ILLINOIS COMMERCE COMMISSION

IAWC EXHIBIT 12.30

SURREBUTTAL TESTIMONY OF

PAULINE M. AHERN

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ILLINOIS-AMERICAN WATER COMPANY

DOCKET NO. 07-0507

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SURREBUTTAL TESTIMONY **Exhibit No. 12.30**
OF
PAULINE M. AHERN

I. INTRODUCTION

Q1. Please state your name.

A. My name is Pauline M. Ahern.

Q2. Are you the same Pauline Ahern who provided direct and rebuttal testimony in this proceeding?

A. Yes.

II. PURPOSE OF TESTIMONY

Q3. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of Staff witness Sheena Kight-Garlisch, Illinois Industrial Water Consumers ("IIWC") witnesses Michael Gorman and Brian Janous, and Citizens Utility Board ("CUB") witness Christopher Thomas.

III. RESPONSE TO STAFF WITNESS KIGHT-GARLISCH

Q4. Please address Ms. Kight-Garlisch's revised return on equity ("ROE") recommendation of 10.38%.

A. Ms. Kight-Garlisch has revised her ROE recommendation to 10.38% without providing any additional rationale other than that which she provided in her direct testimony, ICC Staff Exhibit 1.0, at page 29, line 554 through page 30, line 556 and lines 570 - 572. In her direct testimony, Ms. Kight-Garlisch applied the quarterly version of the constant-growth Discounted Cash Flow ("DCF") model utilizing Zacks consensus forecasted 5-year growth rates in earnings per share ("EPS"). Because the Water Sample growth rates were "much higher than the

long-term growth forecasts for the United States economy of 4.37% and 5.57%," she concluded, at lines 555 and 556 on page 30 of ICC Staff Exhibit 4.0, that they were "not likely to be sustainable for the long-term." Based upon this conclusion, coupled with her opinion that the beta estimates for the Water Sample should receive less weight in estimating IAWC's cost of common equity, she gave only one-third (1/3) weight to her Water Sample while giving two-thirds (2/3) weight to her Utility Sample. In ICC Staff Exhibit 14.0, her rebuttal testimony, Ms. Kight-Garlisch uses precisely the same rationale. She provides no additional information or insight to justify the change from her initial reliance upon the quarterly DCF model to the non-constant DCF ("NCDCF") model now. The only difference is a much lower resultant common equity cost rate.

In addition, Ms. Kight-Garlisch acknowledges, at lines 86 and 87 on page 5 of ICC Staff Exhibit 14.0, that the NCDCF "necessitates greater reliance on rate of return analysts' judgment than the constant-growth DCF analysis." She further states that at lines 88 - 90 on page 5 that, "under certain circumstances, measurement error associated with a constant-growth DCF analysis exceeds that associated with a NCDCF model." However, her rebuttal testimony does not provide any empirical support that the unidentified "certain circumstances" exist relative to her application of the constant-growth DCF model as presented in her direct testimony, ICC Staff Exhibit 4.0. Based upon both her direct and rebuttal testimonies, these "certain circumstances" are merely that the Zacks' forecasted 5-year earnings per share (EPS) growth rate which she utilized in her direct testimony are, in her opinion, greater than the expected growth in the general

economy as measured by the nominal growth in Gross Domestic Product ("GDP"), and therefore she concludes that the constant-growth DCF model is not appropriate to use to arrive at a cost rate of common equity capital for IAWC in the instant proceeding. However, these "certain circumstances", i.e., the relationship between the average Zacks' 5-year EPS growth rates for her sample groups relative to expected growth in GDP, existed at the time of the preparation of her direct testimony, ICC Staff Exhibit 4.0. In her direct testimony Ms. Kight-Garlisch testified that the constant-growth DCF model utilizing the Zacks' 5-year EPS growth rates was appropriate. Moreover, she does not provide any empirical support that the expected growth in GDP is an appropriate measure of sustainable growth rate for utility companies, in general, and water companies, in particular. She merely states that the sustainability of the average Zacks' forecasted EPS growth rate of 9.16% for her Water Sample is "dubious" at lines 99 and 100 on page 5 of ICC Staff Exhibit 14.0 and that the 5.54% average Zacks' forecasted EPS growth rate for her Utility Sample, which is only 54 basis points (0.54%) above the forecasted 5.0% nominal growth in the economy cited at line 95 on page 5 of ICC Staff Exhibit 14.0, is "questionable" at line 109 on page 6 of ICC Staff Exhibit 14.0.

