Exhibit No:	
Issues:	Impairment Plant Balances
Witness:	Joseph M. Bahr
Type of Exhibit:	Direct Testimony
Sponsoring Party:	Aquila Networks – MPS
Case No:	GM-2004-0244
Date Testimony Prepared:	December 4, 2003

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. GM-2004-0244

DIRECT TESTIMONY

OF

JOSEPH M. BAHR

ON BEHALF OF

AQUILA, INC.
d/b/a
AQUILA NETWORKS – MPS

Kansas City, Missouri

December, 2003

State of Missouri)
) ss
County of Jackson)

AFFIDAVIT OF JOSPEH M. BAHR

Joseph M. Bahr, being first duly sworn, deposes and says that he is the witness who sponsors the accompanying testimony and schedules entitled "Direct Testimony of Joseph M. Bahr"; that said testimony was prepared by him and/or 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.

Joseph M Bahr

Subscribed and sworn to before me this 19th day of November, 2003.

Alexa Nunnery
Notary Public

My Commission expires:

ALEXA NUNNERY
Notary Public – State of Missouri
County of Jackson
My Commission Expires May 4, 2004

ALEXA NUNNERY
NOTARY SEAL
NOTARY PUBLIC
STATE OF MISSOURI

DIRECT TESTIMONY OF JOSEPH M. BAHR

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Joseph M. Bahr and my business address is 10700 E 350 Hwy. Kansas City, MO 64138.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Aquila Inc. ("Aquila") in the Financial Management group of the domestic networks business unit. My position is Senior Manager, Financial Management, directly supporting the state jurisdictions of Iowa Gas and Missouri Gas. I am submitting this testimony on behalf of Aquila's natural gas operating division in Missouri: Aquila Networks - MPS ("MPS").

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I attended Fort Hays State University in Hays, Kansas from which I received a Bachelor of Science Degree in Business in 1981 and a Masters Business Administration Degree in 1993. I have worked for Aquila and its predecessor companies since 1981 and have held various positions with Aquila in the areas of accounting, budgeting, planning, regulatory, business management, retail services and now financial management.

Q. HAVE YOU EVER TESTIFIED BEFORE ANY UTILITY REGULATORY COMMISSION?

A. Yes. I have testified on two occasions before the Colorado Public Utilities Commission with respect to Integrated Resource Planning dockets related to WestPlains Energy, another operating division of Aquila. I also provided testimony in MPS' electric filing of its new extension policy in case no. ET-99-126. And most recently I sponsored testimony in the MPS (Gas) and Aquila Networks – L&P (Gas) rate case no. GR-2004-0072, with respect to its proposed extension policy for Aquila's gas divisions in Missouri and an overview of the Impairment Charge Aquila recognized at 12-31-02 in relation to the Eastern System.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony will review the Impairment Charge and the resulting net plant in service balances for the Eastern System.

Q. PLEASE IDENTIFY ANY SUPPORTING SCHEDULES WHICH YOU SPONSOR.

A. I am sponsoring the following schedules which were reviewed and prepared under my direct supervision:

JMB-1	Allocation of Asset Impairment by Account
JMB-2	FASB 144 Test Value
JMB-3	Eastern System Plant Balances, 9-30-03

IMPAIRMENT PER FASB 144

Q. WHAT DOES FASB STAND FOR?

A. FASB is the industry acronym for the Financial Accounting Standards Board. The stated mission of FASB is "to establish and improve standards of financial accounting and reporting for the guidance and education of the public, including issuers, auditors, and users of financial information." From time to time, FASB issues new pronouncements to support its mission. FASB 144 is one such pronouncement.

Q. WHAT ARE THE REQUIREMENTS OF FASB 144?

A. The key FASB 144 paragraphs regarding the methodology for determining if an asset is impaired are noted below, with specific quotes in parentheses:

- Impairment, paragraph 7. "For purposes of this statement, impairment is the condition that exists when the carrying amount of a long-lived asset (asset group) is not recoverable and exceeds its fair value. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset."
- Test Value, paragraph 16. "Estimates of the future cash flows used to test the recoverability of a long-lived asset shall include only the future cash flows that are directly associated with .... those estimates shall exclude interest charges that will be recognized as an expense is incurred."

- Assumptions, paragraph 17. "... shall consider all available evidence. The assumptions used in developing those estimates shall be reasonable in relation to the assumptions used in developing other information used by the entity for comparable periods, such as internal budgets and projections. A probability-weighted approach may be useful in considering the likelihood of those possible outcomes."
- Fair Value, paragraph 22. "The fair value of asset is the amount at which the asset could be bought or sold (settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale. Quoted market prices in active markets are the best evidence of fair value ... if not available ... in those instances the estimate of fair value shall be based on the best information available ... and the results of using other valuation techniques."

Q. WHEN DID AQUILA RECOGNIZE THAT AN IMPAIRMENT EXISTED FOR THE EASTERN SYSTEM ASSETS?

A. Aquila recorded the impairment on its books at year-end 2002. The entries on the corporate books are as follows:

Debit account 421, Misc Operating Income $8,980,000

Credit account 101, Plant in Service 8,980,000

In May of 2003, the above entries were reversed on the corporate books and the following entries were made on the books of the MPS Gas business unit as follows:

Debit account 421, Misc Operating Income $8,980,000

Credit account 108, Accum Deprec Reserve 8,980,000

Q. WHAT ARE THE TAX CONSEQUENCES OF THE IMPAIRMENT EXPENSE?

A. An expense for asset impairment reduces the book income of the reporting entity, MPS, thus reducing the corresponding book amount of income taxes. However, the recognition of the expense for tax purposes is not made until the asset is disposed of. This creates a book-to-tax timing difference, which drives the additional entries for deferred income tax expense and a deferred income tax asset for MPS. The effective federal and state income tax rate for MPS is 38.39%. This tax rate multiplied by the reduced income of $8,980,000 calculates an income tax impact of $3,447,422. The entries and accounts are as follows:

Credit account 410 Deferred Income Tax Expense	$3,447,422
Debit account 282 Deferred Income Tax Liability*	$3,447,422

*Account 282 is normally a liability account with a credit balance. The referenced entry, as a “tax asset”, reduces the level of credit balance.

