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Exhibit No.:
Issues: ROE
Witness: Samuel C. Hadaway
Sponsoring Party: Aquila Networks-MPS & L&P
Case No.: ER-2007-0004

Before the Public Service Commission
of the State of Missouri

Surrebuttal Testimony

of

Samuel C. Hadaway

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SURREBUTTAL TESTIMONY OF SAMUEL C. HADAWAY
ON BEHALF OF AQUILA, INC.
D/B/A AQUILA NETWORKS-MPS AND AQUILA NETWORKS-L&P
CASE NO. ER-2007-0004

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI
SURREBUTTAL TESTIMONY OF SAMUAL C. HADAWAY
ON BEHALF OF AQUILA, INC.
D/B/A AQUILA NETWORKS-MPS AND AQUILA NETWORKS-L&P
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I. INTRODUCTION AND PURPOSE OF TESTIMONY

Q. Please state your name, occupation, and business address.

A. My name is Samuel C. Hadaway. I am a Principal in FINANCO, Inc., Financial Analysis Consultants, 3520 Executive Center Drive, Austin, Texas 78731.

Q. Did you previously file Direct and Rebuttal Testimony on behalf of Aquila, Inc., D/B/A Aquila Networks-MPS and Aquila Networks-L&P ("MPS/LP" or the "Company") in this proceeding?

A. Yes.

Q. What is the purpose of your Surrebuttal Testimony?

A. The purpose of my testimony is to respond to the rebuttal testimony of Commission Staff witness David C. Parcell and the rebuttal testimony of Federal Executive Agencies/Sedalia Industrial Energy Users' Association/St. Joe Industrial Group ("FEA/Industrials") witness Michael Gorman.

II. RESPONSE TO STAFF WITNESS PARCELL

Q. What are Mr. Parcell's principal rebuttal comments?

A. Mr. Parcell criticizes three aspects of my rate of return recommendations:

1) Capital Structure;

2) Discounted Cash Flow ("DCF") analysis; and

3) Risk Premium analysis.

I disagree with his criticisms in each of these areas.

Capital Structure

Q. Does Mr. Parcell continue to use the Company's proposed capital structure and assigned debt costs to calculate the recommended overall rate of return?

A. Yes.

Q. Why does he criticize your use of these same numbers?

A. On pages 2 and 3, of his rebuttal he disagrees with use of the hypothetical capital structure that results from the Company's internal capital assignment process. At page 3, line 3, he mischaracterizes my Direct Testimony by saying that the requested capital structure is based on my 24-company comparable group.

Q. Ho do you respond?

A. While the requested capital structure is well supported by the comparable group, it is clear in my testimony that the requested capital structure is "based on" the Company's internal capital assignment process.

Q. How do you characterize Mr. Parcell's use of the results of the capital assignment process?

A. It is a "selective" use.

Q. Please explain.

A. He accepts the lower debt costs that result from that process but rejects the process as the basis of the debt and equity percentages. As I demonstrated in my Rebuttal Testimony, his position is one-sided and inconsistent with prior Staff policy.

DCF Analysis

Q. On page 5 of his rebuttal, Mr. Parcell begins his criticism of your DCF analysis by noting that that your "prediction" for higher interest rates has not proven to be true. How do you respond to this criticism?

A. Utility interest rates have indeed declined from the interim peak levels they reached in mid-2006 when I was preparing my Direct Testimony. Projections for future interest rates have also been scaled back. To reflect these factors, in my Rebuttal Testimony I reduced my ROE estimate for the comparable group from 11.25 percent to 10.75 percent.

Q. At the bottom of page 5, Mr. Parcell provides a table that shows monthly utility interest rates for June-December 2006. What would Mr. Parcell's interest rate table have shown if he had included a longer time period?

A. While utility interest rates have declined from their highest levels in mid-2006, a longer-term view of the data shows that rates are about where they were two years ago and that they have actually increased since their low points in mid-2005 as show by the following table:

Long-Term Interest Rate Trends

Month	Baa Utility Rates	Average Utility Rates	Long-Term Treasury Rates	10-Year Treasury Rates
Jan-05	5.95%	5.80%	4.77%	4.22%
Feb-05	5.76%	5.64%	4.61%	4.17%
Mar-05	6.01%	5.86%	4.89%	4.50%
Apr-05	5.95%	5.72%	4.75%	4.34%
May-05	5.88%	5.60%	4.56%	4.14%
Jun-05	5.70%	5.39%	4.35%	4.00%
Jul-05	5.81%	5.50%	4.48%	4.18%
Aug-05	5.80%	5.51%	4.53%	4.26%
Sep-05	5.83%	5.54%	4.51%	4.20%
Oct-05	6.08%	5.79%	4.74%	4.46%
Nov-05	6.19%	5.88%	4.83%	4.54%
Dec-05	6.14%	5.83%	4.73%	4.47%
Jan-06	6.06%	5.77%	4.65%	4.42%
Feb-06	6.11%	5.83%	4.73%	4.57%
Mar-06	6.26%	5.98%	4.91%	4.72%
Apr-06	6.54%	6.28%	5.22%	4.99%
May-06	6.59%	6.39%	5.35%	5.11%
Jun-06	6.61%	6.39%	5.29%	5.11%
Jul-06	6.61%	6.37%	5.25%	5.09%
Aug-06	6.43%	6.20%	5.08%	4.88%
Sep-06	6.26%	6.03%	4.93%	4.72%
Oct-06	6.24%	6.01%	4.94%	4.73%
Nov-06	6.04%	5.82%	4.78%	4.60%
Dec-06	6.05%	5.83%	4.78%	4.56%

Sources: Mergent Bond Record (Utility Rates);
www.federalreserve.gov (Treasury Rates).

Currently, utility and Treasury bond interest rates are 40 to 60 basis points higher than they were in mid-2005. Additionally, while interest rate forecasts have been reduced, such forecasts still call for higher interest rates in the coming year. I have included as Schedule SCH-19 the latest Standard & Poor's *Trends & Projections* publication, dated February 15, 2007. As compared to the June 15, 2006 version of that forecast, which was included as Schedule 8, page 3 of 3, of

my Direct Testimony, the forecast for 30-year Treasury bonds has been reduced from 5.6 percent to 5.2 percent. However, relative to the December 2006 rate shown in the table above, the current forecast continues to show an expected 40 basis point rate increase during the coming year.