The real crux of the issue is what investors do when evaluating the expected growth, or market appreciation, when making their pricing decision relative to common stock. As discussed in my rebuttal testimony, IAWC Exhibit 12.10, at line 808 on page 30 through line 884 on page 32, there is a wealth of empirical and academic research, of which investors are aware, which supports

the superiority of analysts' forecasts of EPS, such as those provided by Zacks, as measures of investor expectations.

Hence, Ms. Kight-Garlisch has provided no supportive rationale or empirical support for her change in methodology.

Q5. Is Ms. Kight-Garlisch's characterization of your rebuttal testimony, IAWC Exhibit 12.10, at lines 221 - 230 on page 12 of ICC Staff Exhibit 14.0, accurate?

A. No. My rebuttal testimony, at lines 894 - 896 of IAWC Exhibit 12.10, relative to the results of Mr. Janous' two stage DCF analysis was that they failed a common sense test in that they are inconsistent with, because they fall below, the range of authorized ROEs shown on Schedule 12.20 accompanying IAWC Exhibit 12.10. And, because IAWC is more risky than the companies in either of Mr. Janous' two proxy groups, his results grossly understate the common equity cost rate applicable to IAWC (lines 899 – 900 of IAWC Exhibit 12.10). Furthermore, considering that I included a 12.22% average CAPM derived common equity cost rate for my proxy group of thirteen utilities selected based upon least relative distance shown on Line No. 2 on page 2 of Schedule 12.01, in arriving at my recommended common equity cost rate of 11.25%, her conclusion that my "logic" would lead to the elimination of her CAPM results of 11.75% for her Utility Sample and 12.11% for her Water Sample is mistaken.

Q6. At lines 231 – 239 of ICC Staff Exhibit 14.0, Ms. Kight-Garlisch states that you fail "to specify critical factors that influenced the allowed returns in" the authorized ROEs presented in IAWC Exhibit 12.10, Schedule 12.20. Please comment.

A. The specific factors identified by Ms. Kight-Garlisch are irrelevant. The point of the matter is that Schedule 12.20 presents the authorized ROEs and related common equity ratios. Furthermore, the average authorized common equity ratio of all litigated cases shown on page 2 of Schedule 12.20, 48.21%, indicates that these companies have slightly less financial risk than IAWC based upon IAWC witness Jenkins's recommended common equity ratio of 43.77% shown on IAWC Exhibit No. 2.22. The companies shown in Schedule 12.20 are among the companies with which IAWC, through American Water Capital Corp. (AWCC) must compete for capital in the capital markets. Consequently, Ms. Kight-Garlisch's comments are misplaced.

IV. RESPONSE TO IIIWC WITNESSES GORMAN AND JANOUS

Q7. Please address Mr. Gorman's claim, at lines 234 – 247 of IIWC Exhibit 4.0, that an ROE "in the low 10% area" is sufficient for IAWC to maintain financial integrity.

A. Mr. Gorman cites a November 15, 2007 Standard & Poor's ("S&P") report which notes that American Water Works ("AWW") enjoys a supportive regulatory environment and then makes the nexus that an average authorized ROE for AWW's utility subsidiaries of 10.0% is "supportive of….its utility affiliates' credit standing." However, S&P is silent relative to any specific utility subsidiary of AWW. In addition, S&P does not rate IAWC's credit standing. The only record

S&P provides for IAWC is shown in Schedule 12.31 which merely lists a profile of IAWC and related entities. Nowhere, does S&P provide a credit rating, bond rating, rating rationale, business risk profile or financial risk profile. Therefore, there is no support for Mr. Gorman's conclusion that S&P would view an authorized ROE for IAWC "in the low 10% area" as supportive of IAWC's credit standing.

