water utilities and their lower relative depreciation rates. UWON and the water industry, specifically my water proxy group, continued to be more capital intensive in 2010 as well as experiencing lower depreciation rates. Page 1 of Schedule PMA-19 shows that for UWON, it took $3.14 of net plant in 2010 to produce $1.00 in operating revenues and for my water proxy group, it took $3.84. In contrast, for Ms. Prylo's proxy group it took $2.09 of net plant to produce a $1.00 in operating revenues. Excluding the water companies from her proxy group only slightly reduce the capital intensive nature of her group, for the electric companies alone in her proxy group, it took $2.08 of net plant to produce a $1.00 of operating revenues. Likewise, UWON experiences a depreciation rate significantly lower than that of my water proxy group Ms. Prylo's proxy group, including and excluding the water companies. As shown on page 2, UWON's 2010 effective depreciation rate was 1.8%, while that of my water group was 3.1% and that of Ms. Prylo's proxy group, both including and excluding the water companies was 3.7%.

Relative to expected capital expenditures, in addition to the information provided by S&P and the Environmental Protection Agency (EPA) on pages 10

and 11 of my prepared direct testimony, in its 2009 infrastructure Fact Sheet[22] published by the American Society of Civil Engineers (ASCE) they state:

> America's drinking water systems face an annual shortfall of at least $11 billion to replace aging facilities that are near the end of their useful lives and to comply with existing and future federal water regulations. This does not account for growth in the demand for drinking water over the next 20 years. Leaking pipes lose an estimated 7 billion gallons of clean drinking water a day.

Water utility capital expenditures as large as projected by the EPA and ASCE will require significant financing. The three sources typically used for financing are debt, equity (common and preferred) and cash flow. All three are intricately linked to the opportunity to earn a sufficient rate of return as well as the ability to achieve that return. Consistent with the *Bluefield* and *Hope* decisions discussed previously, the return must be sufficient enough to maintain credit quality as well as enable the attraction of necessary new capital, be it debt or equity capital. If unable to raise debt or equity capital, the utility must turn to either retained earnings or free cash flow, both of which are directly linked to earning a sufficient rate of return. If either are inadequate, it will be nearly impossible for the utility to invest in needed infrastructure. Since all utilities typically experience negative free cash flows, it is clear that an insufficient rate of return can be financially devastating for utilities and for its customers, the ratepayers. Page 1 of Schedule PMA-20 demonstrates that the free cash flows (funds from operations minus capital expenditures) of water utilities as a percent of total operating revenues has been consistently and more negative than that of

[22] 2009 American Society of Civil Engineers, Report Card for America's Infrastructure 2009.

electric, combination electric and gas and natural gas utilities for the ten years ended 2010. Magnifying the impact of water utilities' negative free cash flow position is a continued inability to achieve what may already be an insufficient authorized rate of return on common equity as will be discussed subsequently.

Consequently, as with the previously discussed capital intensity and depreciation rates, significant capital expenditures relative to net plant as well as the consistently and more significantly negative free cash flow relative to operating revenues of water utilities indicates greater investment risk for water utilities relative to electric, combination electric and gas and natural gas utilities.

In view of the foregoing, it is clear that the water and wastewater utility industry's high degree of capital intensity, low depreciation rates and significant negative free cash flow, coupled with the need for substantial infrastructure capital spending, requires regulatory support in the form of adequate and timely rate relief, as recognized by NARUC, so water and wastewater utilities will be able to successfully meet the challenges they face.

**Q. ARE THERE OTHER INDICATIONS THAT THE WATER UTILITY INDUSTRY EXHIBITS MORE INVESTMENT RISK THAN THE ELECTRIC, COMBINATION ELECTRIC AND GAS AND NATURAL GAS UTILITY INDUSTRIES?**

A. Yes. Schedule PMA-20 presents several such indications: total debt / earnings before interest, taxes, depreciation and amortization (EBITDA); funds from operations (FFO) / total debt; funds from operations / interest coverage; before-income tax / interest coverage; earned ROEs and earned v. authorized ROEs for each utility industry for the ten years ended 2010. The increasing proportion of

total debt to EBITDA for the water utilities indicates significantly increasing and greater financial risk for water utilities, which began the most recent ten years below that of electric, combination electric and gas and natural gas utilities.

As noted previously, S&P evaluates total debt as a percentage of EBITDA and FFO as a percentage of debt in the bond / credit rating process. Page 2 of Schedule PMA-20 shows that total debt / EBITDA has risen steadily for water utilities for the ten years ended 2010, dropping only slightly for 2010. Notwithstanding the decline in 2010, total debt / EBITDA is now higher than that for electric, combination electric and gas and natural gas utilities. Page 3 shows that FFO / total debt has steadily declined for water utilities over the decade ending 2010, while rising for the other utility groups. The consistently low level of FFO / total debt for the water utilities, is a further indication of the pressures upon water utility cash flows and the increased relative investment risk which the water utility industry faces.

Pages 4 and 5 of Schedule PMA-20 confirm the pressures upon both cash flows and income faced by water utilities. Page 4 shows that FFO / interest coverage for water, electric, combination electric and gas and natural gas utilities followed a similar pattern to FFO interest coverage for the ten years ended 2010. FFO interest coverage remained relative consistent for water utilities, rising and falling between 2.0 and 3.0 times during the period. A similar pattern was exhibited by electric utilities. However, FFO / total debt for combination electric and gas as well as natural gas utilities rose during the ten years, exceeding that of water utilities significantly in 2009 and dropping back somewhat in 2010. Page

5 shows that before-income tax coverage interest coverage for water utilities also remained relatively stable, falling below that of gas utilities in 2002 and below that of electric and combination electric and gas utilities between 2005 and 2006, where it remained for the remainder of the ten years. In 2010, in all likelihood due to the "Great Recession" and the economy's currently nascent, fragile recovery from it, before-income tax interest coverage for water, electric and combination electric and gas utilities has converged at slightly lower than 3.0 times, while natural gas utilities continue to enjoy a significantly greater before-income tax interest coverage of approximately 4.25 times in 2010. Once again, the consistency and relatively low level of interest coverage ratios for water utilities are further indications of the pressures upon cash flow which water utilities face, confirming greater investment risk for water utilities relative to electric, combination electric and gas and natural gas utilities.

A final indication of the relative investment risk of water utilities compared with electric, combination electric and gas and natural gas utilities, are trends in earned and authorized ROEs. As shown on page 6 of Schedule PMA-20, earned ROEs, on average, for water utilities have generally been below those of electric, combination electric and gas and natural gas utilities during the ten years ended 2010. They have consistently been lower for the last five years. However, such a comparison would not be complete without a comparison of earned ROEs with authorized ROEs, as shown on pages 7 through 10 of Schedule PMA-20. The authorized ROEs are those reported in AUS Utility Reports for the last month of each year representing the authorized ROEs in effect during the previous year,

rather than the outcomes of rate cases decided during the year. Hence, these authorized ROEs represent the revenue requirements of each year which give rise to the earned ROEs in each year. Water utilities generally, consistently and dramatically earned far below their authorized ROEs, while electric and combination electric and gas earned above their authorized ROEs in some years and below in others. In contrast, natural gas utilities generally, consistently and dramatically earned above their authorized ROEs. Notwithstanding the closing of the gap between the average authorized ROEs for the various utility groups over the ten year period, for the majority of the period, water utilities have failed to earn their average authorized ROE with earned ROEs significantly lower than authorized, a likely contributing factor to the greater risk indicated by the previously discussed coverage metrics.