Q. WHY, IN MAY 2003, WAS THE CREDIT ENTRY MADE TO THE RESERVE ACCOUNT INSTEAD OF TO PLANT IN SERVICE AS IT WAS AT YEAR-END?

A. The effect on net plant, which is plant in service less accumulated depreciation reserve, is the same regardless of which is account is credited.

The decision to credit the reserve account was made after consulting with the accounting staff of the Federal Energy Regulatory Commission ("FERC").

Q. HOW WILL THE IMPAIRMENT, VIA A REDUCTION IN ACCUMULATED RESERVE, AFFECT FUTURE DEPRECIATION EXPENSE?

A. Given that the impairment is almost sixty percent (60%) of gross plant for the Eastern System, a recognition of the change in either depreciable plant or depreciation rates is significant and necessary. Aquila has determined that a manual adjustment to depreciable plant and the associated calculation of depreciation expense is the most effective means of recognizing this change. This results in no change to depreciation rates. Aquila has an accounting system that will continue to calculate pre-impairment depreciation expense on an automated basis as reflected by the pre-impairment depreciable plant in service. Referencing Schedule JMB-1, Aquila has allocated the $8.98 million impairment across the plant accounts in service on the Eastern System. Applying the MPSC approved depreciation rates, by plant account, against the allocated impaired plant accounts, will determine the depreciation expense attributable to the impairment. On a monthly basis, Aquila will credit depreciation expense related to the impairment on its income statement. On a quarterly basis, Aquila will accumulate the depreciation expense credit for the three months, and credit accumulated depreciation reserve.

Q. WHAT MODEL AND ASSUMPTIONS DID AQUILA USE IN DEVELOPING THE VALUATION ANALYSIS OF THE IMPAIRMENT?

A. First, remember that FASB 144 requires a test to determine if an impairment exists. If an impairment exists, a determination of fair value is required. I will first describe the test phase. Then, I will describe the fair value phase, which actually determined the impairment of $8.98 million referenced in the preceding question.

Test Value Phase:

In summary, the purpose of this phase is to determine or test what level of recoverable investment is supported by the projected level of future cash flows. The valuation model starts with a simple extrapolation of the 2003 budget. This model is attached per schedule JMB-2. The base budget for 2003 is carried forward for an additional twenty-nine (29) years subject to the assumptions below. In most instances, the 2003 Budget was not prepared at the specific level of detail for the Eastern System, so allocations and extrapolations were used as explained below. As prescribed by FASB 144, the cash flow is undiscounted and interest expense is excluded.

The beginning base level margins (2003 year) are derived from a known measurement of year-end 2002 customers multiplied by weather-normalized use per customer multiplied by current rates. In 2004, or year 2 of the model, a projected conservative increase of three percent (3%) in revenue, or approximately twelve percent (12%) in margins, from the 2003 rate case was included. The growth rate, net of customer additions and retirements, for the remaining twenty-eight (28) years was measured across the variability of incremental margins as measured across four levels, year over year change in margins. Per Schedule JMB-2, these models were run as 1% increase per version A (page 2 of 5), .5% increase per version B (page 3 of 5), 0% increase per version C (page 4 of 5) and -.5% decrease per version D, (page 5 of 5). The current budget assumption for Missouri Gas is a growth rate of .5% per year. This variability was used in the weighted probability approach discussed later.

Expenses are either directly assigned or allocated. A distinct operating department is responsible for the Eastern System, and other costs such as property taxes and bad debts were directly assigned. Inter Business Unit (IBU) expenses were estimated to be 2/3 direct related and 1/3 allocated. Additional allocated costs included Enterprise Support Functions (ESF) and other Missouri management. All expenses were assumed to escalate by 2.25% per year. Depreciation expense was extrapolated to its current rates at about 3.4% per year.

Based upon the above analysis, a weighted probability outcome test value of $3.882 million was derived from the thirty (30) years of projected cash flow. Reference Schedule JMB-2, page 1, for the summarized results and the underlying weighting of the four varying margin increase scenarios (A,B,C,& D). With a present net investment base estimated at about $12.0 million, the impairment as tested is almost $8 million.

Fair Value Phase:

As prescribed by FASB 144, upon failure of the test valuation referenced above, i.e. impairment was evident and material, a fair valuation was necessary. The same assumptions from the valuation model used in Schedule JMB-2, with respect to the baseline operating income and changes in margins and expenses over thirty (30) years, and applying a discount rate of 7.56% was used to estimate the fair value if Aquila continues to hold this asset under a regulatory framework. The weighted fair value, of continuing to hold or selling the system, was estimated at $3.02 million on the then estimated $12 million rate base. This results in an impaired value or required write-down of $8.98 million.

Plant Balances for Eastern System

Q. AFTER RECOGNITION OF THE IMPAIRMENT, WHAT ARE THE RESULTING NET PLANT IN SERVICE BALANCES FOR THE EASTERN SYSTEM?

A. The resulting net plant in service balances and the supporting account detail are provided on Schedule JMB-3. The results are summarized below, as of September 30, 2003:

Gross Plant in Service:	$ 15,602,729
Accumulated Depreciation Reserve	(2,354,787)

Impairment (Accum Dep Reserve)	(8,980,000)
Net Plant in Service	$ 4,267,942

Q. PLEASE BRIEFLY DESCRIBE THE CALCULATION OF THE PLANT IN SERVICE BALANCE ON SCHEDULE JMB-3:

A. This determination of plant in service is only for the property located specifically in the towns of Rolla, Salem and Owensville. No common plant of MPS nor any Corporate Shared Assets like customer information or accounting systems is included. The majority of the plant in service accounts and the associated dollar amounts [$15,170,343] are specifically accounted for on the property records for Eastern System. There are four plant accounts, primarily meters and meter installations, which are accounted for at the MPS division level. These four accounts [$430,165] were allocated to the Eastern System based on a customer allocator. The Eastern System represents 8.7% of the customers of the MPS division.