Q8. At line 306 on page 15 through line 320 on page 16 of IIWC Exhibit 4.0, Mr. Gorman maintains his claim that IAWC is a low-risk regulated utility company. Please comment.

A. My disagreement with Mr. Gorman's conclusion of IAWC as a low-risk regulated utility company is in relation to the riskiness of the proxy companies utilized by all witness in this proceeding. It is indisputable that S&P characterizes the regulated operations of AWW, and by inference IAWC, as of low operating risk. However, as discussed on page 35 of IAWC Exhibit 12.10, line 953 through page 36, line 980, IAWC, as proxied by both American Water Capital Corporation ("AWCC") and AWW, has greater, not less risk, than my proxy companies, and indeed less risk than any of the proxy companies utilized by any witness in this proceeding, as evidenced by pages 1 and 2 of Schedule 12.25 accompanying IAWC Exhibit 12.10. Both AWCC and AWW have been assigned a credit rating of "A-" and an "Aggressive" financial risk profile, both of which are more risky than the average credit ratings and financial risk profiles of all the proxy companies utilized in this proceeding, as shown on pages 1 and 2 of Schedule 12.25. In addition, a review of either S&P's November 9, 2007 (Schedule 12.32)

Issuer Ranking: U.S. Investor-Owned Water Utilities, Strongest to Weakest, based upon S&P's former business profile system or the more current February 7, 2008 (Schedule 12.33) Issuer Ranking: U.S. Investor-Owned Water Utilities, Strongest to Weakest, based upon S&P's new business risk / financial risk matrix, reveals that AWW and AWWC are at the bottom of the ranking lists and hence, characterized by S&P as the weakest (and hence riskiest) water utilities among those ranked by S&P. Therefore, notwithstanding S&P's characterization of AWW as a low-risk regulated water utility, its regulated water subsidiaries including IAWC, are among the riskiest of the water utilities, whether measured by S&P's current matrix or S&P's former business profile system. Thus, IAWC continues to be riskier than the average utility in any of the proxy groups utilized by the rate of return witnesses in this proceeding.

Q9. At lines 325 and 326 of IIWC Exhibit 4.0, Mr. Gorman states that you have stated "that a growth rate does not need to be in line with the long-term nominal growth of GDP." Please comment.

A. Mr. Gorman mischaracterizes my testimony. To clarify the record, my testimony on pages 36 and 37, lines 985 – 993 states the following:

> First, on lines 106-108 on page 6 of his Direct Testimony, Mr. Gorman asserts that growth rates, i.e., analysts consensus forecasts of growth in EPS, "are excessive and cannot be sustained in the long run." Previously in [the] this Rebuttal Testimony I have discussed and demonstrated that these are the appropriate growth rates to utilize in a DCF analysis. Moreover, there is no empirical evidence that investors do not rely upon analysts' EPS growth rate forecasts. In addition, the use of such forecasts is consistent with the prospective nature of ratemaking, cost of capital analysis and the Commission Staff's practice of using such forecasts in its cost of common equity analyses."

Hence, Mr. Gorman's characterization of my rebuttal testimony is inaccurate. Moreover, Mr. Gorman has not provided any empirical evidence to refute my testimony nor which indicates that investors do rely upon the long-term nominal growth of GDP in making their pricing decisions and equity return expectations for public utility companies, or indeed, for any type of enterprise. In addition, Mr. Gorman has ignored the wealth of empirical and academic research which supports the superiority of analysts' forecasts of EPS, such as those provided by Zacks, as measures of investor expectations as discussed in my rebuttal testimony, IAWC Exhibit 12.10, at line 808 on page 30 through line 884 on page 32.

