Exhibit No.:
Witness: Michael Gorman
Type of Exhibit: Rebuttal Testimony
Issue: Rate of Return, Depreciation
Sponsoring Party: Federal Executive Agencies, Sedalia Industrial Energy Users' Association and St. Joe Industrial Group
Case No.: ER-2007-0004

Before the Public Service Commission of the State of Missouri

In the Matter of Aquila, Inc. d/b/a Aquila Networks-MPS and Aquila Networks-L&P, for authority to file tariffs increasing electric rates for the service provided to customers in the Aquila Networks-MPS and Aquila Networks-L&P service areas	)	Case No. ER-2007-0004

Rebuttal Testimony and Schedules of

Michael Gorman

On behalf of

Federal Executive Agencies, Sedalia Industrial Energy Users' Association and St. Joe Industrial Group

Project 8629
February 20, 2007

BRUBAKER & ASSOCIATES, INC.
ST. LOUIS, MO 63141-2000

Before the Public Service Commission
of the State of Missouri

In the Matter of Aquila, Inc. d/b/a Aquila Networks-MPS and Aquila Networks-L&P, for authority to file tariffs increasing electric rates for the service provided to customers in the Aquila Networks-MPS and Aquila Networks-L&P service areas	))))))	Case No. ER-2007-0004

STATE OF MISSOURI)
) **SS**
COUNTY OF ST. LOUIS)

Affidavit of Michael Gorman

Michael Gorman, being first duly sworn, on his oath states:

1. My name is Michael Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000. We have been retained by the Federal Executive Agencies, Sedalia Industrial Energy Users' Association and the St. Joe Industrial Group in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes are my rebuttal testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2007-0004.

3. I hereby swear and affirm that the rebuttal testimony and schedules are true and correct and that they show the matters and things they purport to show.

Michael Gorman

Subscribed and sworn to before me this 20th day of February 2007.

CAROL SCHULZ
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis County
My Commission Expires: Feb. 26, 2008

Notary Public

My Commission Expires February 26, 2008.

Before the Public Service Commission
of the State of Missouri

In the Matter of Aquila, Inc. d/b/a Aquila Networks-MPS and Aquila Networks-L&P, for authority to file tariffs increasing electric rates for the service provided to customers in the Aquila Networks-MPS and Aquila Networks-L&P service areas	))))))	Case No. ER-2007-0004

Rebuttal Testimony of Michael Gorman

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A My name is Michael Gorman and my business address is 1215 Fern Ridge Parkway, Suite 208, St. Louis, MO 63141-2000.

Q ARE YOU THE SAME MICHAEL GORMAN THAT FILED DIRECT TESTIMONY IN THIS PROCEEDING?

A Yes, I am.

Q WHAT IS THE SUBJECT OF YOUR REBUTTAL TESTIMONY?

A I will respond to the rate of return testimony of Aquila witness Dr. Samuel Hadaway.

Q PLEASE SUMMARIZE THE CONCLUSIONS IN YOUR REBUTTAL TESTIMONY.

A Dr. Hadaway's proposed 11.5% return on equity for Aquila is excessive and unnecessarily increases Aquila's claimed revenue requirement in this proceeding. For the reasons set forth below, Dr. Hadaway's proposal for a 25 basis point return on equity add-on to reflect his claim that Aquila is more risky than his proxy group is without merit and should be rejected. Further, his return on equity estimate for Aquila

of 11.25%, without the return on equity add-on of 0.25%, is based on unreasonable DCF and risk premium studies and significantly exceeds a fair return on equity for a regulated utility company in today's very low capital cost market.

Indeed, Dr. Hadaway's 11.25% return on equity compares to industry average authorized returns on equity of approximately 10% for electric utilities and 9.6% for gas utilities in the third quarter of 2006.[1] As such, it is evident that Dr. Hadaway's recommendations significantly exceed fair and reasonable returns on equity as determined by other regulatory commissions around the country, and also exceed a fair return based on reasonable applications of financial models, use of data that reflects rational investment decisions, and the consensus of data published by security analysts and economists.

As set forth below, use of more reasonable market-based data in Dr. Hadaway's analysis, without his inappropriate return on equity add-on adjustments, will show that a return on equity of 10%, as I recommended in my direct testimony, is fair and reasonable.

RESPONSE TO AQUILA WITNESS SAMUEL HADAWAY

Q WHAT RETURN ON COMMON EQUITY IS AQUILA PROPOSING FOR THIS PROCEEDING?

A Aquila is proposing to set rates based on a return on equity of 11.5%, which includes an upward adjustment of 25 basis points. Dr. Hadaway estimates a fair return based on his proxy group of electric utility companies of 11.25%. To that, he adds 25 basis points to reflect his belief that Aquila has greater construction risk, and small company risk adjustment. He notes that Aquila currently does not have a fuel

[1] Regulatory Research Focus, Regulatory Focus, October 5, 2006.

adjustment mechanism, which may expose it to greater risk associated with recovery of fuel and purchased power energy charges. However, based on Missouri legislation and the Company's proposal for an FAC in this proceeding, he states that he has not included it in his return on equity increment. (Hadaway Direct Testimony at 6)

Q DO YOU HAVE ANY GENERAL COMMENTS CONCERNING DR. HADAWAY'S OUTLOOK AND PRINCIPLES IN ESTABLISHING A FAIR RETURN ON EQUITY FOR AQUILA IN THIS PROCEEDING?