Q. PLEASE BRIEFLY DESCRIBE THE CALCULATION OF THE ACCUMULATED DEPRECIATION RESERVE BALANCE ON SCHEDULE JMB-3:

A. The accumulated depreciation reserve is accounted for only at the MPS division level. The reserve is maintained by plant account, i.e. there is a reserve specifically assignable to mains, a reserve specifically assignable to services, a reserve specifically assignable to meters, etc. The reserve for the

Eastern System was calculated by account in the Aquila "PowerPlant" accounting system which ratios the Eastern System plant in service balances by the MPS division plant in service balances on a pro rata vintage year basis. As referenced on Schedule JMB-1, Aquila allocated the Impairment Charge by account and maintains a separate accounting of those balances within the total accumulated depreciation reserve account.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes it does.

MPS Gas -- Eastern System -- Allocation of Impairment by Account

	w/o Resid Meters / Alloc GP Total	PE Main 376.002	Plast Main 376.005	Misc Main 376.007	Reg Stat 378.000	Iron Serv 380.001	PE Serv 380.002	Iron Serv 380.003	Plast Serv 380.005	H Piping 382.001
CPR @ 12-31-02										
Rolla	10,159,901	1,174,623	5,401,188	93,691	16,818	288,162	603,187	6,216	865,995	1,172,021
Salem	3,380,073	149,766	1,898,748	1,180	-	150,181	126,119	-	440,374	530,411
Owensville	1,239,565	36,673	746,610	3,985	-	29,487	179,609	-	85,059	66,751
Total Eastern	14,779,539	1,361,062	8,046,546	98,856	16,818	467,830	908,915	6,216	1,391,428	1,769,183
Adjustments, Pre-Impairment										
Rolla	(599,660)	(395,176)	-	-	-	-	-	-	(68,813)	(39,349)
Salem	79,438	-	-	-	-	-	-	-	-	(16,884)
Owensville	520,222	395,176	-	-	-	-	-	-	68,813	56,233
Total Eastern	-	-	-	-	-	-	-	-	-	-
Adjusted CPR, Pre-Impairment										
Rolla	9,560,241	779,447	5,401,188	93,691	16,818	288,162	603,187	6,216	797,182	1,132,672
Salem	3,459,511	149,766	1,898,748	1,180	-	150,181	126,119	-	440,374	513,527
Owensville	1,759,787	431,849	746,610	3,985	-	29,487	179,609	-	153,872	122,984
Total Eastern	14,779,539	1,361,062	8,046,546	98,856	16,818	467,830	908,915	6,216	1,391,428	1,769,183
Adjusted CPR, Pre-Impairment (% by account by town)										
Rolla	64.69%	5.27%	36.55%	0.63%	0.11%	1.95%	4.08%	0.04%	5.39%	7.66%
Salem	23.41%	1.01%	12.85%	0.01%	0.00%	1.02%	0.85%	0.00%	2.98%	3.47%
Owensville	11.91%	2.92%	5.05%	0.03%	0.00%	0.20%	1.22%	0.00%	1.04%	0.83%
Total Eastern	100.00%	9.21%	54.44%	0.67%	0.11%	3.17%	6.15%	0.04%	9.41%	11.97%
Impairment Allocated by Account		***376.092***	***376.095***	***376.097***	***378.090***	***380.091***	***380.092***	***380.093***	***380.095***	***382.091***
Rolla	**5,808,771**	**473,589**	**3,281,744**	**56,926**	**10,219**	**175,086**	**366,494**	**3,777**	**484,365**	**688,208**
Salem	**2,101,988**	**90,997**	**1,153,673**	**717**	**-**	**91,249**	**76,629**	**-**	**267,570**	**312,017**
Owensville	**1,069,241**	**262,390**	**453,638**	**2,421**	**-**	**17,916**	**109,130**	**-**	**93,492**	**74,725**
Total Eastern	**$ 8,980,000**	**826,977**	**4,889,055**	**60,065**	**10,219**	**284,252**	**552,254**	**3,777**	**845,427**	**1,074,950**
Depreciation Rate Current	2.78%	2.40%	2.40%	2.40%	2.40%	4.68%	4.68%	4.68%	4.68%	2.00%
Annual Depreciation	$ 250,049	19,847	117,337	1,442	245	13,303	25,845	177	39,566	21,499
Adjusted Net Plant, Post-Impairment		***376.002***	***376.005***	***376.007***	***378.000***	***380.001***	***380.002***	***380.003***	***380.005***	***382.001***
Rolla	**3,751,470**	**305,858**	**2,119,444**	**36,765**	**6,599**	**113,076**	**236,693**	**2,439**	**312,817**	**444,464**
Salem	**1,357,523**	**58,769**	**745,075**	**463**	**-**	**58,932**	**49,490**	**-**	**172,804**	**201,510**
Owensville	**690,546**	**169,459**	**292,972**	**1,564**	**-**	**11,571**	**70,479**	**-**	**60,380**	**48,259**
Total Eastern	**5,799,539**	**534,085**	**3,157,491**	**38,791**	**6,599**	**183,578**	**356,661**	**2,439**	**546,001**	**694,233**
Total before Impairment/ wo Meters & General Plant										
Depreciation Rate Current	2.78%	2.40%	2.40%	2.40%	2.40%	4.68%	4.68%	4.68%	4.68%	2.00%
Annual Depreciation	$ 411,537	32,665	193,117	2,373	404	21,894	42,537	291	65,119	35,384