Q10. At lines 338 – 340 of IIWC Exhibit 4.0, Mr. Gorman states that "right now utility companies are rapidly growing firms because of the growth in rate base and related increase in utility earnings." Please comment.

A. Mr. Gorman's statement implies that current investment and growth in water utility rate base is a temporary phenomenon. However, it is well known that water utilities are much more capital intensive than electric and gas, natural gas or telephone utilities, as discussed on page 9, line 168 through page 10, line 176. As shown on Schedule 12.34, the greater relative capital intensity of water utilities has been persistent for the ten years ending 2006 at an average 2.24 times greater than that of electric utilities, 2.59 times greater than that of combination electric and gas utilities, 3.01 times greater than that of gas distribution utilities and 3.05 times greater than that of telephone utilities. Based upon the stability of the relationship of the capital intensity of water utilities

relative to that of other types of utilities, it is clear that water utilities will continue to be substantially more capital intensive than other types of utilities well into the future. Value Line Investment Survey supports this position when they state on Schedule 12.35, which is a copy of Value Line's January 25, 2008 Water Utility Industry summary:

> However, long term, we worry that many water utilities lack the finances to keep up with *the elevated infrastructure costs that should persist for years to come.* (italics and underline added for emphasis)
>
> * * *
>
> Water providers have seen maintenance costs jump considerably in recent years, as aging infrastructure required repairs and, in many cases, even rebuilding. However, we suspect that *many systems are still outdated and require additional renovations*. That, coupled, with more stringent water purification standards, due to greater fears of bioterrorism, *ought to result in high costs for the foreseeable future*. Unfortunately, many companies here do not have the finances to fund these endeavors and will be forced to look to outside financiers to help meet the costs. (italics added for emphasis)
>
> * * *
>
> …any gains we envision stemming from an improving regulatory landscape and/or penetration into new markets, will likely be offset by rising interest costs and *higher sharecount*. (italics added for emphasis)

Not only does Value Line expect continued, persistent investment in water utility infrastructure, it expects an increase in the number of common shares outstanding for water utilities which, while dampening the effect of the "temporary" increase in utility earnings Mr. Gorman envisions on a per share basis, would still result in a level of EPS growth in line with the 5-year analysts' consensus growth rates utilized by the witnesses in this proceeding and deemed unsustainable by Staff, CUB and IIWC.

Moreover, the National Association of Regulatory Commissioners ("NARUC") as discussed on pages 10 and 11 of IAWC Exhibit 12.0, also recognizes that large capital investment by water utilities will persist well into the future, when they noted in their "resolution Supporting Consideration of Regulatory Policies Deemed as 'Best Practices'" provided in Schedule 12.36 that:

> To meet the challenges of the water and wastewater industry which may face a combined capital investment requirement nearing one trillion dollars *over a 20-year period* . . . (italics added for emphasis)
>
> * * *
>
> Due to the massive capital investment required to meet current and *future water quality and infrastructure requirements*. . . . (Italics added for emphasis)

In addition, Moody's Investors Service, in its January 2004 Special Comment, as cited on page 12 of IAWC Exhibit 12.0, noted the following:

> We expect that the credit quality of the investor-owned U.S. water utilities will likely deteriorate over the next several years, due to *ongoing large capital spending requirements. Larger capital expenditures facing the water utility industry result from the following factors:*
>
> - *Continued federal and state environmental compliance requirements;*
> - *Higher capital investments for constructing modern water treatment and filtration facilities;*
> - *Ongoing improvement of maturing distribution and delivery infrastructure; and*
> - *Heightened security measures for emergency preparedness designed to prevent potential terrorist acts.* (italics added for emphasis)

Clearly, then, the water utility industry will continue to experience substantial investment in infrastructure, i.e., rate base, and rate base which will also continue grow substantially well into the future. Consequently, Mr. Gorman's implication that the current growth in rate base and earnings related thereto is temporary is unfounded.

