

Rate Design Impact On Residential Customers		At Average Residential Usage	10% Greater Winter Usage	10% Less Winter Usage	20% Greater Winter Usage	20% Less Winter Usage
Weatherproof Rate Design With Customer Charge Increase	Annual Bills	\$ 958.93	\$ 1,025.72	\$ 892.15	\$ 1,092.50	\$ 825.37
	PGA Adjustment	\$ 11.94	\$ 2.04	\$ 21.84	\$ (7.86)	\$ 31.74
	Combined	\$ 970.87	\$ 1,027.75	\$ 913.99	\$ 1,084.63	\$ 857.11
Uniform Volumetric Increase With No Customer Charge Increase	Annual Bills	\$ 958.93	\$ 1,029.22	\$ 888.64	\$ 1,099.51	\$ 818.35
	PGA Adjustment	\$ -	\$ -	\$ -	\$ -	\$ -
	Combined	\$ 958.93	\$ 1,029.22	\$ 888.64	\$ 1,099.51	\$ 818.35
Difference		\$ 11.94	\$ (1.47)	\$ 25.35	\$ (14.88)	\$ 38.76

12

\$ 23.88

\$ 23.88

2

2

\$ 11.94

\$ 11.94

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JUL 13 2004
Missouri Public
Service Commission

Exhibit No. 231
Case No(s) GL-2004-0209
Date 7-1-04 Rptr B

MGE Proposal	USE	Customer Charge	Volumetric Rate<=68	PGA Rate<= 68	PGA Rate > 68	Customer Charge	Non-Gas	Gas	Total
Nov	38.4	13.55	0.32599	0.57982	0.90617	13.55	12.52	22.27	48.33
Dec	92.8	13.55	0.32599	0.57982	0.90617	13.55	22.17	61.90	97.62
Jan	141	13.55	0.32599	0.57982	0.90617	13.55	22.17	105.40	141.11
Feb	134	13.55	0.32599	0.57982	0.90617	13.55	22.17	99.60	135.31
Mar	110	13.55	0.32599	0.57982	0.90617	13.55	22.17	77.85	113.57
Apr	72.8	13.55	0.32599	0.57982	0.90617	13.55	22.17	43.78	79.49

		Customer Charge	All Volumes						
May	49	13.55	0.15525	0.75056	13.55	7.61	36.78	57.93	
June	21	13.55	0.15525	0.75056	13.55	3.26	15.76	32.57	
July	16	13.55	0.15525	0.75056	13.55	2.48	12.01	28.04	
August	14	13.55	0.15525	0.75056	13.55	2.17	10.51	26.23	
September	16	13.55	0.15525	0.75056	13.55	2.48	12.01	28.04	
October	26	13.55	0.15525	0.75056	13.55	4.04	19.51	37.10	PGA COST
732					162.60	145.40	517.37	825.37	549.11

31.74

Existing Method	USE	N Customer Charge	N Volumetric Rate	N PGA Rate	Customer Charge	Non-Gas	Gas	Total
Nov	38.4	10.05	0.11423	0.75056	10.05	4.39	28.82	43.26
Dec	92.8	10.05	0.11423	0.75056	10.05	10.60	69.65	90.30
Jan	141	10.05	0.11423	0.75056	10.05	16.08	105.68	131.81
Feb	134	10.05	0.11423	0.75056	10.05	15.35	100.88	126.28
Mar	110	10.05	0.11423	0.75056	10.05	12.61	82.86	105.52
Apr	72.8	10.05	0.11423	0.75056	10.05	8.32	54.64	73.01

May	49	10.05	0.11423	0.75056	10.05	5.60	36.78	52.42	
June	21	10.05	0.11423	0.75056	10.05	2.40	15.76	28.21	
July	16	10.05	0.11423	0.75056	10.05	1.83	12.01	23.89	
August	14	10.05	0.11423	0.75056	10.05	1.60	10.51	22.16	
September	16	10.05	0.11423	0.75056	10.05	1.83	12.01	23.89	
October	26	10.05	0.11423	0.75056	10.05	2.97	19.51	32.53	PGA COST
732					120.60	83.57	549.11	753.28	549.11