Q. On page 6 of his rebuttal, Mr. Parcell says that this changed interest rate environment demonstrates that your reasoning for not considering the "traditional" DCF model is not legitimate. How do you respond?

A. His criticism is not accurate. First, I did consider the "traditional" constant growth version of the DCF model. I rejected its results because they were not consistent with the higher interest rates and interest rate forecasts that existed when I prepared my testimony. The constant growth results were also 100 basis points below alternative risk premium tests of reasonableness.

As I explained in my Rebuttal Testimony, Mr. Parcell's (and Mr. Gorman's) singular reliance on that one version of the DCF model is a major short-coming. The use of traditional growth rates based on historical data or analysts' 3-to-5 year estimates is simply incorrect. The constant growth version of the DCF model requires an estimate of investors' very long-term expected growth rates. This growth rate cannot be observed and the basic constant growth version of the DCF model cannot be derived without assuming that the "g" term remains constant to infinity.

Q. Have you prepared a schedule to demonstrate the inconsistency in Mr. Parcell's growth rate arguments?

A. Yes, I have prepared as Schedule SCH-20 a summary of analysts' current growth rate projections as compared with the same projections from 5 years ago. (An earlier version of this analysis was provided in response to Data Request SIE-125.) For my 24-company group, the average Value Line growth rate has declined from about 7.7 percent to 5.2 percent, a drop of 2.5 percentage points. Similarly, the more conservative "BR" sustainable growth rate has dropped from 5.8 percent to 3.8 percent. Use of such data in the constant growth DCF model is not consistent with the requirement for a constant long-term growth rate. In earlier years when analysts' forecasts were consistent with long-term GDP growth rate forecasts, economists like Mr. Parcell complained that analysts were overly optimistic. Now, with analysts' growth rates much lower, they are acceptable for use in the DCF model. The inconsistency of this approach seems obvious.

Q. On page 7 of his rebuttal, Mr. Parcell criticizes your GDP growth forecast because it is based on historical growth rates in GDP. Is it accurate to say that your GDP growth rate is a simple average or historical extrapolation?

A. No. In response to Data Request MPSC-159, I provided to Mr. Parcell the entire data base and forecast methodology I applied to develop my expected GDP growth rate. I have included the summary forecast as Schedule SCH-21. While the St. Louis Federal Reserve Bank data base contains data dating back to 1947, my forecast is not a simple average or extrapolation of the historical data. To account for recent data having a greater influence on current expectations, I applied a weighted averaging process that gives about five times as much weight to the most recent 10 years as compared to the earliest 10 years. Giving more

weight to the more recent, low inflation years also lowers the overall forecast. For example, my forecast is for a future growth rate of 6.6 percent, while the overall average of the data indicates a growth rate of 7 percent. In this context, Mr. Parcell's criticism of my use of historical GDP data is unwarranted.

Q. At the bottom of page 7 of his rebuttal, Mr. Parcell offers a table of GDP forecasts that are lower than your forecast. How do you respond to this comparison?

A. Interest rate forecasts and economic forecasts in general are difficult and are often dominated by current data and very recent experience. I used the very long-term St. Louis Federal Reserve Bank data to mitigate this well-known forecasting deficiency.

Mr. Parcell's forecast from the Energy Information Agency (EIA) of the U.S. Department of Energy is often used in GDP applications before the FERC. The data presented by Mr. Parcell for 2011 to 2030 indicate a 19-year GDP growth rate of 5.55 percent. The underlying EIA data for 2005 through 2030 indicate a growth rate of about 5.7 percent. The reason the EIA GDP growth forecast is lower than mine based on the historical St. Louis Federal Reserve data is because EIA projects a much lower future inflation rate. EIA projects that inflation will fall to below 2 percent per year in 2008, and remain at that low level throughout the forecast period.

This forecast is in stark contrast to historical experience. The data in Schedule SCH-21 show that only one subperiod had an inflation rate as low as low as 2 percent per year. While Government forecasters may hope, for policy

and deficit reduction purposes, to see permanently low inflation, their recent forecasts are not consistent with longer-term historical results.

Q. Mr. Parcell also presents a forecast of GDP growth from the Social Security Administration ("SSA") that is even lower than the EIA forecast. Have you reviewed that forecast?

A. Yes, I have.

Q. Why is the SSA forecast lower?

A. SSA develops annual very long-term forecasts to be used in its actuarial evaluation of the Social Security System. Under status quo tax rates and payments, and with SSA's Intermediate economic assumptions, Social Security disbursements are expected to exceed receipts in 2017 and the System is expected to be entirely depleted in 2040.[1] The SSN Intermediate forecast is similar to the EAI forecast in the sense that it uses an inflation rate (2.4 percent) that is below the historical average. SSA's forecast for GDP growth is even lower because the SSA forecast assumes that real GDP will grow at only 2 percent per year, or less, beginning in 2013. In combination the 2 percent real GDP growth rate and the 2.4 percent assumed inflation rate produce a nominal GDP growth rate of only 4.4 percent, which is shown in Mr. Parcell's table.

Q. Should the average of Mr. Parcell's GDP growth forecasts (4.96 percent) be used to replace your GDP forecast as he does on page 9 of his rebuttal?

A. No.

Q. Why not?

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1 Social Security Administration: 2006 OASDI Trustees Report (www.ssa.gov/OACT/TR/TR06/II_highlights.html)

A. In his analysis on page 9, Mr. Parcell used a stale average dividend yield (4.82 percent) from my Direct Testimony, Schedule 9, page 2 of 5, which existed in the May-June 2006 timeframe. In my Rebuttal Testimony, Schedule 15, page 2 of 5, I showed that that same average dividend yield has dropped to 4.26 percent. Had Mr. Parcell recalculated current dividend yields for his analysis and added his 4.83 percent overall average growth rate from page 9, he would have found an ROE of only 9.1 percent (4.26% yield + 4.83% growth = 9.09% ROE).