Q11. At lines 351 – 356 of IIWC Exhibit 4.0, Mr. Gorman quotes Eugene F. Brigham and Joel F. Houston. Please comment.

A. I do not have a copy of the specific text book cited by Mr. Gorman. However, the quotation also appears on page 164 of Intermediate Financial Management, 9th Ed., Eugene F. Brigham & Phillip R. Daves, Thomson/South-Western, 2007. In this book, the quotation does not end at the end of Mr. Gorman's quotation. The entire paragraph from Intermediate Financial Management (see Schedule 12.37) reads:

> The constant growth model is often appropriate for mature companies with a stable history of growth. Expected growth rates vary somewhat among companies, but dividend growth for most mature firms is generally expected to continue to the future at about the same rate as nominal gross domestic product (real GDP plus inflation). On this basis, one might expect the dividends of an average, or "normal," company to grow at a *rate of 5 to 8 percent a year.* (italics added for emphasis)

Then, on pages 165 through 167 of Intermediate Financial Management, the authors provide an example of the application of the NCDCF, assuming a normal growth rate of 8% which they identify as "the assumed average for the economy." Thus, assuming that this same information appears in Fundamentals of Financial Management, from which Mr. Gorman quoted, although he relied upon the Brigham / Houston quotation to support the use of the growth in nominal GDP for

use in a NCDCF model, Mr. Gorman has ignored the authors recommendation of an assumed 8% normal growth rate to be used in the NCDCF.

Q12. At line 357 on page 17 through line 362 on page 18 of IIWC Exhibit 4.0, Mr. Gorman cites pages 64-66 of Morningstar, Inc.'s <u>Stocks, Bonds, Bills and Inflation – Market Results for 1926-2007 – Valuation Edition ("SBBI")</u> to "support the use of a GDP growth rate as a maximum sustainable growth rate for use in a DCF model." Please comment.

A. The study reported in SBBI relates growth in the earnings and dividends of the stock market as a whole to GDP growth from 1926-2006. Since the stock market as a whole, whether measured by the NYSE or S&P 500, is a broad based representation of all the common stocks traded in the U.S., it stands to reason that the earnings and dividends of the market as a whole would track GDP growth. However, neither SBBI nor Mr. Gorman have provided any empirical support that the earnings and dividends of utility companies, in general, or water companies, in particular, or indeed any specific company or industry, track GDP growth.

Q13. At lines 363 and 364 of IIWC Exhibit 4.0, Mr. Gorman states that you testify that "investors would blindly rely on three- to five-year analyst growth projections in a constant growth DCF model." Please comment.

A. Once again, Mr. Gorman has mischaracterized my rebuttal testimony which discussed the wealth of empirical and academic evidence of which investors are aware which supports the superiority of analyst's forecasts of EPS as measures of investor expectations. (See pages 30 through 32 of IAWC Exhibit 12.20.)

Q14. On page 20 of IIWC Exhibit 4.0, at lines 405 – 420, Mr. Gorman continues to take exception to your conclusion that IAWC's increased risk due to its smaller size relative to the proxy companies needs to be reflected in any common equity cost rate derived from the market data of the proxy companies utilized by all witnesses in this proceeding. Please comment.

A. IAWC Exhibit 12.10, my rebuttal testimony, at pages 38 through 42 contains a comprehensive discussion of the fact that while IAWC's affiliation with its large parent company results in a mitigation of the risk of its small relative size, due to the reduced costs of the management services provided by AWW as well as lower fixed capital cost rates, which are passed directly on to ratepayers. However, despite the reduction in rates due to its affiliation with AWW, Mr. Gorman has ignored the basic financial principle discussed on pages 39 and 40 of IAWC Exhibit 12.10, that it is the use of the funds invested, and not the source of the funds, which gives rise to risk and the risk-appropriate rate of return. As discussed in IAWC Exhibit 12.10, it is the rate base of IAWC, and IAWC alone, to which the overall rate of return set in this proceeding will be applied. Therefore, IAWC should be evaluated as a stand alone utility. Consequently, the Commission should focus on the risk and return on common equity investment in IAWC's jurisdictional rate base because it is IAWC's rates which will be set in this proceeding and it is IAWC's rate base which serves its ratepayers and to which the authorized rate of return set in this proceeding will be applied. Furthermore, the risk of the common equity investment in IAWC's rate base is independent of the source of that equity capital. IAWC Exhibit 12.10, on page 40, provides