Eastern System -- Allocation of Impairment by Account

w/o F	H Reg 383.001	Com/Indus 385.001	LV Meters 385.002	Meters 381.000	Rolla Gen Plant	Total Plant
CPR @ 12-31-02				$ 2,868,819	$390,000	before other
Rolla	518,288	5,488	14,224	avg 2002		allocated
Salem	83,294	-	-	res & coml cust		general plant
Owensville	88,346	1,795	1250	46,063		Corp & Mo Common
Total Eastern	689,928	7,283	15,474	$ 62.28		
Adjustments, Pre-Impairment				Avg Cust		
Rolla	(96,322)	-	-	2,734		
Salem	96,322	-	-	919		
Owensville	-	-	-	370		
Total Eastern	-	-	-	4,023		
Adjusted CPR, Pre-Impairment						
Rolla	421,966	5,488	14,224	$ 170,274	$ 252,274	$ 9,982,789
Salem	179,616	-	-	57,236	91,289	$ 3,608,036
Owensville	88,346	1,795	1,250	23,044	46,437	$ 1,829,268
Total Eastern	689,928	7,283	15,474	$ 250,554	$ 390,000	$15,420,093
Adjusted CPR, Pre-Impairment (						
Rolla	2.86%	0.04%	0.10%			
Salem	1.22%	0.00%	0.00%			
Owensville	0.60%	0.01%	0.01%			
Total Eastern	4.67%	0.05%	0.10%			
Impairment Allocated by Acco	***383.091***	***385.091***	***385.092***			
Rolla	**256,385**	**3,334**	**8,642**			
Salem	**109,134**	**-**	**-**			
Owensville	**53,679**	**1,091**	**759**			
Total Eastern	**419,198**	**4,425**	**9,402**			
Depreciation Rate Current	2.50%	2.22%	2.22%			
Annual Depreciation	10,480	98	209			
Adjusted Net Plant, Post-Impai	***383.001***	***385.001***	***385.002***			
Rolla	**165,581**	**2,154**	**5,582**			
Salem	**70,482**	**-**	**-**			
Owensville	**34,667**	**704**	**491**			
Total Eastern	**270,730**	**2,858**	**6,072**			
Total before Impairment/ wo Met						
Depreciation Rate Current	2.50%	2.22%	2.22%			
Annual Depreciation	17,248	162	344			

MPS Gas -- Eastern System -- FASB 144 Test Value
Summary of Model Runs and Weighted Test Value

Model Run	$000s Sum of Value, Not Discounted, wo Interest Exp, Accumulated	Used 30 yr	Prob.	Wghtd Test Value
A	1% Margin Increase AFTER year 2 Rate Case Cash Flow	$ 6,951	10%	$ 695
B	.5% Margin Increase AFTER year 2 Rate Case Cash Flow	4,820	40%	1,928
C	0% Margin Increase AFTER year 2 Rate Case Cash Flow	2,874	40%	1,149
D	-.5% Margin Increase AFTER year 2 Rate Case Cash Flow	1,095	10%	109
			100%	$ 3,882

MPS Gas -- Eastern System -- FASB 144 Test Value

Model Run A, 1.0% Increase in Margins after Year 2

$000s	1.0% Margins	2.25% Dir Exp	2.25% IBU Dir	Bef Alloc EBITDA	58.5% Aft Tx EBITDA	2.25% Dir Alloc	2.25% IBU Alloc	2.25% ESF Alloc	After alloc EBITDA	58.5% Aft Tx EBITDA	Dir Deprec	0.0% Int Exp	Bef Tax Op Incom	58.5% Aft Tx NET INC	Cash Flow Add Back Deprec
Year 1	1,400	600	200	600	351	100	100	200	200	117	410	-	(210)	(123)	287
Year 2	1,566	614	205	748	438	102	102	205	339	198	410	-	(71)	(42)	369
Year 3	1,582	627	209	745	436	105	105	209	327	191	410	-	(83)	(49)	362
Year 4	1,597	641	214	742	434	107	107	214	315	184	410	-	(96)	(56)	354
Year 5	1,613	656	219	739	432	109	109	219	302	177	410	-	(109)	(64)	347
Year 6	1,630	671	224	735	430	112	112	224	288	169	410	-	(122)	(71)	339
Year 7	1,646	686	229	732	428	114	114	229	274	161	410	-	(136)	(79)	331
Year 8	1,662	701	234	727	426	117	117	234	260	152	410	-	(150)	(88)	322
Year 9	1,679	717	239	723	423	119	119	239	245	143	410	-	(165)	(97)	314
Year 10	1,696	733	244	718	420	122	122	244	230	134	410	-	(181)	(106)	305
Year 11	1,713	750	250	713	417	125	125	250	214	125	410	-	(197)	(115)	295
Year 12	1,730	766	255	708	414	128	128	255	197	115	410	-	(213)	(125)	286
Year 13	1,747	784	261	702	411	131	131	261	180	105	410	-	(230)	(135)	276
Year 14	1,765	801	267	696	407	134	134	267	162	95	410	-	(248)	(145)	265
Year 15	1,782	819	273	690	404	137	137	273	144	84	410	-	(267)	(156)	254
Year 16	1,800	838	279	683	400	140	140	279	125	73	410	-	(286)	(167)	243
Year 17	1,818	857	286	676	395	143	143	286	105	61	410	-	(305)	(179)	232
Year 18	1,836	876	292	668	391	146	146	292	85	49	410	-	(326)	(191)	220
Year 19	1,855	896	299	661	386	149	149	299	63	37	410	-	(347)	(203)	207
Year 20	1,873	916	305	652	382	153	153	305	42	24	410	-	(369)	(216)	195
Year 21	1,892	936	312	643	376	156	156	312	19	11	410	-	(391)	(229)	182
Year 22	1,911	957	319	634	371	160	160	319	(4)	(2)	410	-	(414)	(242)	168
Year 23	1,930	979	326	625	365	163	163	326	(28)	(16)	410	-	(438)	(256)	154
Year 24	1,949	1,001	334	615	360	167	167	334	(53)	(31)	410	-	(463)	(271)	139
Year 25	1,969	1,023	341	604	353	171	171	341	(78)	(46)	410	-	(489)	(286)	125
Year 26	1,988	1,046	349	593	347	174	174	349	(105)	(61)	410	-	(515)	(301)	109
Year 27	2,008	1,070	357	582	340	178	178	357	(132)	(77)	410	-	(542)	(317)	93
Year 28	2,028	1,094	365	570	333	182	182	365	(160)	(94)	410	-	(570)	(334)	77
Year 29	2,049	1,119	373	557	326	186	186	373	(189)	(110)	410	-	(599)	(351)	60
Year 30	2,069	1,144	381	544	318	191	191	381	(219)	(128)	410	-	(629)	(368)	42
30 Y(sum					11,715				(9,874)	1,842				(5,360)	**$ 6,951**