Existing Method With

Adjusted Revenue	USE	N Customer Charge	N Volumetric Rate	N PGA Rate	Customer Charge	Non-Gas	Gas	Total
Nov	38.4	10.05	0.20317	0.75056	10.05	7.80	28.82	46.67
Dec	92.8	10.05	0.20317	0.75056	10.05	18.85	69.65	98.56
Jan	141	10.05	0.20317	0.75056	10.05	28.61	105.68	144.34
Feb	134	10.05	0.20317	0.75056	10.05	27.31	100.88	138.23
Mar	110	10.05	0.20317	0.75056	10.05	22.43	82.86	115.34
Apr	72.8	10.05	0.20317	0.75056	10.05	14.79	54.64	79.48

May	49	10.05	0.20317	0.75056	10.05	9.96	36.78	56.78	
June	21	10.05	0.20317	0.75056	10.05	4.27	15.76	30.08	
July	16	10.05	0.20317	0.75056	10.05	3.25	12.01	25.31	
August	14	10.05	0.20317	0.75056	10.05	2.84	10.51	23.40	
September	16	10.05	0.20317	0.75056	10.05	3.25	12.01	25.31	
October	26	10.05	0.20317	0.75056	10.05	5.28	19.51	34.85	PGA COST
732					120.60	148.64	549.11	818.35	549.11

7.02 31.74

MGE Proposal	USE	Customer Charge	Volumetric Rate<=68	PGA Rate<= 68	PGA Rate > 68	Customer Charge	Non-Gas	Gas	Total
Nov	57.6	13.55	0.32599	0.57982	0.90617	13.55	18.78	33.40	65.72
Dec	139	13.55	0.32599	0.57982	0.90617	13.55	22.17	103.95	139.66
Jan	211	13.55	0.32599	0.57982	0.90617	13.55	22.17	169.19	204.91
Feb	202	13.55	0.32599	0.57982	0.90617	13.55	22.17	160.49	196.21
Mar	166	13.55	0.32599	0.57982	0.90617	13.55	22.17	127.87	163.59
Apr	109	13.55	0.32599	0.57982	0.90617	13.55	22.17	76.76	112.48
		Customer Charge	All Volumes						
May	49	13.55	0.15525	0.75056		13.55	7.61	36.78	57.93
June	21	13.55	0.15525	0.75056		13.55	3.26	15.76	32.57
July	16	13.55	0.15525	0.75056		13.55	2.48	12.01	28.04
August	14	13.55	0.15525	0.75056		13.55	2.17	10.51	26.23
September	16	13.55	0.15525	0.75056		13.55	2.48	12.01	28.04
October	26	13.55	0.15525	0.75056		13.55	4.04	19.51	37.10
1026						162.60	151.66	778.24	1092.50
									PGA COST
									770.37

-7.86

Existing Method	USE	N Customer Charge	N Volumetric Rate	N PGA Rate	Customer Charge	Non-Gas	Gas	Total
Nov	57.6	10.05	0.11423	0.75056	10.05	6.58	43.23	59.86
Dec	139	10.05	0.11423	0.75056	10.05	15.90	104.48	130.43
Jan	211	10.05	0.11423	0.75056	10.05	24.13	158.52	192.69
Feb	202	10.05	0.11423	0.75056	10.05	23.03	151.31	184.39
Mar	166	10.05	0.11423	0.75056	10.05	18.92	124.29	153.26
Apr	109	10.05	0.11423	0.75056	10.05	12.47	81.96	104.49
May	49	10.05	0.11423	0.75056	10.05	5.60	36.78	52.42
June	21	10.05	0.11423	0.75056	10.05	2.40	15.76	28.21
July	16	10.05	0.11423	0.75056	10.05	1.83	12.01	23.89
August	14	10.05	0.11423	0.75056	10.05	1.60	10.51	22.16
September	16	10.05	0.11423	0.75056	10.05	1.83	12.01	23.89
October	26	10.05	0.11423	0.75056	10.05	2.97	19.51	32.53
1026					120.60	117.25	770.37	1008.22
								770.37
								PGA COST