On its face, this result is below the reasonable range and only further demonstrates that the "traditional" constant growth DCF is deficient. Had he performed the calculation properly, Mr. Parcell simply would have presented an additional estimate that is clearly outside the reasonable range.

Q. On page 10 of his rebuttal, Mr. Parcell inserts his average of GDP growth estimate into your second version of the DCF model. How do you characterize that result?

A. It is not reasonable.

Q. Pease explain.

A. Again Mr. Parcell relied on the outdated dividend yield (4.82 percent) from my Direct Testimony. In this case he averaged that yield directly with his average of GDP growth forecasts (4.96 percent) to obtain an ROE estimate of 9.78 percent. Had he correctly calculated a current dividend yield (4.26 percent), his result again would have been below the reasonable range at 9.2 percent (4.26% yield + 4.96% growth = 9.22% ROE). To my knowledge, no major electric company has received a return on equity even close to the low levels that Mr. Parcell would

have found had he applied his GDP growth rates correctly. While such low growth rate forecasts may exist, the assumptions supporting these forecasts appear constrained by recent low levels of inflation that are not consistent with actual data for long-term periods. A longer-term view consistent with the actual experience of the U.S. economy should be used.

Risk Premium

Q. How do you respond to Mr. Parcell's criticism of your risk premium analysis?

A. On page 13 of his rebuttal, lines 5-13, Mr. Parcell implies that at current interest rates, my risk premium analysis indicates an ROE of only 10.2 percent (from the risk premium study shown in Schedule SCH-10) or 9.0 percent to 10.0 percent (from the risk premium of "recent years"). These calculations are not correct and are potentially misleading.

In redoing my risk premium study (from Schedule SCH-10), Mr. Parcell replaced my originally forecasted triple-B bond yield (6.85 percent) with a current rate of 6.0 percent. This approach is incorrect because it ignores the inverse relationship between interest rates and equity risk premiums, and it ignores the fact that interest rates are still expected to increase over the coming year. I show in Schedule SCH-22 what his result, with a 6.0 percent interest rate, should have been. When the analysis is conducted properly, the risk premium at the lower triple-B bond yield increases to 4.54 percent and the new indicated equity return is 10.54 percent (6.0% triple-B rate + 4.54% risk premium = 10.54%).

His conclusion that risk premiums from "recent years" would lead to ROEs in the range of 9.0 percent to 10.0 percent is also incorrect. Averaging the last three years of risk premium data from Schedule SCH-10 indicates a "recent years" risk premium of 4.6 percent (average of 4.36%, 4.55%, and 4.87%). Adding this "recent years" risk premium of 4.6 percent to Mr. Parcell's current triple-B interest rate of 6.0 percent produces an ROE estimate of 10.6 percent. In this light, the results that he provides on page 13 are not reliable.

Q. What are the results of the risk premium analysis if one uses current interest rate forecasts?

A. I have updated my risk premium analysis in Schedule SCH-23, using the latest S&P *Trends & Projections* from February 15, 2007. That analysis indicates that an ROE of 10.83 percent is appropriate.

III. RESPONSE TO FEA/INDUSTRIALS WITNESS GORMAN

Q. What are Mr. Gorman's principal rebuttal comments?

A. Mr. Gorman criticizes essentially every aspect of my rate of return analysis. He disagrees with my applications of the DCF and risk premium models and he says that my recommended adjustment to reflect MPS/LP's higher construction and operating risks is *without merit*. He characterizes my recommended ROE as *excessive* (Gorman at 1, line 10) and says that my DCF and risk premium studies are *unreasonable* (Gorman at 2, lines 1-2). He later says that my approach is *unreasonable and a biased assessment* (Gorman at 3, line 18) and that I am *alone in my belief that capital market costs will increase over time* (Gorman at 3, line 27).

Q. What is your general response to Mr. Gorman's remarks?

A. I entirely disagree with Mr. Gorman. I will demonstrate that his assertions are incorrect and that his comments about my testimony are inappropriate.

Q. At page 4 of his rebuttal, Mr. Gorman says that on page 4 of your Direct Testimony you claimed to rely on consensus forecasts but used only an individual forecast from S&P in your analysis. Is Mr. Gorman's criticism correct?

A. It is not clear why Mr. Gorman made the remarks he did. On page 4 of my Direct Testimony, I stated (at lines 8-9) that I used S&P's forecast in my risk premium analysis. I later said (at lines 13-14) that current DCF and risk premium estimates of ROE should be tempered by consensus forecasts about future interest rates. I did not make any claim that the S&P forecast is a consensus.

Q. If you had used the Consensus Blue Chip Financial Forecast that Mr. Gorman provided in his Rebuttal Testimony Schedule MPG-1, would your conclusions or recommendations have been different?

A. No. While the dates in Mr. Gorman's schedule are different than those in the S&P forecast, the projections for higher interest rates are clear in both forecasts. For example, in the S&P publication (Exhibit SCH-8, page 3 of 3), the projected 2007 rate for the 10-year Treasury note is 5.5 percent. In Mr. Gorman's Blue Chip forecasts, the "March Consensus" projected rate for the 10-year Treasury note fluctuates between 5.4 percent and 5.5 percent for each year shown. His criticism of my source for forecasted interest rates in unwarranted.

Q. At page 4, line 26, through page 5, line 3 of his rebuttal, Mr. Gorman says that your view of construction risk is inconsistent with S&P's assessment, and that S&P has noted that Aquila's construction risk is "moderate and declining." How do you respond?

A. It is again not clear why Mr. Gorman would offer this testimony. My assessment of MPS/LP construction risk is plainly presented in my Direct Testimony Schedule SCH-1 and my Rebuttal Testimony Schedule SCH-17, which updates the Company's construction requirements. Those schedules show that MPS/LP's projected construction expenditures are 92.8 percent to 118.2 percent of existing net plant. For the comparable company group the corresponding percentages are 58.7 percent to 60.9 percent. In terms of either relative size or absolute dollars the Company's construction budget is large and the associated capital requirements clearly represent a higher risk level for the Company.