MPS Gas -- Eastern System -- FASB 144 Test Value
Model Run B, .5% Increase in Margins after Year 2

$000s	0.5% Margins	2.25% Dir Exp	2.25% IBU Dir	Bef Alloc EBITDA	58.5% Aft Tx EBITDA	2.25% Dir Alloc	2.25% IBU Alloc	2.25% ESF Alloc	After alloc EBITDA	58.5% Aft Tx EBITDA	Dir Deprec	Bef Tax Op Income	58.5% Aft Tx NET INC	Cash Flow Add Back Deprec
Year 1	1,400	600	200	600	351	100	100	200	200	117	410	(210)	(123)	287
Year 2	1,566	614	205	748	438	102	102	205	339	198	410	(71)	(42)	369
Year 3	1,574	627	209	737	431	105	105	209	319	187	410	(91)	(53)	357
Year 4	1,582	641	214	726	425	107	107	214	299	175	410	(112)	(65)	345
Year 5	1,590	656	219	715	418	109	109	219	278	163	410	(132)	(77)	333
Year 6	1,598	671	224	703	411	112	112	224	256	150	410	(154)	(90)	320
Year 7	1,606	686	229	691	404	114	114	229	234	137	410	(176)	(103)	307
Year 8	1,614	701	234	679	397	117	117	234	211	124	410	(199)	(116)	294
Year 9	1,622	717	239	666	389	119	119	239	188	110	410	(223)	(130)	280
Year 10	1,630	733	244	652	382	122	122	244	164	96	410	(247)	(144)	266
Year 11	1,638	750	250	639	374	125	125	250	139	81	410	(272)	(159)	252
Year 12	1,646	766	255	624	365	128	128	255	113	66	410	(297)	(174)	237
Year 13	1,654	784	261	609	357	131	131	261	87	51	410	(323)	(189)	221
Year 14	1,663	801	267	594	348	134	134	267	60	35	410	(350)	(205)	205
Year 15	1,671	819	273	578	338	137	137	273	32	19	410	(378)	(221)	189
Year 16	1,679	838	279	562	329	140	140	279	4	2	410	(407)	(238)	173
Year 17	1,688	857	286	546	319	143	143	286	(26)	(15)	410	(436)	(255)	155
Year 18	1,696	876	292	528	309	146	146	292	(56)	(33)	410	(466)	(273)	138
Year 19	1,705	896	299	510	299	149	149	299	(87)	(51)	410	(497)	(291)	120
Year 20	1,713	916	305	492	288	153	153	305	(118)	(69)	410	(529)	(309)	101
Year 21	1,722	936	312	473	277	156	156	312	(151)	(88)	410	(561)	(328)	82
Year 22	1,730	957	319	454	265	160	160	319	(185)	(108)	410	(595)	(348)	62
Year 23	1,739	979	326	434	254	163	163	326	(219)	(128)	410	(629)	(368)	42
Year 24	1,748	1,001	334	413	242	167	167	334	(254)	(149)	410	(665)	(389)	22
Year 25	1,756	1,023	341	392	229	171	171	341	(291)	(170)	410	(701)	(410)	0
Year 26	1,765	1,046	349	370	216	174	174	349	(328)	(192)	410	(738)	(432)	(22)
Year 27	1,774	1,070	357	347	203	178	178	357	(366)	(214)	410	(776)	(454)	(44)
Year 28	1,783	1,094	365	324	190	182	182	365	(405)	(237)	410	(816)	(477)	(67)
Year 29	1,792	1,119	373	300	176	186	186	373	(446)	(261)	410	(856)	(501)	(90)
Year 30	1,801	1,144	381	275	161	191	191	381	(487)	(285)	410	(897)	(525)	(115)
30 Yr sum					9,585					(289)			(7,491)	**$ 4,820**