A Yes. At page 7 of his direct testimony, Dr. Hadaway takes issue with the constant growth DCF model because he asserts that it depends on historically low dividend levels and pessimistic growth forecasts. He believes that these near term circumstances do not reasonably reflect his longer-term expectations for higher capital costs. As such, he makes several adjustments to increase current capital market estimates to reflect his belief that capital costs will increase in the long term.

Q DO YOU BELIEVE IT IS REASONABLE FOR DR. HADAWAY TO INCREASE HIS RETURN ON EQUITY ESTIMATES FOR HIS BELIEF THAT CAPITAL COSTS WILL INCREASE OVER THE LONG-TERM?

A No. This is unreasonable and a biased assessment for the following reasons.

1. Dr. Hadaway has not provided any corroborating evidence that any market participant shares his expectation of increases in capital costs. Indeed, over the next two years, consensus economists' forecasts are for long-term Treasury bond yields to remain flat at about the current 5.0% level. The consensus longer-term growth projections for long-term Treasury bond yields indicate a yield of approximately 5.1%. See Exhibit MPG-1. Hence, consensus economists are not projecting increases in capital costs over the next two, five, and ten-year periods. Therefore, Dr. Hadaway is alone in his belief that capital market costs will increase over time.

2. Return on equity estimates should be based on an assessment of the **market's** capital cost requirements, not an assessment of the expected return of the individual **analyst**. Dr. Hadaway's return on equity estimates are based on his own belief and risk assessment. He is not attempting to assess Aquila's cost of capital in the marketplace today. This is significant, because Aquila will attract capital from the market, not from Dr. Hadaway. Hence, it is appropriate to develop an authorized return on equity based on the demands of the marketplace, not the individual opinion of Dr. Hadaway.

Q ON PAGE 4 OF HIS TESTIMONY, DR. HADAWAY ASSERTED THAT HE RELIED ON CONSENSUS FORECASTS IN ARRIVING AT HIS BELIEF THAT INTEREST RATES WILL INCREASE. PLEASE RESPOND.

A Dr. Hadaway's consensus forecast is actually an individual forecast published by S&P. S&P does not publish a consensus forecast, and it is incorrect for Dr. Hadaway to assert otherwise. A true consensus forecast is published by the Blue Chip Economic Forecast, which surveys economists, including those like S&P, and publishes a consensus of economists projections of future economic indicators, including interest rates, GDP growth, and inflation. Attached as Rebuttal Schedule MPG-1 is a copy of the Blue Chip Financial Forecast, which indicates a **consensus** forecast for interest rates to increase modestly over the two years. Despite this modest increase, this consensus forecast nevertheless undermines the significant increase projected by Dr. Hadaway.

Q IS DR. HADAWAY'S PROPOSED 25 BASIS POINT RETURN ON EQUITY ADD-ON FOR THE CONSTRUCTION RISK AND SMALL COMPANY SIZE RISK REASONABLE?

A No. Dr. Hadaway's view that Aquila's Missouri utility construction risk is higher than those of his proxy group is inconsistent with S&P's specific assessment of Aquila's

Missouri utility operations. As mentioned in my direct testimony, S&P noted Missouri utility operations' construction risk is moderate and declining, based on favorable regulatory treatment in Missouri.

Second, small company risk is part of a company's total risk. Hence, selecting companies with minimum investment grade bond ratings, and higher (more risky) than integrated electric utility average business profile scores of 6, as Aquila has done, reflects the higher operating risk attributable to small utility operations. It is redundant and unnecessary to add an equity risk premium to a proxy group that already reflects the higher operating risk associated with small company operations.

Q ARE YOU SAYING THAT THE PROXY GROUP THAT YOU HAVE USED TO ESTIMATE AQUILA'S RETURN ON EQUITY IN THIS CASE IS BASED ON COMPANIES OF SIMILAR SIZE TO AQUILA?

A No. Rather, I have selected companies that are similar in total investment risk to Aquila. Part of Aquila's investment risk is its small size. By selecting companies that have similar investment risk to Aquila, my proxy group can be used to estimate a fair rate of return to compensate investors in utility companies with Aquila's investment risk characteristics. Again, and importantly, Aquila's investment risk characteristics include the increased risks that are attributable to the size of its operations, access to capital, and therefore fairly reflects this investment risk in my recommended return on equity.

Q HOW WOULD A COMPANY'S SIZE IMPACT ITS RISK?

A Normally, a company's size would impact its operating risk in the following ways:

1. Small companies typically have less ability to attract qualified management pools.

2. Small companies usually do not have the economies of scale to minimize operating expenses by spreading expertise over a larger customer base and buying materials and supplies in larger quantities.

3. Small companies do not have the geographic diversification to mitigate sales variations caused by weather and local economic cycles.

Q HOW WERE YOU ABLE TO SELECT A COMPARABLE GROUP THAT ENCAPSULATED AQUILA'S SMALL COMPANY RISK IN ESTIMATING A FAIR RETURN FOR AQUILA IN THIS CASE?

A These small company risk factors certainly are considered by credit rating analysts and security analysts in assessing a utility's investment risk and valuation. Hence, when selecting a group of comparable risk companies, if one relies on a group of companies with bond ratings that are comparable to the proxy company and business profile scores in particular, that reasonably compare to the utility's business profile score, then the proxy group itself would reflect these risk factors.