In view of all of the foregoing, it is clear that the investment risk of water utilities, has increased over the most recent ten years and that water utilities currently face greater investment risk relative to electric, combination electric and gas and natural gas utilities. Coupled with the fact that there is broad based market information available for the publicly traded companies in the water utility industry, it is therefore appropriate and possible to utilize a water utility proxy group and not an electric proxy group augmented by a limited number of water utilities.

**Q. IS THERE ANYTHING ELSE INAPPROPRIATE ABOUT MS. PRYLO'S USE OF AN ELECTRIC AND WATER COMPANY PROXY GROUP?**

A. Yes. Having performed a common equity cost rate analysis based upon electric and water companies, Ms. Prylo then neglected to perform a complete relative business risk analysis between her electric and water companies and UWON. Significant differences in business risk include the significantly greater capital intensity and lower depreciation rates of the water industry, in general, and UWON, specifically, relative to the electric utility industry discussed previously as well as the smaller relative size of UWON relative to the companies in her proxy group.

**Q. PLEASE DISCUSS THE RISK IMPLICATIONS OF UWON'S SMALL SIZE RELATIVE TO THE PROXY GROUP OF SIX AUS UTILITY REPORTS WATER COMPANIES AND MS. PRYLO'S PROXY GROUP OF THIRTY-ONE ELECTRIC AND WATER COMPANIES.**

A. In general, all else equal, one significant element of business risk is size, as discussed on page 11, line 32 through 13, line 9 and again at page 49, line 31, through page 51, line 13 of my prepared direct testimony. Ms. Prylo acknowledges as much when, relative to her discussion of the definition of business risk on page 19 of her prepared direct testimony, specifically at lines 12 through 14, she states that "[s]ize is also factored into the equation because a smaller company implies less diversification and less financial flexibility." Smaller companies are less capable of coping with significant events which affect sales revenues and earnings. For example, the loss of revenues from a few larger customers, for example, would have a greater effect on a small company such as UWON than on much larger companies with larger customer bases such as the

companies in Ms. Prylo's proxy group of electric utility holding companies. In addition, the effect of extreme weather conditions, i.e., prolonged droughts or extremely wet weather, will have a greater effect upon a small operating water utility than upon the much larger, more geographically diverse holding companies.

Further evidence of the risk effects of size includes the fact that investors demand greater returns to compensate them for a lack of marketability and liquidity for the securities of smaller firms. As discussed previously, because UWON is the regulated utility to whose rate base the NYPSC's ultimately allowed overall cost of capital and fair rate of return will be applied, the relevant risk reflected in the cost of capital must be that of UWON, including the impact of its small size on common equity cost rate. Hence, size is an important factor which affects common equity cost rate.

**Q. PLEASE COMPARE THE SIZE OF UWON WITH THAT OF THE PROXY GROUP OF SIX AUS UTILITY REPORTS WATER COMPANIES AND MS. PRYLO'S THIRTY-ONE ELECTRIC AND WATER COMPANIES.**

A. UWON is significantly smaller than the average company in either my water proxy group or Ms. Prylo's electric and water proxy group based upon the results of a study of the market capitalization of UWON estimated relative to the water proxy group and Ms. Prylo's proxy group of thirty-one electric and water companies. The results are shown on Schedule PMA-21. Page 1 contains a chart of the results, while page 2 is a summary of the small size risk premiums based upon the Ibbotson Associates 2010 size premia study, and page 3

contains a summary of the market capitalizations based upon the average market price used by Ms. Prylo in her DCF analysis. Pages 4 through 15 provide an updated excerpt from Ibbotson® SBBI® – 2011 Valuation Yearbook – Market Results for Stocks, Bonds, Bills and Inflation – 1926-2010 (SBBI – 2011) regarding the size premium. As can be seen on both pages 1 and 2 of Schedule PMA-21, the Company is significantly smaller than the average company in either the water proxy group or in Ms. Prylo's electric proxy group based upon market capitalization as shown below:

Table 1

| | Market Capitalization(1) ($ Millions) | Times Greater than the Company |
|---|---|---|
| UWON | | |
| Based upon the Proxy Group of Six Water Cos. | $4.744 | |
| Based upon Ms. Prylo's Proxy Group of Thirty-One Electric & Water Cos. | 3.163 | |
| Proxy Group of Six Water Companies | 1,621.756 | 341.9x |
| Ms. Prylo's Proxy Group of Thirty-One Electric & Water Cos. | 12,028.942 | 3,803.0x |

Because UWON's common stock is not publicly traded, I have assumed that if it were publicly traded, its common shares would be selling at the same market to book ratios as either the average water company or the average electric and water company. Hence, UWON's market capitalization is estimated to be $4.744 and $3.163 million based upon the water and electric and water proxy groups, respectively. In contrast, the market capitalization of the average

water company was $1.622 billion and the average company in Ms. Prylo's proxy group was approximately $12.029 billion, or 341.9 and 3,803.0 times larger than UWON's estimated market capitalization, respectively. It is conventional wisdom, supported by actual returns over time, and a general premise contained in basic finance textbooks[23], that smaller companies tend to be more risky causing investors to expect greater returns as compensation for that risk. Pages 4 5 through 15 of Schedule PMA-21 of confirm this proposition to be true. As shown on page 2 of Schedule PMA-21 the average size premium for common stocks in the 10th decile, in which UWON falls, was 6.36% from 1926-2010. In contrast, size premiums for the 6th decile in which the average water company falls and the 2nd decile in which Ms. Prylo's average electric and water company falls were 1.82% and 0.81% from 1926-2010. As also shown on page 2, the size premium spreads between the six water companies and thirty-one electric and water companies and UWON are 4.54% and 5.55%, respectively.

In view of UWON's extremely small estimated market capitalization, relative to the estimated average market capitalization of the thirty-one electric and water companies, in my opinion, it is conservatively reasonable to assume a small size risk premium of 0.40% or 40 basis points, as I have done relative to my water proxy group in my prepared direct testimony, although a size premium as large as 5.55% is indicated as discussed above. Adding 40 basis points to Ms. Prylo's 2/3-1/3 weighted DCF and CAPM results adjusted for the greater financial risk of her recommended capital structure of 10.00% results in an

[23] See lines 11-22on page 16 of Ms. Ahern's prepared direct testimony.

indicated return rate on common equity of 10.40%, while adding 5.55%, the result is 15.55%, which clearly demonstrates the inadequacy of Ms. Prylo's recommended 10.00%.

**Discounted Cash Flow Model**

**Q. DO YOU HAVE ANY COMMENTS ABOUT MS. PRYLO'S APPLICATION OF THE DISCOUNTED CASH FLOW MODEL?**

A. Yes. Ms. Prylo's DCF results are understated for two reasons. First, she incorrectly relies exclusively upon a two-stage growth version of the DCF model. Second, she incorrectly relies upon both dividend growth and sustainable growth in her application of the two-stage DCF.