MPS Gas -- Eastern System -- FASB 144 Test Value

Model Run C, 0.0% Increase in Margins after Year 2

$000s	0.0% Margins	2.25% Dir Exp	2.25% IBU Dir	Bef Alloc EBITDA	58.5% Aft Tx EBITDA	2.25% Dir Alloc	2.25% IBU Alloc	2.25% ESF Alloc	After alloc EBITDA	58.5% Aft Tx EBITDA	Dir Deprec	Bef Tax Op Income	58.5% Aft Tx NET INC	Cash Flow Add Back Deprec
Year 1	1,400	600	200	600	351	100	100	200	200	117	410	(210)	(123)	287
Year 2	1,566	614	205	748	438	102	102	205	339	198	410	(71)	(42)	369
Year 3	1,566	627	209	730	427	105	105	209	311	182	410	(99)	(58)	352
Year 4	1,566	641	214	711	416	107	107	214	283	166	410	(127)	(74)	336
Year 5	1,566	656	219	692	405	109	109	219	254	149	410	(156)	(91)	319
Year 6	1,566	671	224	672	393	112	112	224	225	131	410	(186)	(109)	302
Year 7	1,566	686	229	652	381	114	114	229	195	114	410	(216)	(126)	284
Year 8	1,566	701	234	631	369	117	117	234	164	96	410	(247)	(144)	266
Year 9	1,566	717	239	610	357	119	119	239	132	77	410	(278)	(163)	248
Year 10	1,566	733	244	589	344	122	122	244	100	58	410	(310)	(182)	229
Year 11	1,566	750	250	567	331	125	125	250	67	39	410	(343)	(201)	209
Year 12	1,566	766	255	544	318	128	128	255	33	19	410	(377)	(221)	190
Year 13	1,566	784	261	521	305	131	131	261	(1)	(1)	410	(412)	(241)	170
Year 14	1,566	801	267	498	291	134	134	267	(37)	(21)	410	(447)	(261)	149
Year 15	1,566	819	273	474	277	137	137	273	(73)	(42)	410	(483)	(283)	128
Year 16	1,566	838	279	449	263	140	140	279	(109)	(64)	410	(520)	(304)	106
Year 17	1,566	857	286	424	248	143	143	286	(147)	(86)	410	(558)	(326)	84
Year 18	1,566	876	292	398	233	146	146	292	(186)	(109)	410	(596)	(349)	62
Year 19	1,566	896	299	372	218	149	149	299	(225)	(132)	410	(635)	(372)	39
Year 20	1,566	916	305	345	202	153	153	305	(265)	(155)	410	(676)	(395)	15
Year 21	1,566	936	312	318	186	156	156	312	(307)	(179)	410	(717)	(419)	(9)
Year 22	1,566	957	319	289	169	160	160	319	(349)	(204)	410	(759)	(444)	(34)
Year 23	1,566	979	326	261	153	163	163	326	(392)	(229)	410	(802)	(469)	(59)
Year 24	1,566	1,001	334	231	135	167	167	334	(436)	(255)	410	(846)	(495)	(85)
Year 25	1,566	1,023	341	201	118	171	171	341	(481)	(281)	410	(891)	(521)	(111)
Year 26	1,566	1,046	349	171	100	174	174	349	(527)	(308)	410	(937)	(548)	(138)
Year 27	1,566	1,070	357	139	81	178	178	357	(574)	(336)	410	(984)	(576)	(166)
Year 28	1,566	1,094	365	107	63	182	182	365	(622)	(364)	410	(1,033)	(604)	(194)
Year 29	1,566	1,119	373	74	43	186	186	373	(671)	(393)	410	(1,082)	(633)	(223)
Year 30	1,566	1,144	381	41	24	191	191	381	(722)	(422)	410	(1,132)	(662)	(252)
30 Yr sum					7,638					(2,235)			(9,437)	**$ 2,874**

MPS Gas -- Eastern System -- FASB 144 Test Value
Model Run D, -.5% Decrease in Margins after Year 2

$000s	-0.5% Margins	2.25% Dir Exp	2.25% IBU Dir	Bef Alloc EBITDA	58.5% Aft Tx EBITDA	2.25% Dir Alloc	2.25% IBU Alloc	2.25% ESF Alloc	After alloc EBITDA	58.5% Aft Tx EBITDA	Dir Deprec	Bef Tax Op Income	58.5% Aft Tx NET INC	Cash Flow Add Back Deprec
Year 1	1,400	600	200	600	351	100	100	200	200	117	410	(210)	(123)	287
Year 2	1,566	614	205	748	438	102	102	205	339	198	410	(71)	(42)	369
Year 3	1,558	627	209	722	422	105	105	209	304	178	410	(107)	(62)	348
Year 4	1,550	641	214	695	407	107	107	214	268	157	410	(143)	(84)	327
Year 5	1,543	656	219	668	391	109	109	219	231	135	410	(179)	(105)	305
Year 6	1,535	671	224	641	375	112	112	224	194	113	410	(217)	(127)	284
Year 7	1,527	686	229	613	359	114	114	229	156	91	410	(255)	(149)	261
Year 8	1,520	701	234	585	342	117	117	234	117	69	410	(293)	(171)	239
Year 9	1,512	717	239	556	325	119	119	239	78	46	410	(332)	(194)	216
Year 10	1,504	733	244	527	308	122	122	244	38	22	410	(372)	(218)	193
Year 11	1,497	750	250	498	291	125	125	250	(2)	(1)	410	(412)	(241)	169
Year 12	1,489	766	255	468	274	128	128	255	(43)	(25)	410	(454)	(265)	145
Year 13	1,482	784	261	437	256	131	131	261	(85)	(50)	410	(496)	(290)	120
Year 14	1,475	801	267	406	238	134	134	267	(128)	(75)	410	(538)	(315)	95
Year 15	1,467	819	273	375	219	137	137	273	(171)	(100)	410	(582)	(340)	70
Year 16	1,460	838	279	343	201	140	140	279	(216)	(126)	410	(626)	(366)	44
Year 17	1,453	857	286	310	182	143	143	286	(261)	(152)	410	(671)	(392)	18
Year 18	1,445	876	292	277	162	146	146	292	(306)	(179)	410	(717)	(419)	(9)
Year 19	1,438	896	299	244	143	149	149	299	(353)	(207)	410	(763)	(447)	(36)
Year 20	1,431	916	305	210	123	153	153	305	(401)	(234)	410	(811)	(474)	(64)
Year 21	1,424	936	312	175	103	156	156	312	(449)	(263)	410	(859)	(503)	(92)
Year 22	1,417	957	319	140	82	160	160	319	(498)	(291)	410	(908)	(531)	(121)
Year 23	1,410	979	326	104	61	163	163	326	(548)	(321)	410	(959)	(561)	(150)
Year 24	1,402	1,001	334	68	40	167	167	334	(599)	(351)	410	(1,010)	(591)	(180)
Year 25	1,395	1,023	341	31	18	171	171	341	(651)	(381)	410	(1,062)	(621)	(211)
Year 26	1,388	1,046	349	(7)	(4)	174	174	349	(704)	(412)	410	(1,115)	(652)	(242)
Year 27	1,382	1,070	357	(45)	(26)	178	178	357	(759)	(444)	410	(1,169)	(684)	(273)
Year 28	1,375	1,094	365	(84)	(49)	182	182	365	(814)	(476)	410	(1,224)	(716)	(306)
Year 29	1,368	1,119	373	(124)	(72)	186	186	373	(870)	(509)	410	(1,280)	(749)	(338)
Year 30	1,361	1,144	381	(164)	(96)	191	191	381	(927)	(542)	410	(1,337)	(782)	(372)
30 Yr sum					5,860					(4,014)			(11,215)	**$ 1,095**