As such it is unreasonable and would be redundant to add an equity risk premium to a proxy group return if that proxy group already reasonably captures Aquila's total investment risk. For example, Aquila's small company risk can be offset by differences in other risk elements. As such, focusing on a single aspect of investment risk as Dr. Hadaway proposes, rather than reviewing proxy groups on the basis of total investment risk, is inappropriate and produces unreasonable results.

Since my proxy group and Dr. Hadaway's proxy group reasonably emulate an investment grade bond rating, with a higher than average integrated electric utility business profile, the proxy group reasonably captures Aquila's construction risk, small size risk, and all other risk factors. As such, there is no need to add an equity risk premium to the return on equity estimated from this proxy group.

Q DO DR. HADAWAY'S METHODOLOGIES SUPPORT HIS 11.25% RETURN ON EQUITY FOR HIS PROXY GROUP?

A No. As discussed below, an appropriate reflection of current market data in Dr. Hadaway's own analyses would produce model results that support a return on equity of 10.0%. This is discussed in more detail below.

Q PLEASE DESCRIBE DR. HADAWAY'S METHODOLOGY SUPPORTING HIS RETURN ON COMMON EQUITY.

A Dr. Hadaway develops his return on common equity by conducting three versions of the Discounted Cash Flow analysis and a utility risk premium analysis, and evaluating risk premium analyses conducted by Ibbotson & Associates and a study published by Harris & Marston ("H&M"). The results of Dr. Hadaway's ROE analysis are shown at Page 46 of his direct testimony. I have summarized Dr. Hadaway's results below in Table 1 under Column 1. Under Column 2, I show the results of Dr. Hadaway's analyses adjusted for updated data and more reasonable application of the model s.

As shown below in Table 1, using updated information, more reasonable estimates of gross domestic product growth, and a better proxy of estimates of a risk adjusted equity risk premium appropriate for Aquila, Dr. Hadaway's analyses would support a return on equity for Aquila in the range of 9.7% to 10.0%. Each of Dr. Hadaway's cost of equity models will be discussed below.

TABLE 1

Summary of Hadaway's ROE Estimate

Description	Hadaway Results (1)	Adjusted Hadaway Results (2)
Constant Growth DCF (Traditional)	10.0% - 10.1%	9.7%
Constant Growth (GDP Growth)	11.3% - 11.4%	9.9%
Two-Stage Growth DCF	11.0%	9.7%
Estimated DCF	11.0% - 11.4%	9.8%
Risk Premium Utility	11.05%	9.8%
Ibbotson Risk Premium	11.35%	9.5%
Harris-Marston Risk Premium	11.98%	10.0%
Average		9.8%

Source: Hadaway Direct at 46.

Q PLEASE DESCRIBE DR. HADAWAY'S CONSTANT GROWTH DCF ANALYSIS.

A Dr. Hadaway's constant growth DCF analysis is shown on his Schedule SCH-9, Page 2 of 5. As shown on that schedule, Dr. Hadaway's constant growth DCF analysis is based on a recent price and an average of three growth rates: (1) Zacks; (2) Value Line; and (3) Dr. Hadaway's estimate of GDP growth.

Q IN WHAT WAY DID DR. HADAWAY OVERSTATE HIS CONSTANT GROWTH DCF ANALYSIS?

A Dr. Hadaway used a GDP growth rate of 6.6% as one of three growth rates. He states that the GDP growth rate is based on the achieved GDP growth over the last 10, 20, 30 and 40-year periods. Dr. Hadaway's projected GDP growth rate is unreasonable. Historical GDP growth over the last 20 and 40-year periods was strongly influenced by the actual inflation rate experienced over that time period.

Projected GDP inflation is much lower than the historical inflation used by Dr. Hadaway in his GDP estimate. A comparison of Dr. Hadaway's historic and current economists' projections of GDP growth in the next five and ten years is shown below in Table 2. As evident in the table below, Dr. Hadaway's nominal GDP inflation factor of 6.6% reflects real GDP of 3.2% and an inflation GDP of 3.3%. Current economists' projections of nominal GDP include real GDP and GDP inflation expectations over the next five and ten years of 3.0%, and 2.1%, respectively.

As is clearly evident in the table below, Dr. Hadaway's historical GDP reflects historical inflation, which is much higher than, and not representative of, expected forward-looking inflation.

TABLE 2

GDP Projections

	GDP Inflation	Real GDP	Nominal GDP
Hadaway	**3.3%**	3.2%	6.6%
Current 5-Year Projection	**2.1%**	3.0%	5.1%
Current 10-Year Projection	**2.1%**	3.0%	5.1%

Source: Blue Chip Economic Forecast, October 10, 2006, and review of economic analyses. Exhibit MPG-1

Dr. Hadaway's 6.6% nominal GDP growth is not reflective of consensus market participant expectations.

Q HOW WOULD DR. HADAWAY'S DCF ANALYSES CHANGE IF A MARKET-BASED GDP GROWTH RATE IS INCLUDED IN HIS ANALYSIS?

A As shown on my Rebuttal Schedule MPG-2, Page 1, I updated Dr. Hadaway's DCF analyses using a GDP growth rate of 5.1%. This is the consensus five-year projected

growth rate to the GDP. Using this consensus projected GDP growth rate reduces his constant growth DCF result from 10.1% to 9.7%.