**Q. PLEASE COMMENT UPON THE APPLICABILITY OF THE TWO-STAGE DCF WHEN DETERMINING A REGULATED WATER UTILITY'S SUCH AS UWON'S, COMMON EQUITY COST RATE.**

A. As discussed on page 19, line 20 through page 20, line 18 of my prepared direct testimony, there is no basis for applying multi-stage growth versions of the DCF model to determine the common equity cost rates of mature public utility companies. Therefore, the constant growth model is most appropriate. In my experience, it is the most widely utilized version of the DCF used in public utility rate base / rate of return regulation. In my opinion, it is widely utilized because utilities are generally in the mature stage of their lifecycles and not transitioning from one growth stage to another. This is especially true for water utilities.

All companies, including utilities, go through typical life cycles in their development, initially progressing through a growth stage, moving onto a

transition stage and finally assuming a steady-state or constant growth state. However, the U.S. public utility industry is a long-standing industry in the U.S., dating back to approximately 1882[24]. The standards of rate of return regulation of public utilities date back to the previously discussed principles of fair rate of return established in the Hope[25] and Bluefield[26] decisions of 1944 and 1923, respectively. Hence, the public utility industry in the U.S. is a stable and mature industry characterized by the steady-state or constant-growth stage of a multi-stage DCF model. The economics of the utility industry reflect the features of this relative stability and demand maturity. As regulated businesses, their returns on capital investment, i.e., rate base, are set through a ratemaking process and not determined in the competitive markets. This characteristic, taken together with the longevity of the public utility industry, all contribute to the stability and maturity of the industry, including the water utility industry. Moreover, Ms. Prylo also characterizes the utility industry as "mature" and / or "stable" three times in her prepared direct testimony. First, on page 44, lines 1 and 2, she cites "the relatively mature and stable nature of the utility industry." Second, on page 49, lines 13 and 14, she characterizes the utility industry as "a mature sector" of the economy as a whole. Finally, on page 52 at lines 7 and 8, she characterizes the electric utility industry as "relatively stable."

[24] Bonbright, Danielsen and Kamerschen 334.

[25] Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944).

[26] Bluefield Water Works Improvement Co. v. Public Serv. Comm'n, 262 U.S. 679 (1923).

Therefore, it is neither necessary nor appropriate to rely upon multi-stage versions of the DCF model, including the two-stage version Ms. Prylo used. The appropriate DCF model for regulated utility cost of capital purposes is the single-stage constant growth DCF model, which I utilized in my prepared direct testimony.

**Q. PLEASE COMMENT UPON MS. PRYLO'S USE OF DIVIDEND GROWTH AND SUSTAINABLE GROWTH IN HER APPLICATION OF THE TWO-STAGE DCF MODEL.**

A. DCF theory indicates that an investor buys a stock for an expected total return rate composed of cash flows received in the form of dividends plus appreciation in market price, or as Morin[27] says on page 3 of Schedule PMA-22, "dividends, rather than earnings, constitute the source of value." Nevertheless, as noted on page 22, line 6 through 12 of my prepared direct testimony:

> Over the long run, there can be no growth in DPS without growth in EPS. Security analysts' earnings expectations have a more significant, but not sole, influence on market prices than dividend expectations. Thus, the use of earnings growth rates in a DCF analysis provides a better matching between investors' market appreciation expectations and the growth rate component of the DCF. Earnings expectations have a significant influence on market prices and their appreciation or the "growth" experienced by investors.[28]

Morin corroborates this concept when he also states on page 252 of New Regulatory Finance (page 3 of Schedule PMA-22):

> This does not mean that earnings are unimportant for they provide the basis for paying dividends.

[27] Morin 252.

[28] Morin 298 – 303.

In fact, Morin states the following on page 298 of New Regulatory Finance (page 3 of Schedule PMA-23):

> Because of the dominance of institutional investors and their influence on individual investors, analysts' forecasts of long-run growth rates provide a sound basis for estimating required returns. Financial analysts exert a strong influence on the expectations of many investors who do not possess the resources to make their own forecasts, that is, they are a cause of g. The accuracy of these forecasts in the sense of whether they turn out to be correct is not at issue here, as long as they reflect widely held expectations. As long as the forecasts are typical and/or influential in that they are consistent with current stock price levels, they are relevant. The use of analysts' forecasts in the DCF model is sometimes denounced on the grounds that it is difficult to forecast earnings and dividends for only one year, let alone for longer time periods. This objection is unfounded, however, because it is present investor expectations that are being priced; it is the consensus forecast that is embedded in price and therefore in required return, and not the future as it will turn out to be.
>
> * * *
>
> Published studies in the academic literature demonstrate that growth forecasts made by security analysts represent an appropriate source of DCF growth rates, are reasonable indicators of investor expectations and are more accurate than forecasts based on historical growth. These studies show that investors rely on analysts' forecasts to a greater extent than on historic data only.

My prepared direct testimony also cites Dr. Myron Gordon, the "father" of the standard regulatory version of the DCF model widely utilized throughout the U. S. in rate base / rate of return regulation, who has recognized the significance of analysts'' forecasts of growth in EPS. (see page 22, line 20 through page 23, line 4 of my prepared direct testimony). Also cited in my prepared direct testimony at page 23, lines 23 and 24 is the fact that studies performed by Cragg

and Malkiel[29] demonstrate that analysts' forecasts are superior to historical growth rate extrapolations.

Finally, Ms. Prylo cites Jeremy Siegel's book "Stocks For the Long Run" on page 53, lines 11 through 17, that "discounting earnings results is [sic] an overstatement of a stock's value" and then concludes that "in this case where the required return is being determined, an overstatement in the expected growth rate of dividends." Her citation and conclusion misplaced for two reasons. Schedule PMA-24 is an excerpt from the 2002 edition of Siegel's book, where her citation is found on page 7. First, Siegel never extended his comment relative to discounting earnings results in an overstatement of a stock's value to include Ms. Prylo's misplaced conclusion that Siegel is implying that "where the required return is being determined an overstatement in the expected growth rate of dividends [results]." (lines 14 through 17 on page 53 of Ms. Prylo's prepared direct testimony. Second, the section in Siegel's 2002 book which contains Ms. Prylo's citation actually supports the use of earnings growth forecasts when valuing stocks. He states:

> For the equity holder, the source of future cash flows is the earnings of firms. (p. 90)
>
> * * *
>
> Some people argue that shareholders most value stocks' cash dividends. But this is not necessarily true. (p. 91)
>
> * * *
>
> Since the price of a stock depends primarily on the present discounted value of all expected future dividends, it appears that dividend policy is

[29] John G. Cragg and Burton G. Malkiel, Expectations and the Structure of Share Prices (University of Chicago Press, 1982) Chapter 4.

> crucial to determining the value of the stock. However this is not generally true. (p. 92)
>
> * * *
>
> Since stock prices are the present value of future dividends, it would seem natural to assume that economic growth would be an important factor influencing future dividends and hence stock prices. However, this is not necessarily so. The determinants of stock prices are earnings and dividends on a *per-share* basis. Although economic growth may influence *aggregate* earnings and dividends favorably, economic growth does not necessarily increase the growth of per-share earnings of dividends. It is earnings per share (EPS) that is important to Wall Street because per-share data, not aggregate earnings or dividends, are the basis of investor returns. (italics in original) (pp. 93-94)

Not only does this last paragraph support the use of security analysts' EPS growth forecasts, it does not support the use of GDP growth by Ms. Prylo as a check on the appropriate growth rate to use in a DCF calculation.