academic support for the basic financial principle that it is the use of the funds invested which gives rise to the risk of an investment, not the source of those funds. For example, Richard A. Brealey and Stewart C. Myers who state on pages 173 and 198 of Principles of Corporate Finance:

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

Hence, as discussed in IAWC Exhibit 12.10, on page 41, the common equity investment in IAWC must be viewed without regard to the source of capital, i.e., AWWC and AWCC, rather the risk to which such capital is put, i.e., invested in IAWC. Consequently, the specific risk of investment in IAWC, including its small size and greater financial risk, relative to the proxy water and utility companies utilized to estimate the cost rate of common equity capital by all witnesses in this proceeding, is most important in order to establish an appropriate common equity cost rate.

Q15. Please respond to Mr. Janous's criticism of your opinion that his conclusions of the riskiness of IAWC relative to his proxy groups are no longer valid.

A. He bases his disagreement exclusively upon S&P's business risk profiles for AWWC, as a proxy for IAWC, and his proxy companies and does not even consider S&P's assigned financial risk profile and the more comprehensive credit rating. Even based upon the current, February 7, 2008 (Schedule 12.33) S&P

Issuer Ranking: U.S. Investor-Owned Water Utilities, Strongest to Weakest and Issuer Ranking: U.S. Natural Gas Distributors and Integrated Gas Companies, Strongest to Weakest, the relationship of the credit ratings, business risk profiles and financial risk profiles shown on Schedule 12.25, page 1 for Mr. Janous's two proxy groups, as well as AWW and AWWC, remains the same. Page 1 of Schedule 12.25 indicates that both of his proxy groups have been assigned an average credit rating of "A," an average business risk profile of "Excellent" and an average financial risk profile of "Intermediate" by S&P, while AWW and AWWC have been assigned credit ratings of "A-," business risk profiles of "Excellent" and financial risk profiles of "Aggressive," indicating similar business risk relative to Mr. Janous's proxy groups but greater financial and overall risk due to AWW's and AWWC's more risky "Aggressive" financial risk profile and more risky "A-" credit rating. Consequently, Mr. Janous's disagreement with my rebuttal testimony is based upon an incomplete review of AWW's and AWWC's, and hence IAWC's, total credit profile which includes S&P's assigned credit ratings, as well as business and financial risk profiles.

Q16. At lines 12 – 22 on page 6 of IIWC Exhibit 6.0, Mr. Janous claims that you were provided "empirical data supporting utility company growth rates in line with GDP" in response to IIWC-IAWC 1.91 and that it is also "contained in the Ibbotson 2007 Yearbook-Valuation Edition." Please comment.

A. My review of the information provided in response to IIWC-IAWC 1.91 found nothing to support Mr. Janous's assumption that the EPS of utility companies can be expected to grow at the GDP growth rate. The attachment provided in

response to IIWC-IAWC 1.91 is merely a chart of energy usage, electricity usage and real GDP over an approximately 20-year period. Given that our economy is so energy dependent, it is not surprising that U.S. economic growth and energy/electricity growth are similar. Likewise, the article provided in response to IIWC-IAWC 1.32 provides no insight whatsoever into the relationship between nominal GDP growth and the growth in EPS for utility and / or water companies. In addition, previously in this rebuttal testimony, I have discussed the SBBI study of the growth in earnings and dividends relative to the growth in GDP, concluding that since the stock market as a whole, whether measured by the NYSE or S&P 500 is a broad based representation of all the common stocks traded in the U.S., it stands to reason that the earnings and dividends of the market as a whole would track GDP growth. But such a tracking does not provide empirical support for the contention that the rates of growth in earnings and dividends of utility companies in general, or water companies in particular, track GDP growth rates.