Using a GDP growth rate of 5.1% would reduce his long-term GDP growth rate from 11.4% to 9.9% as shown on Page 2 of my Rebuttal Schedule MPG-2, and his two-stage growth DCF model from 11.0% to 9.7% as shown on Page 3 of my Rebuttal Schedule MPG-2.

Q WITH THESE ADJUSTMENTS, WHAT RETURN ON EQUITY WOULD DR. HADAWAY'S DCF MODELS SUGGEST IS A FAIR RETURN ON EQUITY FOR AQUILA IN THIS PROCEEDING?

A Reflecting a consensus economists GDP growth forecast would produce an average DCF result using Dr. Hadaway's models of 9.8%, which supports my recommended return on equity for Aquila in this proceeding of 10.0%.

Q PLEASE DESCRIBE DR. HADAWAY'S UTILITY RISK PREMIUM ANALYSIS.

A Dr. Hadaway's utility bond yield versus authorized return on common equity risk premium is shown on his Schedule SCH-10, Page 1. As shown on this schedule, Dr. Hadaway compares the contemporary Moody's average bond yield for utility companies and the authorized regulatory commission return on common equity over the period 1980 through 2005. Based on this analysis, Dr. Hadaway estimates an average indicated equity risk premium over contemporary utility bond yields of 3.09%.

Dr. Hadaway then adjusts this average equity risk premium using a regression analysis based on an expectation that there is an ongoing inverse relationship between interest rates and equity risk premiums. Based on this regression analysis, Dr. Hadaway increases his equity risk premium from 3.09%, as reflected in his

analysis, up to 4.20%. He then adds this inflated equity risk premium to a projected "Baa" bond yield of 6.85% to produce a return on equity of 11.05% for Aquila.

Q IS DR. HADAWAY'S UTILITY BOND RISK PREMIUM ANALYSIS REASONABLE?

A No. Dr. Hadaway has unreasonably attempted to create a forward-looking specific risk premium point estimate using this historical data. This is not reasonable because the data and model are not this precise. For example, interest rate volatility and inflation uncertainty in the 1980s and early 1990s is not reasonably representative of interest rate volatility and inflation outlooks currently and going forward. Inflation volatility or uncertainty over this historical time period had an impact on utility bond yields, valuations and equity risk premiums. This inflation volatility, however, is not characteristic of the current economy or capital markets.

Q IS IT APPROPRIATE TO USE ONLY FORECASTED INTEREST RATES IN A RISK PREMIUM ANALYSIS AS DR. HADAWAY HAS DONE?

A No. As indicated above, the accuracy of projecting interest rates is highly problematic. Indeed, while interest rates have been projected to increase over the last five years, those increased interest rate projections have turned out to be not only wrong, but also significantly inflated. In actuality, despite these projections of increased rates, interest rates have either stayed flat or have declined. Accordingly, Dr. Hadaway's analysis should be performed based on current interest rates, with some consideration given to the possibility of increased interest rates.

In significant contrast, Dr. Hadaway has completely ignored current real interest rates observable today, and has relied only on his own estimate of a projected interest rate. Also importantly, Dr. Hadaway's projected interest rate is not

transparently developed in his testimony, and the accuracy is highly questionable. Dr. Hadaway is projecting that interest rates on Baa-rated utility bonds will increase from approximately 6.12% to 6.85%. This dramatic increase in interest rates is not consistent with consensus economists' projected increases to interest rates as shown on my Rebuttal Schedule MPG-1, and likely does not reflect overall market expectations.

Further, as noted above, Dr. Hadaway is wrong that consensus economists were projecting an increase in interest rates over the next two to five years. Indeed, consensus projections of Treasury interest rates over the next two, five and ten years indicate a relatively flat interest rate environment relative to today's interest rates (see Rebuttal Schedule MPG-1). Hence, it is inappropriate for Dr. Hadaway to reflect an approximately 70 basis point increase in the yield on Baa utility bond yields to develop Aquila's return on equity in this proceeding.

Q DOES DR. HADAWAY'S RISK PREMIUM ANALYSIS SUPPORT A RETURN ON EQUITY OF 11.5% IN THIS PROCEEDING?

A No. His equity risk premium estimate of 4.20% is overstated and he applies this inflated premium to an inflated "Baa" rated utility bond yield. If Dr. Hadaway's inflated equity risk premium were applied to the current cost of a Baa-rated utility bond of 6.12%, it would produce an indicated return on equity for Aquila of less than 10.3%. However, as discussed in my direct testimony, since the spread between utility bond yields and Treasury bond yields is currently relatively low, an average equity risk premium of 3.1% based on Dr. Hadaway's study applied to a current Baa bond yield of 6.12% would indicate a fair return on equity for Aquila of 9.2%. In any case, the reasonable application of Dr. Hadaway's model, and observation of current real

capital market costs for utility companies, indicate a fair return on equity for Aquila in the range of 9.2% to 10.3%, with a midpoint of 9.8%. This range supports my recommended 10% return on equity for Aquila in this proceeding.

Q DID DR. HADAWAY PERFORM ANY TESTS OF HIS RISK PREMIUM ANALYSIS RESULTS?