**Q. MS. PRYLO STATES ON PAGE 53, LINES 18 THROUGH 20 OF HER PREPARED DIRECT TESTIMONY THAT "ANALYSTS' EARNINGS FORECASTS ARE . . . SOMETIMES PRONE TO GRAVE INACCURACIES." PLEASE COMMENT.**

A. While some question the accuracy of analyst's forecasts of EPS growth, it does not really matter what the level of accuracy of those analysts' forecasts is well after the fact. What is important is that they influence investors and hence the market prices they pay. Moreover, there is no empirical evidence that investors, consistent with the EMH, would discount or disregard analysts' estimates of the growth in earnings per share, given the empirical research supporting their use in a DCF application.

Investors also are aware of the accuracy of past forecasts, whether for earnings or dividends growth or for interest rates. Investors have no prior knowledge of the accuracy of any forecasts available at the time they make their investment decisions, as that accuracy only becomes known after some future period of time has elapsed. Investors have such analysts' earnings growth rate projections available to them, investors are aware of the accuracy of such projections, and investors are aware of the empirical research in support of such growth forecasts.

In view of all of the foregoing, Ms. Prylo should more correctly have relied upon security analysts' earnings per share growth projections in a single-stage growth rate DCF analysis.

**Q. DO YOU AGREE WITH MS. PRYLO'S RELIANCE UPON SUSTAINABLE GROWTH IN THE SECOND-STAGE OF HER DCF ANALYSIS?**

A. No. Ms. Prylo's second-stage DCF growth rate utilizes the sustainable growth methodology for determining the growth rate component. She calculates sustainable growth for "each company in the proxy group based on its projected retention of earnings and growth in common stock balances" as she states on lines 1 through 3 on page 48 of her prepared direct testimony. On page 2 of Exhibit___(KAP-4), it is clear that the return on equity utilized in Ms. Prylo's growth rate analysis is based upon five-year expectations by Value Line. her allowance for growth caused by the sale of new common stock above book value was also based upon the five-year growth in shares from 2011 through 2014-2016. Hence, Ms. Prylo's sustainable growth methodology is a short-term

forecast, no longer than the security analysts' five-year forecasts of EPS growth used in my DCF analysis.

Moreover, her sustainable growth methodology is inherently circular because it relies upon an expected ROE on book common equity which is then used in a DCF analysis to establish a common equity cost rate related to the market value of the common stock which, if authorized as the allowed ROE in this proceeding, will become the expected ROE on book common equity. Thus, the resultant allowed DCF derived ROE on book common equity, Ms. Prylo's recommended 8.96%, is lower than the expected average Value Line ROE of 10.04% for her proxy group, as discussed previously, used to derive the allowed ROE based upon that proxy group's market data. Schedule PMA-23, an excerpt from Roger A. Morin's book New Regulatory Finance, states the following on pages 306 and 307 (page 11-12 of Schedule PMA-23):

> There are three problems in the practical application of the sustainable growth method. The first is that it may be even more difficult to estimate what b, r, s and v investors have in mind than it is to estimate what g is they envisage. It would appear far more economical and expeditious to use available growth forecasts and obtain g directly instead of relying on four individual forecasts of the determinants of such growth. *It seems only logical that the measurement and forecasting errors inherent in using four different variables to predict growth far exceed the forecasting error inherent in the direct forecast of growth itself.*
>
> *Second, there is a potential element of circularity in estimating g by a forecast of b and ROE for the utility being regulated, since ROE is determined in large part by regulation. To estimate what ROE resides in the minds of investors is equivalent to estimating the market's assessment of the outcome of regulatory hearings.* Expected ROE is exactly what regulatory commissions set in determining an allowed rate of return. In other words, the method requires an estimate of return on equity before it can even be implemented. *Common sense would dictate the inconsistency of a*

> *return on equity recommendation that is different than the expected ROE that the method assumes the utility will earn forever*. For example, using an expected return on equity of 11% to determine the growth rate and using the growth rate to recommend a return on equity of 9% is inconsistent. *It is not reasonable to assume that this regulatory utility company is expected to earn 11% forever, but recommend a 9% return on equity. The only way this utility can earn 11% is that rates be set by the regulator so that the utility will, in fact, earn 11%....*
>
> Third, the empirical finance literature discussed earlier demonstrates that the sustainable growth method of determining growth is not as significantly correlated to measures of value, such as stock price and price/earnings ratios, as other historical measures or analysts' growth forecasts. *Other proxies for growth such as historical growth rates and analysts' growth forecasts outperform retention growth estimates*. (italics added)

In view of the foregoing, it is clear that Ms. Prylo's application of the DCF is circular and ignores the basic principle of rate base / rate of return regulation, namely, that the cost of equity which will be authorized in this proceeding will be applied to the jurisdictional book value rate base of UWON and become the allowed future earned return on book common equity, i.e., the expected ROE component of the sustainable growth method.

**Q. WHAT WOULD MS. PRYLO'S DCF RESULT HAVE BEEN HAD HE PROPERLY UTILIZED A SINGLE-STAGE DCF AS WELL AS FORECASTED GROWTH IN EPS FROM VALUE LINE, HER SOURCE FOR GROWTH IN HER TWO-STAGE DCF ANALYSIS?**

A. On Schedule PMA-25 I have shown a recalculated DCF analysis based upon Ms. Prylo's DPS, average market price and Value Line's forecasted 5-year growth in EPS. As shown, the average indicated DCF common equity cost rate is 10.87% and the median, upon which Ms. Prylo relies, is 11.61%. These properly

calculated DCF cost rates also confirm that both Ms. Prylo's unadjusted recommended ROE of 8.96% and her financial risk adjusted ROE of 10.00% are grossly understated. In addition, even this corrected DCF analysis understates the cost of common equity for UWON because it does not reflect UWON's additional business risk due to its small size or greater financial risk due to the greater financial risk of Ms. Prylo's recommended capital structure ratios.

**Capital Asset Pricing Model**

**Q. DO YOU AGREE WITH MS. PRYLO'S APPLICATION OF THE CAPITAL ASSET PRICING MODEL?**

A. No. Ms. Prylo's CAPM results are understated for three reasons. First, she relies exclusively upon an average of Merrill Lynch's "Implied Return" and "Required Return" from the February 2011 and March 2011 Quantitative Profiles without looking to other sources of the expected market return such as long-term returns on the market from the Ibbotson® SBBI – 2011 Valuation Yearbook – Market Returns for Stocks, Bonds, Bills, and Inflation – 1926-2010,[30] or a projected total market return derived from Value Line's projected median price appreciation and projected median dividend yield.

Second, she does not utilize a projected risk-free rate. Since both the cost of capital and rate making are prospective in nature, it is appropriate to utilize a forecasted risk-free rate in a CAPM analysis, as I have done in my prepared direct testimony.

[30] Ibbotson SBBI – 2011 Valuation Yearbook – Market Returns for Stocks, Bonds, Bills and Inflation for 1926-2010.

Third, she erroneously averages the yields on 10-year and 30-year U. S. Treasury bonds to develop her risk-free rate. It is not appropriate to utilize the yields on 10-year U.S. Treasury Bonds for cost of capital purposes because their term, i.e., ten years, is not consistent with the long-term cost of capital to public utilities as measured by the yields on A rated public bonds. As discussed in my prepared direct testimony at page 39, line 13 through page 40, line 6, such an average is not consistent with either the long-term investment horizon inherent in utilities' common stocks, or the long-term investment horizon presumed in the DCF model. In addition, it is not consistent with the typical long-term life of the jurisdictional rate base to which the allowed fair rate of return, i.e., cost of capital, will be applied. Hence, it would have been more appropriate for Ms. Prylo to use the yields on 30-year U. S. Treasury bonds and not the average of the yields on 10-year and 30-year U. S. Treasury bonds.