Additionally, Mr. Gorman's reading of S&P assessment is questionable. There is nothing in the S&P article that Mr. Gorman quotes on page 6 of his Direct Testimony that says Aquila's construction risk is declining. S&P does state that the Company's "growth-related" capital expenditures are "moderate." It is incorrect and inappropriate for Mr. Gorman to selectively extrapolate these comments to overall lower construction risk.

Q. At pages 5 and 6 of his rebuttal, Mr. Gorman discusses "small company risk" at length and concludes that such risk is already factored into the ROE analysis by selecting comparable groups with appropriate bond ratings and

business profile scores. Is small company risk a prominent factor in your analysis and do you agree with Mr. Gorman's assessment?

A. While I discuss MPS/LP's relatively small size, as well as the historical lack of a fuel adjustment clause as risk factors, my recommended risk adjustment is based on the Company's much higher construction requirements. Additionally, while Mr. Gorman's comments might be at least partially true in some circumstances, they are not on point in the present case. MPS/LP does not have an explicit bond rating or business profile score. However, for the financial evaluation of MPS/LP no one has contested the use of an implicit triple-B bond rating and a business profile score of 6. Under these circumstances, Mr. Gorman's equivalent risk discussion is wrong. The average bond ratings for the comparable group I used to estimate ROE is BBB/A- and the average business profile score is 4.xx. Therefore, if these were the required metrics for risk evaluation as Mr. Gorman suggests, his conclusions with regard to MPS/LP relative risk would still be wrong.

Q. At page 9 of his rebuttal, Mr. Gorman offers estimates of GDP growth that are lower than your GDP growth forecast. He proposes to use a 5.1 percent growth rate in place of your 6.6 percent estimate. How do you respond?

A. Mr. Gorman's analysis in this regard is similar to Mr. Parcell's presentation. Both of their recommended GDP growth rate forecasts rely on long-term inflation rates that are much lower than have actually been experienced in the U.S. economy. It is not difficult to see why Mr. Gorman's 150 basis point reduction to the DCF growth rate produces a much lower ROE estimate.

Q. At page 11 of his rebuttal, Mr. Gorman says that in your risk premium analysis you apply an "inflated" equity risk premium of 4.20 percent to a projected bond yield. Is your estimated risk premium inflated?

A. No. As I noted in my responses to Mr. Parcell, no extensive analysis is required to see that recent equity risk premiums have been above 4 percent. In fact, as shown in my Schedule SCH-23, with the lower interest rates that have existed, allowed risk premiums in each of the last four years have exceed 4.20 percent.

Q. At page 12 of his rebuttal, Mr. Gorman criticizes your using in your risk premium analysis a projected Baa utility bond yield of 6.85 percent. What is your current Baa interest rate forecast?

A. As shown in Schedule SCH-23, my current Baa forecast is 6.5 percent. This is based on S&P's current 30-year Treasury bond forecast of 5.2 percent plus the same 130 Baa interest rate spread over Treasuries that I used previously. For 2006, the average monthly spread of Baa utility bond yields over Treasuries was 132 basis points. The analysis in Schedule SCH-23 indicates that a base ROE of 10.83 percent is appropriate.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes.