Aquila Inc.
Aquila Networks - MPS Gas Plant by System
As of September 30, 2003

	Eastern System			North/South System			
	Direct	Assigned	Total	Direct	Assigned	Total	Total All MPD-Gas
MPD - MO - Gas Dist 367002			0.00			$0.00	$0.00
MPD - MO - Gas Dist 374001			0.00	$1,774.21		$1,774.21	$1,774.21
MPD - MO - Gas Dist 375001			0.00	$59,033.00		$59,033.00	$59,033.00
MPD - MO - Gas Dist 376001			0.00	$24,803.65		$24,803.65	$24,803.65
MPD - MO - Gas Dist 376002	$1,388,451.89		1,388,451.89	$2,561,654.01	1,598.96	$2,563,252.97	$3,951,704.86
MPD - MO - Gas Dist 376003	$0.00		0.00	$5,449,099.04		$5,449,099.04	$5,449,099.04
MPD - MO - Gas Dist 376004			0.00	$0.00		$0.00	$0.00
MPD - MO - Gas Dist 376005	$8,041,508.07		8,041,508.07	$23,752,686.90	38.52	$23,752,725.42	$31,794,233.49
MPD - MO - Gas Dist 376006			0.00	$0.00		$0.00	$0.00
MPD - MO - Gas Dist 376007	98,855.05		98,855.05	$1,529,628.82		$1,529,628.82	$1,628,483.87
MPD - MO - Gas Dist 376100		$14.00	14.00		$4,222.00	$4,222.00	$4,236.00
MPD - MO - Gas Dist 376200		$983.00	983.00		$291,837.00	$291,837.00	$292,820.00
MPD - MO - Gas Dist 377000			0.00			$0.00	$0.00
MPD - MO - Gas Dist 378000	$16,818.12		16,818.12	$214,585.42		$214,585.42	$231,403.54
MPD - MO - Gas Dist 379000			0.00	$418,109.17		$418,109.17	$418,109.17
MPD - MO - Gas Dist 380001	$467,829.46		467,829.46	$5,002,475.87		$5,002,475.87	$5,470,305.33
MPD - MO - Gas Dist 380002	$948,875.85		948,875.85	$2,231,650.54		$2,231,650.54	$3,180,526.39
MPD - MO - Gas Dist 380003	$6,215.95		6,215.95	$7,210.88		$7,210.88	$13,426.83
MPD - MO - Gas Dist 380005	$1,380,753.01		1,380,753.01	$13,938,289.40		$13,938,289.40	$15,319,042.41
MPD - MO - Gas Dist 380100	0	$0.00	0.00	0	$132.00	$132.00	$132.00
MPD - MO - Gas Dist 380200	0	$631.00	631.00	0	$187,281.00	$187,281.00	$187,912.00
MPD - MO - Gas Dist 381000	0	256,103.18	256,103.18	0	2,738,260.29	$2,738,260.29	$2,994,363.47
MPD - MO - Gas Dist 382001	$1,772,060.74	159,704.48	1,931,765.22	$31,553.60	1,687,097.81	$1,718,651.41	$3,650,416.63
MPD - MO - Gas Dist 383001	$709,206.49	$325.00	709,531.49	$2,175,218.17	$96,840.00	$2,272,058.17	$2,981,589.66
MPD - MO - Gas Dist 385001	$7,283.57	4,597.11	11,880.68	$110,676.90	48,079.81	$158,756.71	$170,637.39
MPD - MO - Gas Dist 385002	$15,473.67	10,028.73	25,502.40	$51,739.05	104,887.38	$156,626.43	$182,128.83
MPD - MO - Gas Tr Ld/Ld Rt (Depr) 365003			0.00	$228,277.12		$228,277.12	$228,277.12
MPD - MO - Gas Trans 365001			0.00	$6,297.70		$6,297.70	$6,297.70
MPD - MO - Gas Trans 366001			0.00	$10,880.09		$10,880.09	$10,880.09
MPD - MO - Gas Trans 367003			0.00	$6,526,403.08		$6,526,403.08	$6,526,403.08
MPD - MO - Gas Trans 367005			0.00			$0.00	$0.00
MPD - MO - Gas Trans 367007			0.00	$277,287.43		$277,287.43	$277,287.43
MPD - MO - Gas Trans 369003			0.00	$372,213.61		$372,213.61	$372,213.61
MPD - MO - Gen Gas Dist 389001 NoDpr			0.00	$2,612.52		$2,612.52	$2,612.52
MPD - MO - Gen Gas Dist 390001			0.00	$240,177.94		$240,177.94	$240,177.94
MPD - MO - Gen Gas Dist 390051	$65,023.02		65,023.02			$0.00	$65,023.02
MPD - MO - Gen Gas Dist 391001	$56,181.83		56,181.83			$0.00	$56,181.83
MPD - MO - Gen Gas Dist 391003	$89,042.24		89,042.24	$191,299.18		$191,299.18	$280,341.42
MPD - MO - Gen Gas Dist 391004			0.00	$681.10		$681.10	$681.10
MPD - MO - Gen Gas Dist 392005			0.00	$38,421.88		$38,421.88	$38,421.88
MPD - MO - Gen Gas Dist 392006			0.00	$48,651.61		$48,651.61	$48,651.61
MPD - MO - Gen Gas Dist 393000			0.00	$9,832.83		$9,832.83	$9,832.83
MPD - MO - Gen Gas Dist 394000	$27,800.86		27,800.86	$541,295.50		$541,295.50	$569,096.36
MPD - MO - Gen Gas Dist 395000	$21,669.86		21,669.86	$100,207.02	1,276.46	$101,483.48	$123,153.34
MPD - MO - Gen Gas Dist 396001			0.00	$51,190.25		$51,190.25	$51,190.25
MPD - MO - Gen Gas Dist 396002	$16,133.08		16,133.08	$67,717.05		$67,717.05	$83,850.13
MPD - MO - Gen Gas Dist 397000	$30,672.08		30,672.08	$361,860.37		$361,860.37	$392,532.45
MPD - MO - Gen Gas Dist 398000	$10,488.10		10,488.10	$36,662.10		$36,662.10	$47,150.20
Total Direct Plant by System	$15,170,342.94	$432,386.50	$15,602,729.44	$66,672,157.01	$5,161,551.23	$71,833,708.24	$87,436,437.68