Q17. At line 23 on page 6 through line 2 on page 7, Mr. Janous's repeats Mr. Gorman's contention that current projected growth rates in EPS for water companies in excess of GDP growth are not surprising given the current need for major capital improvement projects and that this need is temporary. Please comment.

A. I have previously discussed this issue, relative to Mr. Gorman's comments and explained why the need for major capital improvement projects on the part of water utilities is neither current nor temporary, a fact as recognized by NARUC,

Value Line and Moody's. My response to Mr. Gorman on this issue applies equally to the testimony of Mr. Janous.

V. RESPONSE TO CUB WITNESS THOMAS

Q18. Has Mr. Thomas provided persuasive evidence that the Commission should "reconsider" its traditional cost of common equity analysis?

A. No. Mr. Thomas has not provided persuasive evidence that the Commission should "reconsider" its traditional cost of common equity analysis, i.e., that proposed by Staff in its direct testimony, ICC Staff Exhibit 4.0 and as applied by me in IAWC Exhibit 12.00. He has provided no proof that the forecast error of the CAPM is any greater than the forecast error of the DCF. And he has provided no evidence that the use of adjusted betas in a CAPM analysis will ameliorate the forecast error of the CAPM.

Q19. Mr. Thomas still maintains that the single article by Gambola and Kahl (1990) provides comprehensive and conclusive support for the use of unadjusted betas for utility companies. Please comment.

A. There is a significant body of research that indicates that betas have an inherent tendency to revert toward their mean value or the market beta of one (see Schedule 12.38, an excerpt from SBBI relative to Beta Adjustment Methodologies). As stated on page 2 of Schedule 8 "[t]his means that high historical betas (those in excess of one) tend to overestimate betas in future time periods, and low historical betas (those under one) tend to underestimate betas in future time periods." And as also stated on page 2 of Schedule 12.38, "for cost of capital projections, we are seeking a forward-looking or prospective beta", it is necessary, therefore, "to adjust betas from historical to prospective or forward-

looking." As noted in SBBI, Marshall E. Blume was one of the first to study whether "historical betas are reliable estimates of future systematic risk." O. A. Vasicek also studied historical betas and developed another beta adjustment technique. Moreover, the point is that adjusted betas are recommended by the majority of academic research, academic textbooks, and SBBI. In addition, adjusted betas are widely available to investors from such sources as Value Line Investment Survey and Merrill Lynch. As rate of return analysts, Mr. Thomas and myself, must try to emulate investor behavior and utilize what investors rely upon in making their investment decisions which, in my opinion are adjusted betas.

Q20. Mr. Thomas cites a recent Ameren case before the Commission to refute your size adjustment based upon estimated market capitalization. Please comment.

A. Mr. Thomas' characterization of my testimony is that I assume "that the Commission's task is to grant utilities a return based upon their market value capitalization." Mr. Thomas is mistaken. It is clear from pages 2 and 3 of IAWC Exhibit 12.00, that my recommended common equity cost rate is to be applied to the book value common equity financed portion of IAWC's jurisdictional rate base because my recommended common equity rate is applicable to the IAWC witness Jenkins recommended common equity ratio of 43.77% (see IAWC Exhibit No. 2.22) which is based upon a book value capital structure. Moreover, in the citation, where the Commission states that "[m]arket value is not utilized in this calculation because it typically includes appreciated value (as reflected in its stock price) above the Utilities' actual capital investments" is precisely the point.