All of this serves to seriously understate Ms. Prylo's CAPM results.

**Q. CAN YOU DEMONSTRATE WHY IT IS APPROPRIATE TO USE THE IBBOTSON ASSOCIATES LONG-TERM (1926-2010) HISTORICAL DATA IN A CAPM ANALYSIS?**

A. Yes. As discussed on page 29, line 7 through page 34, line 1 of my prepared direct testimony and in Schedule PMA-8, the use of holding period returns over a very long period of time is useful in a cost of capital analysis. On pages 30 and 31 of my prepared direct testimony, I provided a citation from Ibbotson® SBBI® – 2010 Valuation Yearbook – Market Results for Stocks, Bonds, Bills and Inflation – 1926-2009 (SBBI – 2010) (which is also contained in SBBI - 2011)

demonstrating the appropriateness of the use of such long-term historical data in a cost of capital analysis. In addition, the use of long-term data in a cost of capital analyses is consistent with the previously-discussed long-term investment horizon presumed by the DCF model. Moreover, arithmetic mean return rates are appropriate for cost of capital purposes. as noted by SBBI – 2010 (and also contained in SBBI – 2011) in the excerpt attached to Schedule PMA-8 of Exhibit No. ___ and demonstrated on pages 1 through 3 of Schedule PMA-8 of Exhibit No. __ discussed on page 33, line 15 through page 34, line 11 of my prepared direct testimony.

In addition, the use of the Ibbotson Associates long-term historical data in a CAPM analysis is consistent with the methodology adopted by the NYPSC in Cases 02-E-0198 and 02-G-0199 cited by Ms. Prylo on page 68 of her prepared direct testimony.

In view of all the foregoing, it should be clear that the arithmetic mean long-term historical risk premium which takes account of the standard deviation of returns, or volatility and which is critical to risk analysis into account is the appropriate for cost of capital purposes.

**Q. CAN YOU EXPLAIN YOUR PRIOR STATEMENT THAT MS. PRYLO SHOULD ALSO HAVE RELIED UPON A FORWARD-LOOKING MARKET EQUITY RISK PREMIUM BASED UPON VALUE LINE'S FORECASTED TOTAL ANNUAL MARKET RETURN PLUS FORECASTED DIVIDEND YIELD?**

A. Using a forward-looking market equity risk premium based upon Value Line data is consistent with Ms. Prylo's exclusive reliance upon Value Line projections in

her DCF analysis. In addition, it provides an additional tool and added reliability to estimating the market equity risk premium. Therefore, in my opinion, equal weight should be given to the current forecasted market risk premium derived from Value Line's average median price appreciation potential and average median expected dividend yield 3-5 years hence of 12.87% as well as the Ibbotson/Morningstar long-term historical arithmetic mean equity risk premium of 6.70% as derived in Note 2 on page 2 of Schedule PMA-26.

**Q. WHAT WOULD MS. PRYLO'S CAPM RESULT HAVE BEEN HAD SHE ALSO UTILIZED IBBOTSON ASSOCIATES LONG-TERM HISTORICAL DATA, A FORECASTED MARKET EQUITY RISK, AS WELL AS A PROJECTED RISK-FREE RATE?**

A. On Schedule PMA-26, I have shown recalculated traditional and empirical CAPM calculations using the average forecasted risk-free rate as well as including the Merrill Lunch return on the market, the long-term Ibbotson/Morningstar historical information, a forecasted Value Line data and a forecasted risk-free rate. As can be seen, the traditional CAPM cost rate is 9.89% while that of the empirical, or zero-beta, CAPM is 10.40%, averaging 10.16%. These properly calculated CAPM cost rates also confirm that Ms. Prylo's unadjusted recommended ROE of 8.60% is grossly understated by at least 156 basis points. In addition, even this corrected CAPM understates the cost of common equity for UWON because it does not reflect UWON's additional business risk due to its small size and financial risk due to the greater financial risk of Ms. Prylo's recommended capital structure ratios.

**Q. DO YOU HAVE ANY FINAL COMMENTS ON MS. PRYLO'S COMMON EQUITY COST RATE RECOMMENDATION?**

A. As discussed above, Ms. Prylo's common equity cost rate is significantly understated for several reasons. Correcting for these flaws results in a DCF cost rate of 11.61% and a CAPM cost rate of 10.16%. Using the 2 / 3 (DCF) / 1 / 3 (CAPM) weighting Ms. Prylo used results in a common equity cost rate of 11.13% (11.13% = ((2/3 * 11.61%) + (1/3 * 10.16%)). Using the more appropriate equal weighting of the DCF and CAPM results consistent with the EMH discussed previously results in a common equity cost rate of 10.89%.

**Q. IS EITHER THE 2/3 / 1/3 OR THE EQUALLY WEIGHTED DCF AND CAPM RESULTS OF 11.13% AND 10.89%, RESPECTIVELY, ADEQUATE WHEN APPLIED TO UWON?**

A. No. Cost rates of 11.13% and 10.89% are still understated and not applicable to UWON, because they do not reflect either the additional risk of UWON due to its smaller size relative to the thirty-one electric and water companies in Ms. Prylo's proxy group or the greater financial risk of Ms. Prylo's recommended capital structure. Adding the modest 0.40% (40 basis points) size premium discussed previously results in a business risk-adjusted common equity cost rate of 11.53% based upon Ms. Prylo's 2/3 (DCF) / 1/3 (CAPM) weighting and 11.29% based upon equally weighting the DCF and CAPM results applicable to UWON, which still does not reflect the greater financial risk of Ms. Prylo's recommended capital structure ratios. Using the previously discussed Hamada equation, Ms. Prylo's recommended capital structure ratios and the corrected traditional CAPM results

of 9.89% derived on Schedule PMA-26, a financial risk adjustment of 85 basis points (0.85%) is warranted. Adding 0.85% to the business risk-adjusted corrected common equity cost rate of 11.53% (2/3 / 1/3 weight) and 11.29% (equal weighting) results in business and financial risk adjusted 12.38% and 12.14% common equity cost rates, respectively.

**Q. BASED ON THE ABOVE TESTIMONY, PLEASE SUMMARIZE YOUR VIEW OF MS. PRYLO'S CALCULATED COMMON EQUITY COST RATE.**

A. Ms. Prylo's recommended capital structure reflects financial risk which is so significantly higher than her proxy group that when her common equity cost rate is corrected for the flaws in her applications of the DCF and CAPM discussed above and adjusted for both business and financial risk, it is clearly not to the benefit of UWON's ratepayers.

## V. COMMENTS ON COMPANY PREPARED DIRECT TESTIMONY

**Q. ON PAGE 73, LINE 7 20 OF HER PREPARED DIRECT TESTIMONY, MS. PRYLO CRITICIZES YOUR USE OF A PROXY GROUP CONSISTING OF ONLY SIX WATER COMPANIES. PLEASE COMMENT.**

A. I have previously discussed at length, in both this rebuttal testimony and my prepared direct testimony why it is appropriate to rely upon water companies as proxies for UWON and not a group which includes electric companies. Moreover, by expanding the source of growth rate projections to include Reuters security analysts' EPS growth rates, which are available for all six water companies, the proxy group is not "missing important forecasting information" as Ms. Prylo states on lines 11 and 12 on page 73. Furthermore, my use of median

results obviates her criticism on lines 18 through 20, that “individual results from any one company can heavily impact the results of the overall return” because the median does not “give undue weight to outliers on either the high or the low side” as stated at lines 18 and 19 on page 26 of my prepared direct testimony.