Economic Indicators

Seasonally Adjusted Annual Rates — Dollar Figures in Billions

			Annual % Change				2006			E2007				E2008
2005	E2006	E2007	2005	E2006	E2007		2Q	R3Q	E4Q	1Q	2Q	3Q	4Q	1Q
						Gross Domestic Product								
$12,456.0	$13,254.0	$13,893.0	6.4	6.4	4.8	GDP (current dollars)	$13,197.0	$13,323.0	$13,487.0	$13,668.0	$13,820.0	$13,966.0	$14,116.0	$14,298.0
6.4	6.4	4.8	-	-	-	Annual rate of increase (%)	5.9	3.9	5.0	5.5	4.6	4.3	4.4	5.3
3.2	3.4	2.6	-	-	-	Annual rate of increase–real GDP (%)	2.6	2.0	3.5	2.6	2.5	2.4	2.6	3.1
3.0	2.9	2.1	-	-	-	Annual rate of increase–GDP deflator (%)	3.3	1.9	1.5	2.6	2.0	1.9	1.7	2.1
						***Components of Real GDP**								
$7,841.0	$8,092.0	$8,348.0	3.5	3.2	3.2	Personal consumption expenditures	$8,055.0	$8,111.0	$8,199.0	$8,268.0	$8,322.0	$8,375.0	$8,428.0	$8,492.0
3.5	3.2	3.2	-	-	-	% change	2.6	2.8	4.4	3.4	2.7	2.6	2.5	3.1
1,145.3	1,204.0	1,244.0	5.5	5.1	3.3	Durable goods	1,190.3	1,208.8	1,226.5	1,249.1	1,243.0	1,240.3	1,243.7	1,258.4
2,276.8	2,363.5	2,449.6	4.5	3.8	3.7	Nondurable goods	2,351.1	2,360.1	2,399.9	2,426.3	2,441.2	2,458.1	2,472.8	2,491.2
4,436.6	4,549.0	4,680.4	2.6	2.5	2.9	Services	4,535.4	4,566.6	4,599.4	4,623.0	4,664.3	4,700.6	4,733.7	4,766.5
1,223.8	1,314.7	1,387.6	6.8	7.4	5.5	Nonresidental fixed investment	1,302.8	1,334.2	1,332.8	1,359.6	1,385.2	1,397.3	1,408.2	1,420.8
6.8	7.4	5.5	-	-	-	% change	4.4	10.0	(0.4)	8.3	7.7	3.5	3.2	3.6
984.9	1,050.7	1,097.4	8.9	6.7	4.4	Producers durable equipment	1,041.2	1,060.7	1,056.0	1,075.6	1,091.2	1,104.8	1,118.0	1,132.9
598.5	572.7	487.1	8.6	(4.3)	(15.0)	Residental fixed investment	590.6	560.6	531.1	509.0	489.3	478.5	471.5	471.6
8.6	(4.3)	(15.0)	-	-	-	% change	(11.2)	(18.9)	(19.4)	(15.6)	(14.6)	(8.5)	(5.7)	0.0
19.7	46.4	27.7	-	-	-	Net change in business inventories	53.7	55.4	35.3	38.0	30.7	22.1	20.0	16.2
1,958.0	1,998.9	2,047.9	0.9	2.1	2.5	Gov't purchases of goods & services	1,991.2	1,999.4	2,017.7	2,032.5	2,041.3	2,054.0	2,063.9	2,070.4
727.6	741.9	760.3	1.5	2.0	2.5	Federal	736.6	738.9	747.1	753.2	757.5	763.7	766.7	768.8
1,230.4	1,256.8	1,287.6	0.5	2.2	2.5	State & local	1,254.4	1,260.3	1,270.5	1,279.2	1,283.7	1,290.3	1,297.2	1,301.6
(619.2)	(617.8)	(569.9)	-	-	-	Net exports	(624.2)	(628.8)	(581.4)	(591.8)	(575.7)	(562.7)	(549.3)	(536.8)
1,196.1	1,302.3	1,409.9	6.8	8.9	8.3	Exports	1,288.5	1,310.0	1,341.5	1,365.8	1,394.3	1,424.0	1,455.3	1,486.4
1,815.3	1,920.1	1,979.7	6.1	5.8	3.1	Imports	1,912.7	1,938.8	1,922.9	1,957.6	1,970.0	1,986.7	2,004.6	2,023.2
						****Income & Profits**								
$10,239.0	$10,897.0	$11,497.0	5.2	6.4	5.5	Personal income	$10,807.0	$10,965.0	$11,096.0	$11,263.0	$11,422.0	$11,576.0	$11,726.0	$11,881.0
9,036.0	9,535.0	10,040.0	4.1	5.5	5.3	Disposable personal income	9,446.0	9,598.0	9,706.0	9,846.0	9,973.0	10,106.0	10,235.0	10,379.0
(0.4)	(1.0)	(0.6)	-	-	-	Savings rate (%)	(1.4)	(1.2)	(1.0)	(0.8)	(0.7)	(0.6)	(0.4)	(0.4)
1,518.7	1,813.5	1,867.0	32.7	19.4	3.0	Corporate profits before taxes	1,811.5	1,854.0	1,847.8	1,846.6	1,865.9	1,883.8	1,871.6	1,888.5
1,119.4	1,335.9	1,378.1	32.6	19.3	3.2	Corporate profits after taxes	1,335.4	1,363.4	1,361.3	1,360.6	1,377.0	1,390.8	1,383.7	1,395.4
70.00	81.20	87.60	19.0	16.4	7.4	‡Earnings per share (S&P 500)	74.50	78.60	81.40	84.60	87.40	87.40	87.40	88.10
						†Prices & Interest Rates								
3.4	3.2	1.5	-	-	-	Consumer price index	5.0	2.9	(2.2)	1.6	2.4	2.6	2.0	2.5
3.1	4.7	5.0	-	-	-	Treasury bills	4.7	4.9	4.9	5.0	5.0	5.0	4.9	4.7
4.3	4.8	4.9	-	-	-	10-yr notes	5.1	4.9	4.6	4.8	4.9	5.0	5.1	5.1
4.6	4.9	5.0	-	-	-	30-yr bonds	5.1	5.0	4.7	4.9	5.0	5.0	5.1	5.2
5.2	5.6	5.6	-	-	-	New issue rate–corporate bonds	5.9	5.7	5.4	5.5	5.6	5.7	5.8	5.8
						Other Key Indicators								
2,070.0	1,820.0	1,520.0	6.3	(12.3)	(16.2)	Housing starts (1,000 units SAAR)	1,870.0	1,710.0	1,560.0	1,560.0	1,500.0	1,500.0	1,520.0	1,540.0
16.9	16.5	16.4	0.5	(2.6)	(0.8)	Auto & truck sales (1,000,000 units)	16.3	16.6	16.3	16.4	16.3	16.4	16.4	16.4
5.1	4.6	4.7	-	-	-	Unemployment rate (%)	4.6	4.7	4.5	4.6	4.7	4.8	4.8	4.8
(1.8)	(1.4)	(4.1)	-	-	-	§U.S. dollar	(12.4)	(2.1)	(0.7)	1.4	(11.6)	(5.2)	(4.8)	(5.2)

Note: Annual changes are from prior year and quarterly changes are from prior quarter. Figures may not add to totals because of rounding. A–Advance data. P–Preliminary. E–Estimated. R–Revised. *1996 Chain-weighted dollars. **Current dollars. ‡Trailing 4 quarters. †Average for period. §Quarterly % changes at quarterly rates. This forecast prepared by Standard & Poor's.

Aquila Missouri

Comparison of Analysts' Growth Rates

2001 to 2006

No.	Company	Value Line Earnings 2001	Value Line Earnings 2006	% Points Decline
1	Alliant Energy Co.	6.5%	5.5%	
2	Ameren	4.0%	1.0%	
3	American Elec. Pwr.	NA	6.5%	
4	CH Energy Group	5.0%	3.0%	
5	Cent. Vermont P.S.	18.0%	10.0%	
6	Con. Edison	2.5%	2.0%	
7	DTE Energy Co.	8.5%	3.0%	
8	Duquesne Light	-1.5%	5.0%	
9	Empire District	5.0%	9.5%	
10	Energy East Corp.	3.5%	4.0%	
11	Green Mtn. Power	NA	3.5%	
12	Hawaiian Electric	5.0%	3.0%	
13	MGE Energy, Inc.	NA	6.0%	
14	NiSource Inc.	16.0%	3.5%	
15	Northeast Utilities	NA	8.5%	
16	NSTAR	6.5%	7.5%	
17	Pinnacle West	5.5%	7.0%	
18	PPL Corporation	15.0%	11.0%	
19	Progress Energy	NA	NA	
20	Puget Energy, Inc.	4.0%	5.0%	
21	SCANA Corp.	6.5%	3.5%	
22	Southern Co.	6.0%	3.5%	
23	Vectren Corp.	15.5%	3.0%	
24	Xcel Energy Inc.	15.0%	6.0%	
	Average	7.71%	5.24%	2.47%