The calculation to which the Commission refers is the calculation of the ratemaking capital structure which is based upon book values and not market values. However, the Commission notes that the stock price reflects appreciated value or market value. Since size is a risk factor which is taken into account by investors in making their pricing decisions and since investors pay market prices for common shares, relative size must be based upon the relatives market values between two different investments, all else equal, as discussed in IAWC Exhibit 12.00 at pages 13 through 16. What Mr. Thomas does not recognize is that in arriving at recommended return rates on common equity, all the witnesses in this proceeding have relied upon the market data of proxy companies. Therefore, it is entirely appropriate and consistent with financial theory to compare the estimated market capitalization of IAWC with that of the proxy companies to determine whether any risk adjustment due to size is warranted.

Q21. At line 355 on page 14 through line 373 on page 15 of CUB Exhibit 2.0, Mr. Thomas disagrees that there is "any degree of circularity in using historic internal growth rates as a measure of expected future sustainable growth." Please comment.

A. Actually, Mr. Thomas's use of historical returns in his internal growth analysis exacerbates the circularity issue. Historical returns for water companies are the direct result of Commission authorized ROEs. It is true, as Mr. Thomas notes on lines 367 – 368, that the "Commission does not grant utilities a specific return each year." However, the returns actually achieved in each year are the product of the rates set in the most recent rate proceeding, based upon the authorized

ROE, which then give rise to the realized ROEs in each subsequent year until a new rate proceeding sets new rates and a new authorized ROE. Therefore, realized ROEs in each year are indeed a function of the then current authorized ROE. Since these historical realized ROEs give rise to internal growth rates, such as those derived by Mr. Thomas, those historical internal growth rates are inherently circular and do not obviate the circularity inherent in the sustainable growth method of determining a DCF growth rate.

Q22. Mr. Thomas states at lines 404 and 405 on page 16 of CUB Exhibit 2.0 that you seem "to believe that investors somehow favor older information over newer information." Please comment.

A. Mr. Thomas's comment is inconsistent with his use of historical ROEs in his internal growth analysis. By not utilizing forecasted ROEs in his internal growth analysis, he is assuming that investors do not utilize forecasted information when formulating their investment decisions and has ignored the ample empirical evidence discussed above and in IAWC Exhibit 12.10 which supports the superiority of analysts' forecasted EPS growth projections for cost of capital purposes. This is inconsistent with the prospective nature of both the cost of capital and ratemaking. Moreover, analysts' forecasted EPS growth projections embody both historical earnings as well as the analysts' assessment of future earnings growth, because analysts have significant insight into the dynamics of various industries and they analyze individual companies as well as companies' abilities to effectively manage the effects of a changing operating and capital market environment.

Q23. At lines 431 and 432 on page 17 of CUB Exhibit 2.0, Mr. Thomas states that you relied upon an analysis of returns on the S&P 500 to argue that his recommendation is inadequate. Please comment.

A. Mr. Thomas' assertion is incorrect. Schedule 12.21 is does not present the returns on the S&P 500 but rather holding period returns on the S&P Public Utility Index, which are indeed relevant to an analysis of the adequacy of Mr. Thomas recommendation. As discussed in IAWC Exhibit 12.20 at lines 573 through 577 on page 21, based upon the historical equity risk premia in the study of the holding period returns of the S&P Utility Index from 1928-2006 of 4.51% shown on Schedule 12.21, Mr. Thomas's recommended common equity cost rate of 8.58% which is a mere 252 basis points (2.52%) above a recent yield on A rated public utility bonds (see lines 566 – 568 on page 21 of IAWC Exhibit 12.20) does not represent an appropriate cost of common equity for IAWC. In addition, the energy companies whose authorized ROEs are shown on Schedule 12.20 as well as the utility companies in the S&P Public Utility Index are among the companies with which IAWC, through AWCC, must compete for financing in the capital markets. Therefore, a review of the equity risk premia implicit in their returns, authorized and holding period returns is indeed germane to analyzing the reasonableness of a recommended common equity cost rate.

Q24. Does this conclude your surrebuttal testimony?

A. Yes, it does.