**Q. ALSO ON PAGE 73, LINE 21 THROUGH PAGE 74, LINE 6 OF HER PREPARED DIRECT TESTIMONY, MS. PRYLO CRITICIZES YOUR PROXY GROUP SELECTION CRITERIA FOR NOT INCLUDING WHETHER A COMPANY HAD AN INVESTMENT GRADE BOND OR CREDIT RATING. SHOULD YOU HAVE INCLUDED SUCH INFORMATION IN YOUR SELECTION CRITERIA?**

A. Whether or not a potential proxy company had an investment grade bond or credit rating is a moot point, since all of the water companies in my proxy group have investment grade bond / credit ratings. In addition, Ms. Prylo states earlier in her prepared direct testimony that “[t]t does not appear that she has employed any specific screening criteria to develop her proxy group beside that of just being a publicly traded water company.” However, the selection criteria for my proxy group of water companies are explicitly detailed on page 16, lines 12 through 22 of my prepared direct testimony.

**Q. ON PAGE 74, LINE 9 THROUGH PAGE 76, LINE 22 OF HER PREPARED DIRECT TESTIMONY, MS. PRYLO CRITICIZES YOUR USE OF BOTH THE SINGLE-STAGE DCF MODEL AND SECURITY ANALYSTS’ EPS FIVE-YEAR GROWTH ESTIMATES IN YOUR DCF ANALYSIS. PLEASE COMMENT.**

A. I have previously discussed at length, in both this rebuttal testimony and my prepared direct testimony, that it is appropriate to use a single-stage, constant growth DCF model because of the maturity and stability of the utility industry as well as the superiority of using analysts' EPS five-year growth estimates in a DCF analysis. Therefore, I will not repeat that discussion again.

**Q. ON PAGE 77, LINE 23 THROUGH PAGE 79, LINE 9 OF HER PREPARED DIRECT TESTIMONY, MS. PRYLO CRITICIZES YOUR CALCULATION OF THE EQUITY RISK PREMIUM FOR YOUR CAPM ANALYSIS. PLEASE COMMENT.**

A. On page 79, lines 11 through 21, Ms. Prylo criticizes my use of the Ibbotson Associates long-term market equity risk premium from 1926-2009, claiming that "it does not reflect the current investing climate"; that I have not "produced any studies indicating why investors believe this information is relevant"; and, that the time period from 1926-2009 covered "periods much different than today, particularly given recent economic events." Ms. Prylo is incorrect on all three points. First, the cost of capital is a long-term concept. Second, consistent with the EMH, investors are aware of the Ibbotson Associates data. Third, returns and equity risk premiums over the time period 1926-2010 do cover periods similar to recent economic events. Fourth, I will discuss an empirical study which indicates that historical equity risk premiums over such long periods of time are indeed relevant to the investors required rate of return.

**Q. PLEASE DISCUSS THE LONG-TERM NATURE OF THE COST OF CAPITAL.**

A. The cost of capital is a long-term concept, because common stocks are outstanding in perpetuity. The DCF presumes an infinite investment horizon. In addition, the assets, i.e., rate bases, of regulated utilities are particularly long-lived, especially water utilities. Therefore, the arithmetic mean equity risk premium over a long horizon is entirely appropriate for cost of capital purposes as discussed in detail both previously in this rebuttal testimony and in my prepared direct testimony. My prepared direct testimony provides ample support for the use of the long-term equity risk premium as the estimate of the equity risk premium on page 30, line 2 through page 33 line 9 and in Schedule PMA-8[31]. While the estimate does depend upon the length of the data series studied, a long enough data series provides a reliable average "without being unduly influenced by very good and very poor short-term returns."[32] In addition, Ibbotson Associates note that "using a long series makes it less likely that the analyst can justify any number he or she wants."[33] As Ibbotson Associates further state:

> Some analysts estimate the expected equity risk premium using a shorter, more recent time period on the basis that recent events are more likely to be repeated in the near future; furthermore, they believe that the 1920s, 1930s and 1940s contain too many unusual events. This view is suspect because all periods contain "unusual" events. Some of the most unusual events the last hundred years took place quite recently, including the inflation of the late 1970s and early 1980s, the October 1987 stock market crash, the collapse of the high-yield bond market, the major contraction and consolidation of the thrift industry, the collapse of the Soviet Union, the development of the European Economic Community, the attacks of September 11, 2001 and the more recent liquidity crisis of 2008 and 2009.

[31] The excerpt from Ibbotson Associates SBBI – 2010 included in Schedule PMA-8 is also repeated in SBBI – 2011.

[32] SBBI - 2011 59.

[33] SBBI - 2011 59.

> It is even difficult for economists to predict the economic environment of the future. For example, if one were analyzing the stock market in 1987 before the crash, it would be statistically improbable to predict the impending short-term volatility without considering the stock market crash and market volatility of the 1929- 1931 period.
>
> Without an appreciation of the 1920s and 1930s, no one would believe that such events could happen. The 85-year period starting with 1926 is representative of what can happen: it includes high and low returns, volatile and quiet markets, war and peace, inflation and deflation, and prosperity and depression. Restricting attention to a shorter historical period underestimates the amount of change that could occur in a long future period. Finally, because historical event-types (not specific events) tend to repeat themselves, long-run capital market return studies can reveal a great deal about the future. Investors probably expect "unusual" events to occur from time to time, and their return expectations reflect this.

**Q. ARE INVESTORS AWARE OF THE IBBOTSON ASSOCIATES LONG-TERM MARKET EQUITY RISK PREMIUM?**

A. Consistent with the EMH, which has also been discussed in detail in this rebuttal testimony as well as in my prepared direct testimony, investors are aware of the Ibbotson Associates long-term market equity risk premium data as well as the appropriateness of the use of such data for cost of capital purposes. Therefore, in my informed expert opinion, investors find the Ibbotson Associates long-term market equity risk premium highly relevant for cost of capital purposes.

**Q. DOES THE TIME PERIOD FROM 1926-2009 COVER "PERIODS MUCH DIFFERENT THAN TODAY, GIVEN RECENT ECONOMIC EVENTS?"**

A. No. As noted above and in my prepared direct testimony, the 1926-2009 period covered periods of both economic stability and economic volatility. Without an appreciation of the various types of events that occurred during the period and

their rate of return effects, it is impossible to assess investors' expectations of what kinds of economic could occur or assess their return expectations.