A Yes. Dr. Hadaway compared his utility risk premium analysis to studies performed by Ibbotson & Associates and H&M. Dr. Hadaway states that Ibbotson & Associates studied the return on common stocks versus corporate bonds for the period 1926 through 2005. The Ibbotson study found that the arithmetic mean risk premium was 6.1%, and the geometric mean return was 4.5%. He states that using the geometric mean return and a debt cost of 4.5%, and his projected 6.85% Baa utility bond yield would produce an indicated equity return of 11.35% for Aquila. (Hadaway Direct at 44-45).

Dr. Hadaway discusses the H&M study stating that it looked at the equity premium over U.S. Government bonds of 6.47%, and the equity risk premium of common stocks over corporate bonds to be 5.13%. Dr. Hadaway finds that the H&M study would support an equity risk premium over an A-rated corporate debt of 11.98% (6.85% debt cost and 5.13% risk premium). (*Id.* at 45)

Q DO THE INDICATED RISK PREMIUM RESULTS FROM THE IBBOTSON & ASSOCIATES AND H&M STUDIES SUPPORT A RETURN ON COMMON EQUITY FOR AQUILA OF 11.35% AND 11.98% AS ESTIMATED BY DR. HADAWAY?

A No. There are two flaws in this analysis. First, the Ibbotson & Associates and H&M studies are based on common equity returns and equity risk premiums for the overall

market. Both of these studies are based on the returns for the S&P 500. Dr. Hadaway did not, and cannot, show that the S&P 500 is risk comparable to Aquila's as a regulated electric utility.

In fact, it is widely recognized that electric utility risk is considerably lower than that of the overall market. This is evident by a review of the beta coefficients measured by Value Line for utility companies, as illustrated on my Schedule MPG-13, Page 1, to my direct testimony. As I noted in my direct testimony with respect to my CAPM analysis, utility company stock market risk is approximately 80% of that of the overall market. Hence, while the equity risk premiums derived from these two studies may be appropriate for the overall market, they overstate significantly a reasonable equity risk premium for a low risk regulated electric utility such as Aquila. Therefore, Dr. Hadaway's use of the Ibbotson and H&M studies' equity risk premiums to produce a return on common equity for Aquila is unreasonable and should be r ejected.

Second, Dr. Hadaway claims that he is producing these return on equity estimates based on an "A" bond yield. However, the 6.85% bond yield is that for a "Baa" bond yield (Dr. Hadaway's Schedule 10, page 1). A bond yield of "A" would be a lower yield than that of a "Baa" bond yield, and hence his return on equity estimates from this model are overstated because of his improper use of utility bond yields.

Further, as noted above, Dr. Hadaway's projected bond yields are overstated and out of sync with market expectations.

Q CAN THE RISK PREMIUM STUDIES PUBLISHED BY IBBOTSON AND H&M BE USED TO DEVELOP A COMMON EQUITY ESTIMATE FOR AQUILA?

A Only generally. By recognizing Aquila's much lower risk than that of the overall market, the equity risk premiums developed by Ibbotson and H&M, of 4.5%, and

5.13%, should be adjusted by a factor of approximately 80%. This 80% represents the current estimate of a utility beta as published by the Value Line Investment Survey. Using an 80% adjustment factor to reflect Aquila's lower than market risk, these studies' equity risk premiums adjusted for the lower risk would be reduced to 3.6% (4.5% * 80%) in the case of Ibbotson, and 4.1% (5.13% * 80%) in the case of H&M. Comparing a 3.6% and 4.1% equity risk premium to the current cost of "A" rated electric utility bond of 5.7% would indicate a return on common equity of 9.5% to 10.0%.

Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A Yes.

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Long-Range Consensus U.S. Economic Projections

II. For comparison, this table includes some of the long-range consensus projections found on the preceding page, plus the latest long-range projections from the Bush Administration[1] and the Congressional Budget Office (CBO)[2].

ECONOMIC VARIABLE		YEAR 2008	2009	2010	2011	2012	Five-Year Averages 2008-12	2013-17
		Percent Change, Full Year-Over-Prior Year						
1. Real GDP (chained, 2000 dollars)	**CONSENSUS**	**3.1**	**3.1**	**3.0**	**2.9**	**3.0**	**3.0**	**3.0**
	Bush Admin.[1,3]	3.2	3.1	3.1	3.0	na	3.1	na
	CBO[2,3]	3.1	3.2	3.0	2.8	2.7	3.0	2.6
2. GDP Chained Price Index	**CONSENSUS**	**2.1**	**2.1**	**2.1**	**2.1**	**2.1**	**2.1**	**2.1**
	Bush Admin.[1,3]	2.2	2.1	2.1	2.1	na	2.1	na
	CBO[2,3]	1.8	1.8	1.8	1.8	1.8	1.8	1.8
3. Nominal GDP (current dollars)	**CONSENSUS**	**5.2**	**5.3**	**5.1**	**5.1**	**5.1**	**5.2**	**5.1**
	Bush Admin.[1,3]	5.5	5.3	5.3	5.2	na	5.3	na
	CBO[2,3]	4.9	5.0	4.9	4.6	4.6	4.8	4.5
4. Consumer Price Index (for all urban consumers)	**CONSENSUS**	**2.3**	**2.3**	**2.3**	**2.3**	**2.4**	**2.3**	**2.4**
	Bush Admin.[1,3]	2.4	2.4	2.5	2.5	na	2.5	na
	CBO[2,3]	2.2	2.2	2.2	2.2	2.2	2.2	2.2
		Annual Average						
5. Treasury Bills, 3-Month (percent per annum)	**CONSENSUS**	**4.6**	**4.7**	**4.5**	**4.5**	**4.6**	**4.6**	**4.5**
	Bush Admin.[1,3]	4.4	4.4	4.3	4.3	na	4.4	na
	CBO[2,3]	4.8	4.5	4.4	4.4	4.4	4.5	4.4
6. Treasury Notes, 10-Year (yield per annum)	**CONSENSUS**	**5.2**	**5.2**	**5.2**	**5.2**	**5.3**	**5.2**	**5.3**
	Bush Admin.[1,3]	5.4	5.5	5.5	5.5	na	5.5	na
	CBO[2,3]	5.3	5.2	5.2	5.2	5.2	5.2	5.2
7. Unemployment Rate (% of civilian labor force)	**CONSENSUS**	**4.9**	**4.9**	**4.9**	**4.9**	**4.9**	**4.9**	**4.9**
	Bush Admin.[1,3]	4.9	4.9	4.9	4.9	na	4.9	na
	CBO[2,3]	4.9	5.0	5.0	5.0	5.0	5.0	5.0