MPS Gas
Reserves for Eastern System
As of September 30, 2003

Sum of Accum R	System		Less October Activity				Sept	(15mos) Depr Exp. Adjt as of Sept business for	Sept Correction to PP (corrects Depr expense for writedown)	Impairment	Adjusted Sept '03 Reserves Total for
	October PowerPlant Balances										
Plant Acct	Eastern	Grand Total	Direct Depr Expense	Assigned Depr Exp	Cost of Removal	Retirements	Accts Not on PP	Write down		Writedown	Eastern System
390051	$65,023.02	$65,023.02	$ -								$65,023.02
392005	$0.00	$0.00									$0.00
396002	$8,491.62	$8,491.62	$ (89.67)								$8,401.95
367003	$0.00	$0.00									$0.00
376002	$103,866.95	$103,866.95	$ (2,776.90)					$ (24,809.06)	$ 9,923.00	$ 826,976.00	$913,179.99
376003	$0.00	$0.00									$0.00
376005	$1,244,234.41	$1,244,234.41	$ (16,083.02)					$ (146,674.81)	$ 58,669.00	$ 4,889,055.00	$6,029,200.58
376007	$17,582.12	$17,582.12	$ (197.71)					$ (1,802.19)	$ 721.00	$ 60,065.00	$76,368.22
378000	$6,433.17	$6,433.17	$ (33.64)					$ (306.95)	$ 122.00	$ 10,219.00	$16,433.58
380001	$108,291.93	$108,291.93	$ (1,824.53)					$ (16,628.56)	$ 6,651.00	$ 284,252.00	$380,741.84
380002	$90,674.35	$90,674.35	$ (3,700.62)					$ (32,307.74)	$ 12,923.00	$ 552,254.00	$619,842.99
380003	$735.18	$735.18	$ (24.24)					$ (220.58)	$ 88.00	$ 3,777.00	$4,355.36
380005	$335,193.50	$335,193.50	$ (5,384.94)		$ 3,045.15	$ 823.42		$ (49,458.44)	$ 19,783.00	$ 845,427.00	$1,149,428.69
382001	$258,357.11	$258,357.11	$ (2,953.43)					$ (26,873.77)	$ 10,750.00	$ 1,074,950.00	$1,314,229.91
383001	$78,691.23	$78,691.23	$ (1,477.51)		$ 3,045.12	$ 4,337.92		$ (13,100.21)	$ 5,240.00	$ 419,198.00	$495,934.55
385001	$1,453.50	$1,453.50	$ (13.47)					$ (122.68)	$ 49.00	$ 4,425.00	$5,791.35
385002	$101.56	$101.56	$ (28.63)					$ (260.56)	$ 104.00	$ 9,402.00	$9,318.37
391001	$29,966.56	$29,966.56	$ (327.73)								$29,638.83
391003	$45,408.45	$45,408.45	$ (1,669.54)								$43,738.91
391004	$0.00	$0.00	$ -								$0.00
394000	$27,800.86	$27,800.86	$ (154.53)								$27,646.33
395000	$7,796.08	$7,796.08	$ (81.26)								$7,714.82
397000	$2,366.12	$2,366.12	$ (88.18)								$2,277.94
398000	$5,550.71	$5,550.71	$ (51.39)								$5,499.32
Grand Total	$2,438,018.43	$2,438,018.43	$ (36,960.94)		$ 6,090.27	$ 5,161.34	$ -	$ (312,565.55)	$ 125,023.00	$ 8,980,000.00	$ 11,204,766.55
Assigned Balances:											
375001							$ (9.00)				($9.00)
376100 metallic							$ (433.00)				($433.00)
376200 nonmetallic							$ (2,873.00)				($2,873.00)
378001							$ (36.00)				($36.00)
379001							$ (45.00)				($45.00)
380100 metallic							$ (673.00)				($673.00)
380200 nonmetallic							$ (2,049.00)				($2,049.00)
381000		$ 87,092.14		$ (356.12)		$ 113.25	$ (210.00)				$86,639.27
382001		$ 49,724.07		$ (266.08)			$ (396.00)				$49,061.99
383000							$ (225.00)				($225.00)
385001		$ 525.71		$ (8.50)			$ (17.00)				$500.21
385002		$ 182.30		$ (18.55)			$ (2.00)				$161.75
Assigned Reserves		137,524.22	-	(649.25)	-	113.25	(6,968.00)	-	-	-	130,020.22
Total Eastern Reserves		$2,575,542.65	($36,960.94)	($649.25)	$6,090.27	$5,274.59	($6,968.00)	($312,565.55)	$125,023.00	$8,980,000.00	$11,334,786.77

Schedule Note: The base calculation was made as of October 31, 2003 and backed out October Activity to calculate the quarter ending balance for September 30, 2003