Existing Method With									
Adjusted Revenue	USE	N Customer Charge	N Volumetric Rate	N PGA Rate	Customer Charge	Non-Gas	Gas	Total	
Nov	57.6	10.05	0.20317	0.75056	10.05	11.70	43.23	64.98	
Dec	139	10.05	0.20317	0.75056	10.05	28.28	104.48	142.81	
Jan	211	10.05	0.20317	0.75056	10.05	42.91	158.52	211.48	
Feb	202	10.05	0.20317	0.75056	10.05	40.96	151.31	202.32	
Mar	166	10.05	0.20317	0.75056	10.05	33.65	124.29	167.99	
Apr	109	10.05	0.20317	0.75056	10.05	22.19	81.96	114.20	
May	49	10.05	0.20317	0.75056	10.05	9.96	36.78	56.78	
June	21	10.05	0.20317	0.75056	10.05	4.27	15.76	30.08	
July	16	10.05	0.20317	0.75056	10.05	3.25	12.01	25.31	
August	14	10.05	0.20317	0.75056	10.05	2.84	10.51	23.40	
September	16	10.05	0.20317	0.75056	10.05	3.25	12.01	25.31	
October	26	10.05	0.20317	0.75056	10.05	5.28	19.51	34.85	
	1026				120.60	208.54	770.37	1099.51	
					PGA COST				
					770.37				

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MGE Proposal	USE	Customer Charge	Volumetric Rate<=68	PGA Rate<= 68	PGA Rate > 68	Customer Charge	Non-Gas	Gas	Total
Nov	43.2	13.55	0.32599	0.57982	0.90617	13.55	14.08	25.05	52.68
Dec	104	13.55	0.32599	0.57982	0.90617	13.55	22.17	72.41	108.13
Jan	158	13.55	0.32599	0.57982	0.90617	13.55	22.17	121.35	157.06
Feb	151	13.55	0.32599	0.57982	0.90617	13.55	22.17	114.82	150.54
Mar	124	13.55	0.32599	0.57982	0.90617	13.55	22.17	90.35	126.07
Apr	81.9	13.55	0.32599	0.57982	0.90617	13.55	22.17	52.02	87.74

		Customer Charge	All Volumes						
May	49	13.55	0.15525	0.75056	13.55	7.61	36.78	57.93	
June	21	13.55	0.15525	0.75056	13.55	3.26	15.76	32.57	
July	16	13.55	0.15525	0.75056	13.55	2.48	12.01	28.04	
August	14	13.55	0.15525	0.75056	13.55	2.17	10.51	26.23	
September	16	13.55	0.15525	0.75056	13.55	2.48	12.01	28.04	
October	26	13.55	0.15525	0.75056	13.55	4.04	19.51	37.10	PGA COST
805					162.60	146.96	582.58	892.15	604.43

21.84

Existing Method	USE	N Customer Charge	N Volumetric Rate	N PGA Rate	Customer Charge	Non-Gas	Gas	Total
Nov	43.2	10.05	0.11423	0.75056	10.05	4.93	32.42	47.41
Dec	104	10.05	0.11423	0.75056	10.05	11.93	78.36	100.33
Jan	158	10.05	0.11423	0.75056	10.05	18.09	118.89	147.03
Feb	151	10.05	0.11423	0.75056	10.05	17.27	113.48	140.81
Mar	124	10.05	0.11423	0.75056	10.05	14.19	93.22	117.46
Apr	81.9	10.05	0.11423	0.75056	10.05	9.36	61.47	80.88

May	49	10.05	0.11423	0.75056	10.05	5.60	36.78	52.42	
June	21	10.05	0.11423	0.75056	10.05	2.40	15.76	28.21	
July	16	10.05	0.11423	0.75056	10.05	1.83	12.01	23.89	
August	14	10.05	0.11423	0.75056	10.05	1.60	10.51	22.16	
September	16	10.05	0.11423	0.75056	10.05	1.83	12.01	23.89	
October	26	10.05	0.11423	0.75056	10.05	2.97	19.51	32.53	PGA COST
805					120.60	91.99	604.43	817.02	604.43