No.	Company	Value Line "br" 2001	Value Line "br" 2006	% Points Decline
1	Alliant Energy Co.	3.1%	3.9%	
2	Ameren	4.0%	1.9%	
3	American Elec. Pwr.	6.9%	5.8%	
4	CH Energy Group	5.1%	3.0%	
5	Cent. Vermont P.S.	5.9%	3.5%	
6	Con. Edison	3.7%	2.0%	
7	DTE Energy Co.	8.2%	3.3%	
8	Duquesne Light	6.1%	4.5%	
9	Empire District	3.6%	2.8%	
10	Energy East Corp.	6.4%	2.8%	
11	Green Mtn. Power	5.4%	4.0%	
12	Hawaiian Electric	4.0%	3.0%	
13	MGE Energy, Inc.	NA	5.3%	
14	NiSource Inc.	8.1%	3.6%	
15	Northeast Utilities	5.2%	3.9%	
16	NSTAR	6.5%	5.8%	
17	Pinnacle West	6.0%	3.1%	
18	PPL Corporation	13.0%	10.0%	
19	Progress Energy	6.6%	1.1%	
20	Puget Energy, Inc.	3.4%	3.1%	
21	SCANA Corp.	4.6%	4.6%	
22	Southern Co.	3.8%	3.8%	
23	Vectren Corp.	7.0%	2.9%	
24	Xcel Energy Inc.	6.6%	4.1%	
	Average	5.79%	3.82%	1.97%

Data Sources:

Electric: Value Line Investment Survey, Electric Utility (East), Dec 1, 2006 & Sep 7, 2001; (Central), Dec 29, 2006 & Oct 5, 2001; (West), Nov 10, 2006 & Aug 17, 2001.

Aquila Missouri
GDP Growth Rate Forecast

	Nominal GDP	% Change	GDP Price Deflator	% Change	CPI	% Change
1947	250.0		15.8		22.5	
1948	271.6	8.7%	16.5	4.6%	24.1	7.0%
1949	268.6	-1.1%	16.3	-1.3%	23.8	-1.3%
1950	307.3	14.4%	16.9	3.6%	24.2	1.9%
1951	344.9	12.3%	17.8	5.5%	26.1	7.6%
1952	365.1	5.9%	18.1	1.7%	26.6	2.0%
1953	378.6	3.7%	18.3	1.1%	26.8	0.8%
1954	387.2	2.3%	18.5	0.9%	26.9	0.2%
1955	421.2	8.8%	18.9	2.3%	26.8	-0.2%
1956	444.7	5.6%	19.6	3.6%	27.3	1.7%
1957	460.3	3.5%	20.2	3.0%	28.2	3.4%
1958	477.6	3.8%	20.6	2.1%	28.9	2.5%
1959	514.5	7.7%	20.8	1.1%	29.2	1.0%
1960	526.6	2.4%	21.1	1.4%	29.6	1.5%
1961	556.7	5.7%	21.4	1.2%	29.9	0.9%
1962	592.2	6.4%	21.6	1.2%	30.3	1.3%
1963	629.6	6.3%	21.9	1.2%	30.7	1.3%
1964	675.2	7.2%	22.2	1.6%	31.1	1.3%
1965	737.9	9.3%	22.7	1.9%	31.6	1.7%
1966	799.6	8.4%	23.4	3.1%	32.6	3.1%
1967	848.1	6.1%	24.1	3.2%	33.5	2.7%
1968	930.2	9.7%	25.2	4.5%	34.9	4.3%
1969	998.7	7.4%	26.5	5.2%	36.9	5.6%
1970	1058.8	6.0%	27.9	5.2%	39.0	5.8%
1971	1150.2	8.6%	29.2	4.9%	40.6	4.1%
1972	1274.5	10.8%	30.5	4.2%	41.9	3.3%
1973	1410.6	10.7%	32.4	6.4%	44.8	6.8%
1974	1530.7	8.5%	35.6	9.9%	49.8	11.2%
1975	1689.0	10.3%	38.6	8.2%	54.1	8.7%
1976	1867.0	10.5%	40.8	5.7%	57.2	5.7%
1977	2083.6	11.6%	43.4	6.5%	61.0	6.6%
1978	2373.3	13.9%	46.6	7.3%	65.7	7.8%
1979	2628.5	10.8%	50.6	8.7%	73.4	11.6%
1980	2871.4	9.2%	55.4	9.4%	83.2	13.3%
1981	3162.0	10.1%	60.1	8.6%	91.5	10.1%
1982	3304.1	4.5%	63.4	5.5%	96.8	5.8%
1983	3643.4	10.3%	65.8	3.7%	99.9	3.2%
1984	4010.7	10.1%	68.2	3.7%	104.2	4.3%
1985	4286.8	6.9%	70.1	2.7%	108.0	3.6%
1986	4519.9	5.4%	71.7	2.3%	109.8	1.7%
1987	4824.0	6.7%	73.7	2.8%	114.0	3.8%
1988	5207.6	8.0%	76.4	3.7%	118.7	4.1%
1989	5571.7	7.0%	79.3	3.7%	124.5	4.9%
1990	5846.0	4.9%	82.4	4.0%	131.3	5.5%
1991	6073.0	3.9%	85.0	3.1%	136.5	4.0%
1992	6424.4	5.8%	86.9	2.3%	140.7	3.1%
1993	6749.5	5.1%	88.8	2.3%	144.8	2.9%
1994	7169.1	6.2%	90.7	2.1%	148.6	2.6%
1995	7479.1	4.3%	92.6	2.0%	152.7	2.8%
1996	7939.3	6.2%	94.3	1.9%	157.3	3.0%
1997	8422.6	6.1%	95.7	1.5%	160.7	2.2%
1998	8867.0	5.3%	96.8	1.2%	163.2	1.6%
1999	9409.1	6.1%	98.4	1.6%	167.0	2.3%
2000	9915.0	5.4%	100.5	2.2%	172.7	3.4%
2001	10205.9	2.9%	102.9	2.4%	177.2	2.6%
2002	10565.5	3.5%	104.7	1.7%	180.2	1.7%
2003	11156.3	5.6%	106.9	2.0%	184.3	2.2%
2004	11919.7	6.8%	109.8	2.8%	189.4	2.8%
2005	12692.7	6.5%	113.0	2.9%	195.9	3.5%
10-Year Average		5.4%		2.0%		2.5%
20-Year Average		5.6%		2.4%		3.0%
30-Year Average		7.0%		3.7%		4.4%
40-Year Average		7.4%		4.1%		4.7%
50-Year Average		7.1%		3.7%		4.1%
58-Year Average		7.0%		3.5%		3.8%
Average of Periods		6.6%		3.2%		3.8%