III. In this table, we compare the results of our most recent survey with those of our survey in March 2006[4].

ECONOMIC VARIABLE		YEAR 2008	2009	2010	2011	2012	Five-Year Averages 2008-12	2013-17
		Percent Change, Full Year-Over-Prior Year						
1. Real GDP (chained, 2000 dollars)	**October Consensus**	**3.1**	**3.1**	**3.0**	**2.9**	**3.0**	**3.0**	**3.0**
	March Consensus	3.1	3.1	3.1	2.9	3.0	3.1	3.0
2. GDP Chained Price Index	**October Consensus**	**2.1**	**2.1**	**2.1**	**2.1**	**2.1**	**2.1**	**2.1**
	March Consensus	2.1	2.1	2.1	2.1	2.1	2.1	2.1
3. Nominal GDP (current dollars)	**October Consensus**	**5.2**	**5.3**	**5.1**	**5.1**	**5.1**	**5.2**	**5.1**
	March Consensus	5.3	5.3	5.2	5.1	5.2	5.2	5.2
4. Consumer Price Index (for all urban consumers)	**October Consensus**	**2.3**	**2.3**	**2.3**	**2.3**	**2.4**	**2.3**	**2.4**
	March Consensus	2.3	2.3	2.3	2.3	2.3	2.3	2.4
		Annual Average						
5. Treasury Bills, 3-Month (percent per annum)	**October Consensus**	**4.6**	**4.7**	**4.5**	**4.5**	**4.6**	**4.6**	**4.5**
	March Consensus	4.7	4.7	4.7	4.5	4.6	4.6	4.6
6. Treasury Notes, 10-Year (yield per annum)	**October Consensus**	**5.2**	**5.2**	**5.2**	**5.2**	**5.3**	**5.2**	**5.3**
	March Consensus	5.4	5.5	5.5	5.4	5.5	5.5	5.5
7. Unemployment Rate (% of civilian labor force)	**October Consensus**	**4.9**	**4.9**	**4.9**	**4.9**	**4.9**	**4.9**	**4.9**
	March Consensus	4.8	4.8	4.9	4.9	5.0	4.9	4.9

[1]*Mid-Session Review, Budget of the United States Government, Fiscal Year 2007,* Office of Management and Budget, July 2006. [2]*The Budget and Economic Outlook: An Update;* Congressional Budget Office, August 2006. [3]The Bush Administration's forecast only extends through 2011, so averages for the 2008-2012 period are based on the forecast for the four-year period 2008-2012. CBO's forecast only extends through 2016, so averages for the 2013-2017 period are based on the forecast for the four-year period 2013-2016. [4]*Blue Chip Economic Indicators*, March 10, 2006.