Existing Method With Adjusted Revenue	USE	N Customer Charge	N Volumetric Rate	N PGA Rate	Customer Charge	Non-Gas	Gas	Total
Nov	43.2	10.05	0.20317	0.75056	10.05	8.78	32.42	51.25
Dec	104	10.05	0.20317	0.75056	10.05	21.21	78.36	109.62
Jan	158	10.05	0.20317	0.75056	10.05	32.18	118.89	161.12
Feb	151	10.05	0.20317	0.75056	10.05	30.72	113.48	154.25
Mar	124	10.05	0.20317	0.75056	10.05	25.23	93.22	128.50
Apr	81.9	10.05	0.20317	0.75056	10.05	16.64	61.47	88.16

May	49	10.05	0.20317	0.75056	10.05	9.96	36.78	56.78	
June	21	10.05	0.20317	0.75056	10.05	4.27	15.76	30.08	
July	16	10.05	0.20317	0.75056	10.05	3.25	12.01	25.31	
August	14	10.05	0.20317	0.75056	10.05	2.84	10.51	23.40	
September	16	10.05	0.20317	0.75056	10.05	3.25	12.01	25.31	
October	26	10.05	0.20317	0.75056	10.05	5.28	19.51	34.85	PGA COST
805					120.60	163.61	604.43	888.64	604.43

3.51 21.84

MGE Proposal	USE	Customer Charge	Volumetric Rate<=68	PGA Rate<= 68	PGA Rate > 68	Customer Charge	Non-Gas	Gas	Total
Nov	52.8	13.55	0.32599	0.57982	0.90617	13.55	17.21	30.61	61.38
Dec	128	13.55	0.32599	0.57982	0.90617	13.55	22.17	93.44	129.15
Jan	194	13.55	0.32599	0.57982	0.90617	13.55	22.17	153.24	188.96
Feb	185	13.55	0.32599	0.57982	0.90617	13.55	22.17	145.27	180.99
Mar	152	13.55	0.32599	0.57982	0.90617	13.55	22.17	115.36	151.08
Apr	100	13.55	0.32599	0.57982	0.90617	13.55	22.17	68.52	104.23
		Customer Charge	All Volumes						
May	49	13.55	0.15525	0.75056		13.55	7.61	36.78	57.93
June	21	13.55	0.15525	0.75056		13.55	3.26	15.76	32.57
July	16	13.55	0.15525	0.75056		13.55	2.48	12.01	28.04
August	14	13.55	0.15525	0.75056		13.55	2.17	10.51	26.23
September	16	13.55	0.15525	0.75056		13.55	2.48	12.01	28.04
October	26	13.55	0.15525	0.75056		13.55	4.04	19.51	37.10
953						162.60	150.09	713.02	1025.72
						PGA COST			
						715.06			

2.04

Existing Method	USE	N Customer Charge	N Volumetric Rate	N PGA Rate	Customer Charge	Non-Gas	Gas	Total
Nov	52.8	10.05	0.11423	0.75056	10.05	6.03	39.63	55.71
Dec	128	10.05	0.11423	0.75056	10.05	14.58	95.77	120.40
Jan	194	10.05	0.11423	0.75056	10.05	22.11	145.31	177.47
Feb	185	10.05	0.11423	0.75056	10.05	21.11	138.70	169.86
Mar	152	10.05	0.11423	0.75056	10.05	17.34	113.94	141.33
Apr	100	10.05	0.11423	0.75056	10.05	11.43	75.13	96.62
May	49	10.05	0.11423	0.75056	10.05	5.60	36.78	52.42
June	21	10.05	0.11423	0.75056	10.05	2.40	15.76	28.21
July	16	10.05	0.11423	0.75056	10.05	1.83	12.01	23.89
August	14	10.05	0.11423	0.75056	10.05	1.60	10.51	22.16
September	16	10.05	0.11423	0.75056	10.05	1.83	12.01	23.89
October	26	10.05	0.11423	0.75056	10.05	2.97	19.51	32.53
953					120.60	108.83	715.06	944.49
					PGA COST			
					715.06			