Source: St. Louis Federal Reserve Bank, Economic Data - FRED II (www.research.stlouisfed.org).

Aquila Missouri

Risk Premium Analysis

	MOODY'S AVERAGE PUBLIC UTILITY BOND YIELD (1)	AUTHORIZED ELECTRIC RETURNS (2)	INDICATED RISK PREMIUM
1980	13.15%	14.23%	1.08%
1981	15.62%	15.22%	-0.40%
1982	15.33%	15.78%	0.45%
1983	13.31%	15.36%	2.05%
1984	14.03%	15.32%	1.29%
1985	12.29%	15.20%	2.91%
1986	9.46%	13.93%	4.47%
1987	9.98%	12.99%	3.01%
1988	10.45%	12.79%	2.34%
1989	9.66%	12.97%	3.31%
1990	9.76%	12.70%	2.94%
1991	9.21%	12.55%	3.34%
1992	8.57%	12.09%	3.52%
1993	7.56%	11.41%	3.85%
1994	8.30%	11.34%	3.04%
1995	7.91%	11.55%	3.64%
1996	7.74%	11.39%	3.65%
1997	7.63%	11.40%	3.77%
1998	7.00%	11.66%	4.66%
1999	7.55%	10.77%	3.22%
2000	8.14%	11.43%	3.29%
2001	7.72%	11.09%	3.37%
2002	7.53%	11.16%	3.63%
2003	6.61%	10.97%	4.36%
2004	6.20%	10.75%	4.55%
2005	5.67%	10.54%	4.87%
2006	6.08%	10.36%	4.28%
AVERAGE	9.35%	12.48%	3.13%

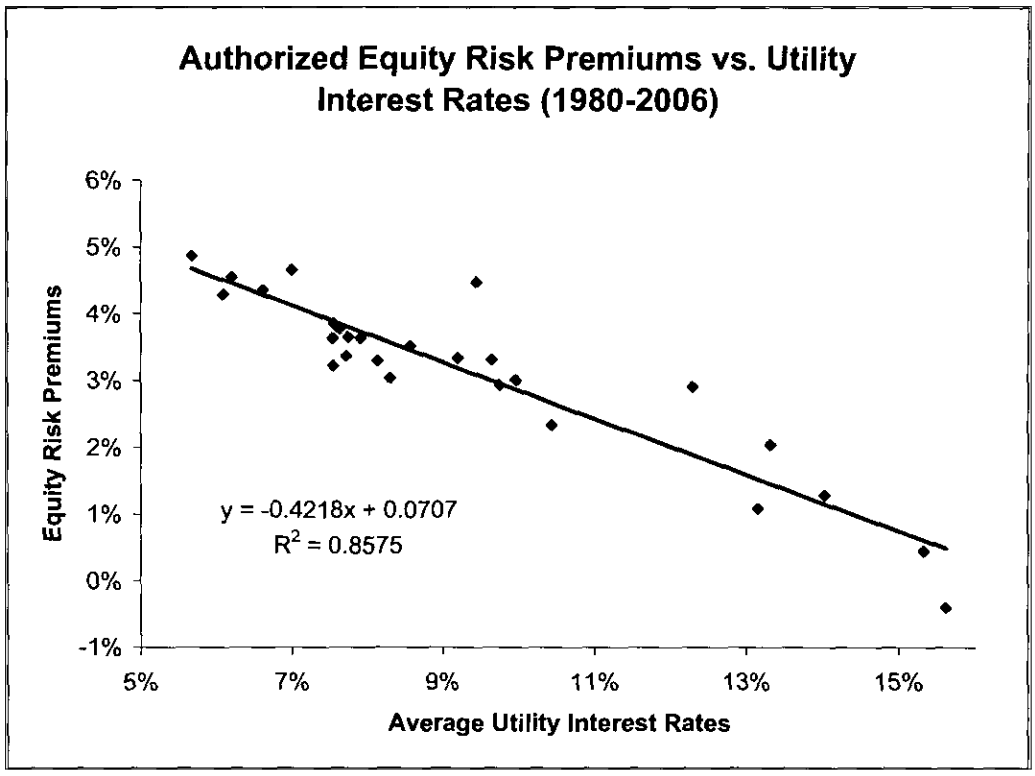
INDICATED COST OF EQUITY	
PARCELL CURRENT TRIPLE-B UTILITY BOND YIELD	6.00%
MOODY'S AVG ANNUAL YIELD DURING STUDY	9.35%
INTEREST RATE DIFFERENCE	-3.35%
INTEREST RATE CHANGE COEFFICIENT	-42.18%
ADUSTMENT TO AVG RISK PREMIUM	1.41%
BASIC RISK PREMIUM	3.13%
INTEREST RATE ADJUSTMENT	1.41%
EQUITY RISK PREMIUM	4.54%
PARCELL CURRENT TRIPLE-B UTILITY BOND YIELD	6.00%
INDICATED EQUITY RETURN	**10.54%**

Sources:

(1) Moody's Investors Service

(2) Regulatory Focus, Regulatory Research Associates, Inc.