Michael Gorman Rebuttal
Schedule MPG-1

Aquila Networks

Discounted Cash Flow Analysis
Traditional Constant Growth DCF Model

Line	Utility	Stock Price (P0) (1)	Next Year's Div (D1) (2)	Dividend Yield (3)	2009 DPS (4)	2009 EPS (5)	Retention Rate (B) (6)	2009 BVPS (7)	ROE (R) (8)	BxR Growth (9)	Zacks (10)	Value Line (11)	GDP (12)	Average Growth (13)	ROE (14)
1	Alliant Energy	32.58	1.25	3.84%	1.49	2.30	35.22%	25.70	8.95%	3.15%	4.00%	6.00%	5.10%	4.56%	8.4%
2	Ameren Corp.	49.75	2.54	5.11%	2.54	3.45	26.38%	36.35	9.49%	2.50%	6.00%	2.50%	5.10%	4.03%	9.1%
3	American Electric Power	34.10	1.60	4.69%	1.90	3.00	36.67%	28.25	10.62%	3.89%	3.00%	2.50%	5.10%	3.62%	8.3%
4	CH Energy	47.29	2.16	4.57%	2.20	3.25	32.31%	35.25	9.22%	2.98%	N/A	3.00%	5.10%	3.69%	8.3%
5	Cent. Vermount P.S.	19.94	0.92	4.61%	0.92	1.75	47.43%	18.95	9.23%	4.38%	N/A	11.50%	5.10%	6.99%	11.6%
6	Consolidated Edison	43.40	2.32	5.35%	2.38	3.20	25.63%	34.30	9.33%	2.39%	4.20%	3.00%	5.10%	3.67%	9.0%
7	DTE Enrgy	40.67	2.06	5.07%	2.10	4.25	50.59%	41.25	10.30%	5.21%	5.50%	6.50%	5.10%	5.58%	10.6%
8	Duquesne Light	16.65	1.00	6.01%	1.00	1.50	33.33%	10.60	14.15%	4.72%	N/A	5.00%	5.10%	4.94%	10.9%
9	Empire District	22.25	1.28	5.75%	1.28	1.50	14.67%	16.25	9.23%	1.35%	N/A	6.50%	5.10%	4.32%	10.1%
10	Energy East Corp.	24.11	1.24	5.14%	1.40	2.00	30.00%	21.25	9.41%	2.82%	4.50%	4.00%	5.10%	4.11%	9.2%
11	Green Mountain	28.49	1.24	4.35%	1.54	2.55	39.61%	24.75	10.30%	4.08%	N/A	3.50%	5.10%	4.23%	8.6%
12	Hawaiian Electric	26.67	1.24	4.65%	1.24	1.75	29.14%	17.00	10.29%	3.00%	5.20%	3.00%	5.10%	4.08%	8.7%
13	MGE Energy	31.47	1.39	4.42%	1.44	2.45	41.22%	19.05	12.86%	5.30%	N/A	6.00%	5.10%	5.47%	9.9%
14	NiSource Inc.	20.81	0.92	4.42%	1.00	1.75	42.86%	21.50	8.14%	3.49%	3.30%	3.50%	5.10%	3.85%	8.3%
15	Northeast Utilities	19.69	0.76	3.86%	0.97	2.00	51.50%	19.00	10.53%	5.42%	8.70%	11.00%	5.10%	7.56%	11.4%
16	NSTAR	27.91	1.26	4.51%	1.50	2.50	40.00%	18.75	13.33%	5.33%	5.00%	6.00%	5.10%	5.36%	9.9%
17	Pinnacle West Capital	39.77	2.13	5.36%	2.43	3.55	31.55%	40.20	8.83%	2.79%	6.80%	6.00%	5.10%	5.17%	10.5%
18	PPL Corporation	29.82	1.20	4.02%	1.65	3.25	49.23%	17.75	18.31%	9.01%	8.30%	9.50%	5.10%	7.98%	12.0%
19	Progress Energy	43.18	2.50	5.79%	2.62	3.40	22.94%	36.65	9.28%	2.13%	3.80%	1.50%	5.10%	3.13%	8.9%
20	Puget Energy, Inc.	20.92	1.00	4.78%	1.10	1.75	37.14%	21.00	8.33%	3.10%	7.00%	5.00%	5.10%	5.05%	9.8%
21	SCANA Corp.	39.21	1.80	4.59%	2.10	3.50	40.00%	30.00	11.67%	4.67%	4.70%	4.50%	5.10%	4.74%	9.3%
22	Southern Co.	32.29	1.62	5.02%	1.88	2.75	31.64%	18.60	14.78%	4.68%	4.80%	5.00%	5.10%	4.89%	9.9%
23	Vectren Corp.	26.36	1.27	4.82%	1.39	2.05	32.20%	18.35	11.17%	3.60%	5.00%	4.00%	5.10%	4.42%	9.2%
24	Xcel Energy, Inc.	18.46	0.93	5.04%	1.10	1.75	37.14%	15.75	11.11%	4.13%	4.20%	6.00%	5.10%	4.86%	9.9%
25	**Group Average**	**30.66**	**1.48**	**4.82%**	**1.63**	**2.55**	**35.77%**	**24.44**	**10.79%**	**3.92%**	**5.22%**	**5.21%**	**5.10%**	**4.85%**	**9.7%**
26	**Group Median**			**4.74%**											**9.6%**

Source:
Schedule SCH-9 Page 2 of 5.

Aquila Networks

Discounted Cash Flow Analysis
Constant Growth DCF Model
Long-Term GDP Growth

Line	Utility	Stock Price (P0) (15)	Next Year's Div (D1) (16)	Dividend Yield (17)	GDP (18)	ROE Col 17+18 (19)
1	Alliant Energy	32.58	1.25	3.84%	5.10%	8.94%
2	Ameren Corp.	49.75	2.54	5.11%	5.10%	10.21%
3	American Electric Power	34.10	1.60	4.69%	5.10%	9.79%
4	CH Energy	47.29	2.16	4.57%	5.10%	9.67%
5	Cent. Vermount P.S.	19.94	0.92	4.61%	5.10%	9.71%
6	Consolidated Edison	43.40	2.32	5.35%	5.10%	10.45%
7	DTE Enrgy	40.67	2.06	5.07%	5.10%	10.17%
8	Duquesne Light	16.65	1.00	6.01%	5.10%	11.11%
9	Empire District	22.25	1.28	5.75%	5.10%	10.85%
10	Energy East Corp.	24.11	1.24	5.14%	5.10%	10.24%
11	Green Mountain	28.49	1.24	4.35%	5.10%	9.45%
12	Hawaiian Electric	26.67	1.24	4.65%	5.10%	9.75%
13	MGE Energy	31.47	1.39	4.42%	5.10%	9.52%
14	NiSource Inc.	20.81	0.92	4.42%	5.10%	9.52%
15	Northeast Utilities	19.69	0.76	3.86%	5.10%	8.96%
16	NSTAR	27.91	1.26	4.51%	5.10%	9.61%
17	Pinnacle West Capital	39.77	2.13	5.36%	5.10%	10.46%
18	PPL Corporation	29.82	1.20	4.02%	5.10%	9.12%
19	Progress Energy	43.18	2.50	5.79%	5.10%	10.89%
20	Puget Energy, Inc.	20.92	1.00	4.78%	5.10%	9.88%
21	SCANA Corp.	39.21	1.80	4.59%	5.10%	9.69%
22	Southern Co.	32.29	1.62	5.02%	5.10%	10.12%
23	Vectren Corp.	26.36	1.27	4.82%	5.10%	9.92%
24	Xcel Energy, Inc.	18.46	0.93	5.04%	5.10%	10.14%
25	**Group Average**	**30.66**	**1.48**	**4.82%**	**5.10%**	**9.9%**
26	**Group Median**			**4.74%**		**9.8%**