**Q. YOU PREVIOUSLY STATED THAT YOU WOULD DISCUSS AN EMPIRICAL STUDY WHICH INDICATES THAT HISTORICAL EQUITY RISK PREMIUMS OVER SUCH LONG PERIODS OF TIME ARE INDEED RELEVANT TO THE INVESTORS REQUIRED RATE OF RETURN. PLEASE COMMENT.**

A. As noted on the final page Appendix A to my prepared direct testimony, Frank J. Hanley (AUS Consultants), Professor Richard A. Michelfelder, Ph.D. (Rutgers University) and myself have co-authored a paper entitled "New Approach to Estimating the Cost of Common Equity Capital for Public Utilities" which is now forthcoming in The Journal of Regulatory Economics. The purpose of the paper was to present, empirically test and apply a recently developed general consumption-based asset pricing model that estimates the risk-return relationship directly from asset pricing data and when estimated with recently developed time series methods, produces a prediction of the equity risk premium that is driven by its predicted volatility. The time series methods used were developed by Professor Robert F. Engle, III, Ph.D. (Stern School of Business – New York University) who shared the Nobel Prize in Economics in 2003 for his work. Engle discovered that volatility changes over time and is related from one period to the next. Using his time series method, we developed a financial model, i.e., the Predictive Risk Premium Model (PRPM$^{TM}$) which predicts equity risk premiums based upon historical equity risk premiums. We estimated the PRPM$^{TM}$ over rolling 24-month periods ending December 2008 for 5, 10, 15, 20, and 70 year

periods. We then calculated predicted equity risk premiums using the average predicted variances (volatility) and the spot (last observation) variance. Table 3 of the article which is contained in Schedule PMA-27 presents the mean predicted risk premiums, the range of predicted premiums and the standard deviations for each time period. It is clear that the risk premiums are more stable over the rolling 24-month periods when calculated using the average predicted variances over the entire time period compared with using the last observation. It is also clear that the longer the time periods, i.e. 20 and 79 years, the substantially more stable and reasonable the equity risk premiums are than over the shorter 5-year time period. Hence, the study supports the use of the long-term historical arithmetic mean equity risk premium published by Ibbotson Associates.

**Q. ON PAGE 79, LINE 12 THROUGH PAGE 80, LINE 8, OF HER PREPARED DIRECT TESTIMONY, MS. PRYLO CRITICIZES YOUR USE OF THE YIELD ON 30-YEAR U.S. TREASURY SECURITIES IN YOUR CAPM ANALYSES. PLEASE COMMENT**

A. My prepared direct testimony at page 39, lines 13 through 20 is clear that the yield on 30-year U.S. Treasury Securities is appropriate for use in CAPM analyses because its term is consistent with the long-term cost of capital discussed previously, specifically, the long-term cost of capital to public utilities as measured by the yields on A rated public utility bonds, the long-term investment horizon inherent in utilities' common stocks, the long-term investment horizon presumed in the standard DCF model employed in regulatory ratemaking, as well as the long-term life of the jurisdictional rate base to which

the allowed fair rate of return, i.e., the cost of capital will be applied. In addition, SBBI – 2011 states[34]:

> Although the equity risk premia of several horizons are available, the long-horizon equity risk premium is preferable for use in most business-valuation settings, even if an investor has a shorter time horizon. Companies are entities that generally have no defined life span; when determining a company's value, it is important to use a long-term discount rate because the life of the company is assumed to be infinite. For this reasons, it is appropriate in most cases to use the long-horizon equity risk premium for business valuation
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> * * *
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> Our methodology for estimating the long-horizon equity risk premium makes use of the income return on a 20-year Treasury bond; however, the Treasury currently does not issue 20-year bond. *The 30-year bond that the Treasury recently began issuing again is theoretically more correct due to the long-term nature of business valuation,* yet Ibbotson Associates instead creates a series of returns using bonds on the market with approximately 20 years to maturity. The reason for the use of a 20-year maturity bond is that 30-year Treasury securities have only been issued over the relatively recent past, starting in February of 1977 and were not issued at all through the early 2000s. (italics added)

**Q. ON PAGE 80, LINE 22 THROUGH PAGE 81, LINE 9 OF HER PREPARED DIRECT TESTIMONY, MS. PRYLO CRITICIZES YOUR APPLICATION OF THE RPM BY CITING AS HER "PRIMARY CONCERN" YOUR USE OF AN EXPECTED BOND YIELD ON MOODY'S A RATED PUBLIC UTILITY BONDS, NOTWITHSTANDING THE FACT THAT FOR THE WATER PROXY GROUP, ONLY ONE COMPANY HAS A MOODY'S BOND RATING. WAS YOUR USE OF THIS EXPECTED BOND YIELD APPROPRIATE?**

A. Yes. It is entirely appropriate to utilize the expected yield on Moody's A rated public utility bonds in a RPM analysis for the water proxy group. Although only

[34] SBBI – 2011 55

one company has a Moody's A bond rating, it is reasonable to assume that the average bond rating for the group would be a Moody's A bond rating, given that the average S&P bond rating for the group, all of which are rated by S&P, is A+ and average S&P credit rating for the group is A as shown on page 2 of Schedule PMA-7 of Exhibit No. __ . Hence, her "concern" is without merit and should be rejected.

**Q. ON PAGE 81, LINES 13 THROUGH 24 OF HER PREPARED DIRECT TESTIMONY, MS. PRYLO CRITICIZES YOUR USE OF THE S&P PUBLIC UTILITY INDEX RELATIVE TO MOODY'S AVERAGE BOND YIELDS OVER THE 1928-2009 PERIOD. IS THIS CRITICISM WARRANTED?**

A. No. Ms. Prylo's criticism is that I have provided "no studies or analyses to determine the extent to which UWON is more or less risky than the average utility contained in *S&P's Public Utility Index* and *Moody's Public Utility Bond Average".* First, it is not necessary to compare the risk of UWON to the S&P Public Utility Index or Moody's Public Utility Bond Average, as the RPM analysis is relative to the proxy group which was selected as a proxy for UWON. Nevertheless, as shown on Schedule PMA-28, the average Moody's and S&P bond ratings of the S&P Public Utility Index are currently "A3" only one notch lower than that of the proxy group, and hence, by reference, UWON and the average S&P bond rating is "A", again only one notch lower than that of the proxy group, and hence, by reference, UWON.

**Q. ON PAGE 82 AT LINES 1 THROUGH 17 OF HER PREPARED DIRECT TESTIMONY, MS. PRYLO STATES THAT "THE COMMISSION HAS**

**SPECIFICALLY REJECTED THE USE OF A RISK PREMIUM APPROACH IN THE PAST . . . 'BECAUSE IT REFLECTS ALLOWED RETURNS WHICH ARE AN INFERIOR ALTERNATIVE'." PLEASE COMMENT.**

A. These comments are not applicable to my RPM analysis because both of the historical equity risk premiums used in my analysis are based upon holding period stock market returns and not allowed returns. Therefore, Ms. Prylo's comments are completely irrelevant.

**Q. ON PAGE 83, LINE 10 THROUGH PAGE 84, LINE 16 OF HER PREPARED DIRECT TESTIMONY, MS. PRYLO CRITICIZES YOUR CEM ANALYSIS, SPECIFICALLY AT LINES 13 THROUGH 16 OF PAGE 63, WHERE SHE STATES: "USING NON-UTILITY RETURNS TO COMPUTE A RETURN FOR A 100% REGULATED, LOW-RISK WATER UTILITY WITH NO DIRECT COMPETITION IS NOT A METHOD THAT WILL PRODUCE A RELIABLE ROE." DO YOU AGREE WITH THIS CRITICISM OF YOUR METHODOLOGY?**

A. No. Ms. Prylo's criticisms are without merit. First, as discussed on page 43, line 25 through page 45, line 21 of my prepared direct testimony, the CEM is derived from the "corresponding risk" standard of the landmark cases of the U.S. Supreme Court. Therefore, it is consistent with the Hope doctrine that the return to the equity investor should be commensurate with returns on investments in other firms having corresponding risks. It is based upon the fundamental economic concept of opportunity cost which maintains that the true cost of an investment is equal to the cost of the best available alternative use of the funds to be invested. This concept is recognized by Ms. Prylo herself when she notes

the "[t]he fair rate of return, therefore, allows the utility to recover its prudently incurred costs of debt, hybrid securities and preferred stock, while providing its common equity investors the opportunity to earn a return that is commensurate with the risk of their investment," on page 7, lines 10 through 16 of her prepared direct testimony. Thus, the CEM is consistent with one of the fundamental principles upon which regulation rests: that regulation is intended to act as a surrogate for competition and to provide a fair rate of return to investors.