Aquila Missouri
Risk Premium Analysis



Aquila Missouri

Risk Premium Analysis

	MOODY'S AVERAGE PUBLIC UTILITY BOND YIELD (1)	AUTHORIZED ELECTRIC RETURNS (2)	INDICATED RISK PREMIUM
1980	13.15%	14.23%	1.08%
1981	15.62%	15.22%	-0.40%
1982	15.33%	15.78%	0.45%
1983	13.31%	15.36%	2.05%
1984	14.03%	15.32%	1.29%
1985	12.29%	15.20%	2.91%
1986	9.46%	13.93%	4.47%
1987	9.98%	12.99%	3.01%
1988	10.45%	12.79%	2.34%
1989	9.66%	12.97%	3.31%
1990	9.76%	12.70%	2.94%
1991	9.21%	12.55%	3.34%
1992	8.57%	12.09%	3.52%
1993	7.56%	11.41%	3.85%
1994	8.30%	11.34%	3.04%
1995	7.91%	11.55%	3.64%
1996	7.74%	11.39%	3.65%
1997	7.63%	11.40%	3.77%
1998	7.00%	11.66%	4.66%
1999	7.55%	10.77%	3.22%
2000	8.14%	11.43%	3.29%
2001	7.72%	11.09%	3.37%
2002	7.53%	11.16%	3.63%
2003	6.61%	10.97%	4.36%
2004	6.20%	10.75%	4.55%
2005	5.67%	10.54%	4.87%
2006	6.08%	10.36%	4.28%
AVERAGE	9.35%	12.48%	3.13%

INDICATED COST OF EQUITY	
PROJECTED TRIPLE-B UTILITY BOND YIELD*	6.50%
MOODY'S AVG ANNUAL YIELD DURING STUDY	9.35%
INTEREST RATE DIFFERENCE	-2.85%
INTEREST RATE CHANGE COEFFICIENT	-42.18%
ADUSTMENT TO AVG RISK PREMIUM	1.20%
BASIC RISK PREMIUM	3.13%
INTEREST RATE ADJUSTMENT	1.20%
EQUITY RISK PREMIUM	4.33%
PROJECTED TRIPLE-B UTILITY BOND YIELD*	6.50%
INDICATED EQUITY RETURN	**10.83%**

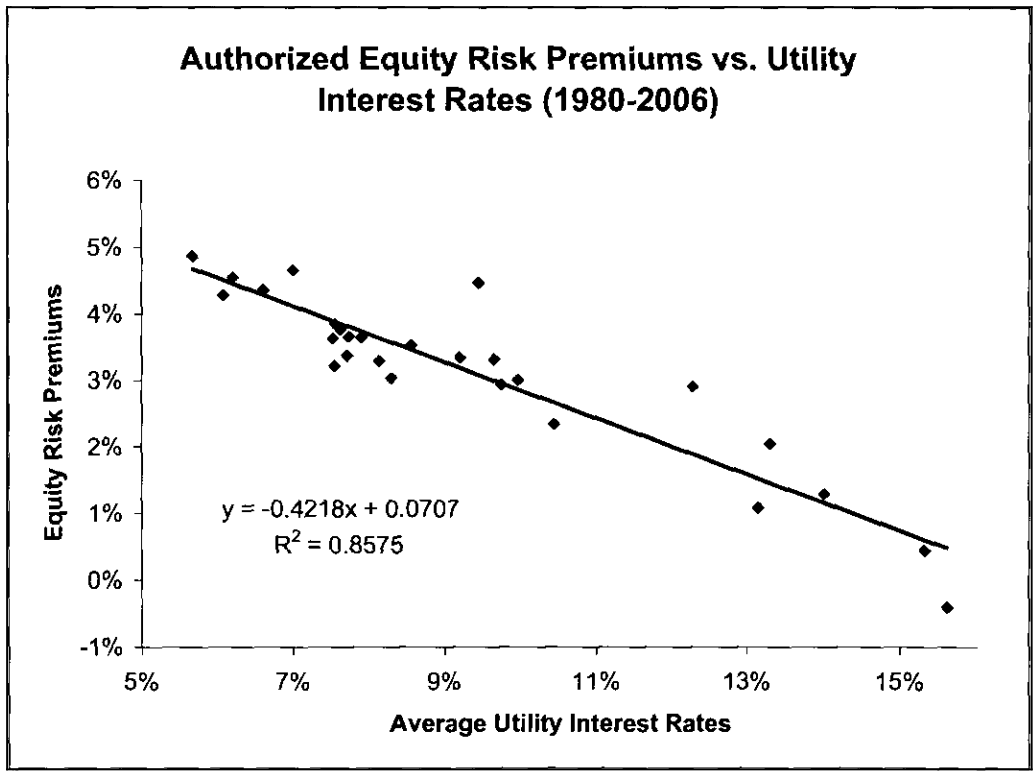
Sources:

(1) Moody's Investors Service

(2) Regulatory Focus, Regulatory Research Associates, Inc.

*The projected triple-B bond yield is equal to the projected 30-year Treasury bond rate (5.2 percent) from S&P's Tre
Projections (Schedule SCH-19) plus 130 basis points. The average triple-B spread over Treasuries for 2006 was 1

Aquila Missouri
Risk Premium Analysis



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 area	))))))	Case No. ER-2007-0004

County of Travis)
) ss
State of Texas)

AFFIDAVIT OF SAMUEL C. HADAWAY

Samuel C. Hadaway, being first duly sworn, deposes and says that he is the witness who sponsors the accompanying testimony entitled "Surrebuttal Testimony of Samuel C. Hadaway;" that said testimony was prepared by him and under his direction and supervision; that if inquiries were made as to the facts in said testimony and schedules, he would respond as therein set forth; and that the aforesaid testimony and schedules are true and correct to the best of his knowledge, information, and belief.

Samuel C. Hadaway
Samuel C. Hadaway

Subscribed and sworn to before me this 13th day of March, 2007.

Notary Public

G Faye McMullen
My Commission DD210138
Expires August 09, 2007

My Commission expires:

August 9, 2007

FD# DL# D1992963