Source:
Schedule SCH-9 Page 3 of 5.

Aquila Networks

Discounted Cash Flow Analysis
Low Near-Term Growth
Two-Stage Growth DCF Model

Line	Utility	Next Year's Div (D_1) (20)	2010 DPS (21)	Annual Change to 2008 (22)	Stock Price (P0) (23)	Year 1 Div (24)	Year 2 Div (25)	Year 3 Div (26)	Year 4 Div (27)	Year 5 Div (28)	Year 5-150 Growth (29)	ROE = IRR (30)
1	Alliant Energy	1.25	1.49	8.00%	-32.58	1.25	1.33	1.41	1.49	1.57	5.10%	9.0%
2	Ameren Corp.	2.54	2.54	0.00%	-49.75	2.54	2.54	2.54	2.54	2.67	5.10%	9.5%
3	American Electric Power	1.6	1.90	10.00%	-34.1	1.60	1.70	1.80	1.90	2.00	5.10%	9.9%
4	CH Energy	2.16	2.20	1.33%	-47.29	2.16	2.17	2.19	2.20	2.31	5.10%	9.1%
5	Cent. Vermount P.S.	0.92	0.92	0.00%	-19.94	0.92	0.92	0.92	0.92	0.97	5.10%	9.1%
6	Consolidated Edison	2.32	2.38	2.00%	-43.4	2.32	2.34	2.36	2.38	2.50	5.10%	9.9%
7	DTE Enrgy	2.06	2.10	1.33%	-40.67	2.06	2.07	2.09	2.10	2.21	5.10%	9.6%
8	Duquesne Light	1	1.00	0.00%	-16.65	1.00	1.00	1.00	1.00	1.05	5.10%	10.3%
9	Empire District	1.28	1.28	0.00%	-22.25	1.28	1.28	1.28	1.28	1.35	5.10%	10.1%
10	Energy East Corp.	1.24	1.40	5.33%	-24.11	1.24	1.29	1.35	1.40	1.47	5.10%	10.1%
11	Green Mountain	1.24	1.54	10.00%	-28.49	1.24	1.34	1.44	1.54	1.62	5.10%	9.7%
12	Hawaiian Electric	1.24	1.24	0.00%	-26.67	1.24	1.24	1.24	1.24	1.30	5.10%	9.1%
13	MGE Energy	1.39	1.44	1.67%	-31.47	1.39	1.41	1.42	1.44	1.51	5.10%	9.1%
14	NiSource Inc.	0.92	1.00	2.67%	-20.81	0.92	0.95	0.97	1.00	1.05	5.10%	9.2%
15	Northeast Utilities	0.76	0.97	7.00%	-19.69	0.76	0.83	0.90	0.97	1.02	5.10%	9.3%
16	NSTAR	1.26	1.50	8.00%	-27.91	1.26	1.34	1.42	1.50	1.58	5.10%	9.7%
17	Pinnacle West Capital	2.13	2.43	10.00%	-39.77	2.13	2.23	2.33	2.43	2.55	5.10%	10.4%
18	PPL Corporation	1.2	1.65	15.00%	-29.82	1.20	1.35	1.50	1.65	1.73	5.10%	9.8%
19	Progress Energy	2.5	2.62	4.00%	-43.18	2.50	2.54	2.58	2.62	2.75	5.10%	10.4%
20	Puget Energy, Inc.	1	1.10	3.33%	-20.92	1.00	1.03	1.07	1.10	1.16	5.10%	9.6%
21	SCANA Corp.	1.8	2.10	10.00%	-39.21	1.80	1.90	2.00	2.10	2.21	5.10%	9.7%
22	Southern Co.	1.62	1.88	8.67%	-32.29	1.62	1.71	1.79	1.88	1.98	5.10%	10.1%
23	Vectren Corp.	1.27	1.39	4.00%	-26.36	1.27	1.31	1.35	1.39	1.46	5.10%	9.7%
24	Xcel Energy, Inc.	0.93	1.10	5.67%	-18.46	0.93	0.99	1.04	1.10	1.16	5.10%	10.2%
25	**Group Average**											**9.7%**
26	**Group Median**											**9.7%**

Source:
Schedule SCH-9 Page 4 of 5.