Morin[35] states (see page 3 of Schedule PMA-29):

> The Comparable Earnings standard has a long and rich history in regulatory proceedings, and finds it origins in the fair return doctrine enunciated by the U.S. Supreme Court in the landmark *Hope* case. The governing principle for setting a fair return decreed in *Hope* is that the allowable return on equity should be commensurate with returns on investments in other firms having comparable risks, and that the allowed return should be sufficient to assure confidence in the financial integrity of the firm, in order to maintain creditworthiness and ability to attract capital on reasonable terms. Two distinct standards emerge from this basic premise: a standard of Capital Attraction and a standard of Comparable Earnings. The Capital Attraction standard focuses on investors' return requirements, and is applied through market value methods described in prior chapters, such as DCF, CAPM, or Risk Premium. The Comparable Earnings standard uses the return earned on book equity investment by enterprises of comparable risks as the measure of fair return.

Morin concludes on page 394 (page 16 of Schedule PMA-29):

> More fundamentally, the basic premise of the Comparable Earnings approach is that regulation should emulate the competitive result. It is not clear from this premise which is the proper level of competition being referenced. Is the norm the perfect competition model of economics where no monopolistic elements exist, or is it the degree of competition actually prevailing in the economy? A strong case for the latter can be made of grounds of fairness alone.

[35] Morin 381.

> Although the Comparable Earnings test does not square well with economic theory, the approach is nevertheless meritorious. If the basic purpose of comparable earnings is to set a fair return rather than determine the true economic return, then the argument is academic. If regulators consider a fair return as one that equals the book rates of return earned by comparable–risk firms rather than one that is equal to the cost of capital of such firms, the Comparable Earnings test is relevant. This notion of fairness, rooted in the traditional legalistic interpretation of the *Hope* language, validates the Comparable Earnings.

Second, the selection criteria utilized to select the non-price regulated firms in my application of the CEM reflect the total risk, i.e., systematic and unsystematic risks, of both of my proxy groups. As discussed in my prepared direct testimony and in Schedule PMA-30, a copy of "Comparable Earnings: New Life for an Old Precept", co-authored by Frank J. Hanley and myself, Value Line betas were used as a measure of each firm's unsystematic or specific risk, and the standard error of the regression reflects the extent to which events specific to a company's operations will affect its stock price. Therefore, it is a measure of diversifiable or unsystematic, company-specific risk. In essence, companies which have similar betas and standard errors of the regressions, have similar investment risk, i.e., the sum of systematic (market) risk as reflected by beta and unsystematic (business and financial) risk, as reflected by the standard error of the regression, respectively. Those statistics are derived from regression analyses using market prices which, under the EMH, previously discussed, reflect all relevant risks. The application of these criteria thus results in a proxy group of non-price regulated firms similar in risk to the average company in the proxy group of six water companies. Therefore, Ms. Prylo's criticisms of my CEM analysis are misplaced.

**Q. ON PAGE 84, LINE 19 THROUGH PAGE 85, OF HER PREPARED DIRECT TESTIMONY, MS. PRYLO VOICES HER CONCERNS REGARDING YOUR BUSINESS RISK ADJUSTMENT TO REFLECT UWON'S SMALLER SIZE RELATIVE TO THE AVERAGE SIZE OF YOUR TWO PROXY GROUPS, SAYING THAT "THIS IS A DISINGENUOUS ARGUMENT AS UWON IS A SUBSIDIARY OF A LARGE PUBLICLY TRADED COMPANY, SuezE." IS YOUR BUSINESS RISK ADJUSTMENT APPROPRIATE?**

A. Yes. Ms. Prylo's concern is unfounded and her use of the word disingenuous, which means not straightforward or candid, insincere or calculating, unaware or uninformed, is misplaced. As stated previously in my prepared direct testimony at page 12, line 1 through page 13, line 9, page 49, line 31, through page 51, line 13 as well as discussed previously in this rebuttal testimony, it is clear that there is both academic and empirical support that size is a risk factor which must be considered when determining common equity cost rate, all else equal. In addition, pages 3 through 15 of Schedule PMA-21 provide the empirical support from Ibbotson Associates' size premium study.

Also, as demonstrated previously in this rebuttal testimony, it is the risk of UWON's operating assets which gives rise to its investment risk and not that of the provider of its capital, UWW, consistent with the basic financial principle that it is the use of the capital which determines the risk of the asset where the capital is invested and not the source of that capital. In my opinion, Ms. Prylo's comments relative to UWON being a subsidiary of SuezE as a rationale for not making a size adjustment are disingenuous given her agreement that the fair rate

of return is one which provides “common equity investors the opportunity to earn a return that is commensurate with the risk of their investment.” (see page 7, lines 10 through 16 of her prepared direct testimony) and her statement relative to the definition of business risk at lines 12 through 14 on page 19 of her prepared direct testimony that “[s]ize is also factored into the equation because a smaller company implies less diversification and less financial flexibility.”

Moreover, as demonstrated previously in this rebuttal testimony, while UWON is in indirect subsidiary of SuezE, it does not receive any of its capital from SuezE. As also demonstrated previously, UWON’s position as an “indirect” subsidiary “of a large publicly-traded company”, SuezE, as Ms. Prylo states on page 84, line 24 through page 85, line 1 of her prepared direct testimony, is irrelevant to the determination of the cost of common equity for UWON. The cost of common equity and the authorized rate of return on common equity based thereon must reflect the risks which the shareholder / shareholders in the regulated utility bear and require in order to invest in that utility, in this case UWON. One of those risks is that of small size as previously discussed above. Ms. Prylo ignores her own statements that risk adjustments are based upon the fundamental concept that the return requirements of common equity investors are commensurate with the riskiness of their investment, i.e., that the use of the funds, and not the source of those funds, and that size is a factor of business risk, gives rise to risk and the risk-appropriate rate of return.

To reiterate, it is the rate base of UWON, and UWON alone, to which the overall rate of return set in this proceeding will be applied. Hence, UWON should

be evaluated as a stand alone utility. To do otherwise would be as discriminatory and confiscatory as double leverage. Hence, UWON must be viewed on its own merits, regardless of the source of its equity capital, i.e., its direct parent, UWW or its indirect “grandparents” or “great grandparents”, UWR, UWI, or SuezE. Therefore, the specific risk of investment in UWON, including its small size as discussed previously, and the greater financial risk of Ms. Prylo’s recommended capital structure ratios if adopted, relative to the proxy companies utilized to estimate the cost rate of common equity capital by both Ms. Prylo and myself in this proceeding, is most important in order to establish an appropriate common equity cost rate.

**Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

A. Yes.