Existing Method With

Adjusted Revenue	USE	N Customer Charge	N Volumetric Rate	N PGA Rate	Customer Charge	Non-Gas	Gas	Total
Nov	52.8	10.05	0.20317	0.75056	10.05	10.73	39.63	60.41
Dec	128	10.05	0.20317	0.75056	10.05	25.92	95.77	131.75
Jan	194	10.05	0.20317	0.75056	10.05	39.33	145.31	194.69
Feb	185	10.05	0.20317	0.75056	10.05	37.55	138.70	186.30
Mar	152	10.05	0.20317	0.75056	10.05	30.84	113.94	154.83
Apr	100	10.05	0.20317	0.75056	10.05	20.34	75.13	105.52
May	49	10.05	0.20317	0.75056	10.05	9.96	36.78	56.78
June	21	10.05	0.20317	0.75056	10.05	4.27	15.76	30.08
July	16	10.05	0.20317	0.75056	10.05	3.25	12.01	25.31
August	14	10.05	0.20317	0.75056	10.05	2.84	10.51	23.40
September	16	10.05	0.20317	0.75056	10.05	3.25	12.01	25.31
October	26	10.05	0.20317	0.75056	10.05	5.28	19.51	34.85
953					120.60	193.56	715.06	1029.22
					PGA COST			
					715.06			

-3.50

2.04

MGE Proposal	USE	Customer Charge	Volumetric Rate<=68	PGA Rate<= 68	PGA Rate > 68	Customer Charge	Non-Gas	Gas	Total
Nov	48	13.55	0.32599	0.57982	0.90617	13.55	15.65	27.83	57.03
Dec	116	13.55	0.32599	0.57982	0.90617	13.55	22.17	82.92	118.64
Jan	176	13.55	0.32599	0.57982	0.90617	13.55	22.17	137.29	173.01
Feb	168	13.55	0.32599	0.57982	0.90617	13.55	22.17	130.04	165.76
Mar	138	13.55	0.32599	0.57982	0.90617	13.55	22.17	102.86	138.58
Apr	91	13.55	0.32599	0.57982	0.90617	13.55	22.17	60.27	95.99
		Customer Charge	All Volumes						
May	49	13.55	0.15525	0.75056		13.55	7.61	36.78	57.93
June	21	13.55	0.15525	0.75056		13.55	3.26	15.76	32.57
July	16	13.55	0.15525	0.75056		13.55	2.48	12.01	28.04
August	14	13.55	0.15525	0.75056		13.55	2.17	10.51	26.23
September	16	13.55	0.15525	0.75056		13.55	2.48	12.01	28.04
October	26	13.55	0.15525	0.75056		13.55	4.04	19.51	37.10
879						182.60	148.63	647.88	959.74

Existing Method	USE	N Customer Charge	N Volumetric Rate	N PGA Rate	Customer Charge	Non-Gas	Gas	Total
Nov	48	10.05	0.11423	0.75056	10.05	5.48	36.03	51.56
Dec	116	10.05	0.11423	0.75056	10.05	13.25	87.06	110.37
Jan	176	10.05	0.11423	0.75056	10.05	20.10	132.10	162.25
Feb	168	10.05	0.11423	0.75056	10.05	19.19	126.09	155.33
Mar	138	10.05	0.11423	0.75056	10.05	15.76	103.58	129.39
Apr	91	10.05	0.11423	0.75056	10.05	10.39	68.30	88.75
								11.94
May	49	10.05	0.11423	0.75056	10.05	5.60	36.78	52.42
June	21	10.05	0.11423	0.75056	10.05	2.40	15.76	28.21
July	16	10.05	0.11423	0.75056	10.05	1.83	12.01	23.89
August	14	10.05	0.11423	0.75056	10.05	1.60	10.51	22.16
September	16	10.05	0.11423	0.75056	10.05	1.83	12.01	23.89
October	26	10.05	0.11423	0.75056	10.05	2.97	19.51	32.53
879					120.60	100.41	659.74	880.75

Existing Method With Adjusted Revenue	USE	N Customer Charge	N Volumetric Rate	N PGA Rate	Customer Charge	Non-Gas	Gas	Total
Nov	48	10.05	0.20317	0.75056	10.05	9.75	36.03	55.83
Dec	116	10.05	0.20317	0.75056	10.05	23.57	87.06	120.68
Jan	176	10.05	0.20317	0.75056	10.05	35.76	132.10	177.91
Feb	168	10.05	0.20317	0.75056	10.05	34.13	126.09	170.28
Mar	138	10.05	0.20317	0.75056	10.05	28.04	103.58	141.67
Apr	91	10.05	0.20317	0.75056	10.05	18.49	68.30	96.84
May	49	10.05	0.20317	0.75056	10.05	9.96	36.78	56.78
June	21	10.05	0.20317	0.75056	10.05	4.27	15.76	30.08
July	16	10.05	0.20317	0.75056	10.05	3.25	12.01	25.31
August	14	10.05	0.20317	0.75056	10.05	2.84	10.51	23.40
September	16	10.05	0.20317	0.75056	10.05	3.25	12.01	25.31
October	26	10.05	0.20317	0.75056	10.05	5.28	19.51	34.85
879					120.60	178.54	659.74	959.74

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Gas Cost			
Month	Average Use	Uniform Rate Of .75056	Company Proposal
Nov	48	\$ 36.03	\$ 27.83
Dec	116	\$ 87.06	\$ 82.92
Jan	176	\$ 137.29	\$ 173.01
Feb	168	\$ 130.04	\$ 165.76
Mar	138	\$ 102.86	\$ 138.58
Apr	91	\$ 60.27	\$ 95.99
Month	10% Above Average Use	Uniform Rate Of .75056	Company Proposal
Nov	52.8	\$ 39.63	\$ 30.61
Dec	127.6	\$ 95.77	\$ 93.44
Jan	193.6	\$ 145.91	\$ 187.29
Feb	184.8	\$ 139.70	\$ 165.76
Mar	151.8	\$ 113.94	\$ 138.58
Apr	100.1	\$ 75.13	\$ 60.27
Month	25% Above Average Use	Uniform Rate Of .75056	Company Proposal
Nov	60	\$ 45.03	\$ 34.79
Dec	145	\$ 108.83	\$ 106.20
Jan	220	\$ 166.12	\$ 177.17
Feb	210	\$ 157.62	\$ 168.10
Mar	172.5	\$ 129.47	\$ 134.12
Apr	113.75	\$ 85.38	\$ 60.89

Old Proposed
Cust Charge 10.05 13.55
Ave Use 3.5
Vol Yr. Round 0.11423 0.15525
Volume Winter 68 0.32599
Volume Summer 0.15525

PGA 0.75056

	Customer Charge	Volumetric Rate<=68	Volumetric Rate>68	Anticipated PGA Rate<= 68	Anticipated PGA Rate<= 68
Proposed Nov. April	\$ 13.55	\$0.32599	\$ -	\$ 0.57982	0.90617
Proposed May October	\$ 13.55	\$0.15525	\$0.15525	\$ 0.75056	\$ 0.75056
Existing Rates	10.05	0.11423	0.11423	0.75056	0.75056

Combined 0.86479

0.90581
0.90617

Bill Differenes

**Nov.-April

Nov-Apr

48 49
116 21
176 16
168 14
138 16
91 26
737 142

MGE Propos

USE

Nov 48
Dec 116
Jan 176
Feb 168
Mar 138
Apr 91
May 49
June 21
July 16
August 14
September 16
October 26
879

Use Totals Use percent
16.2%
5.5%
78.4%

173.01 162.25
165.76 155.33
138.59 129.39
95.99 88.75
57.93 52.42
32.57 28.21
28.04 23.89
26.23 22.16
28.04 23.89
37.1 32.53
57.03 51.56
118.64 110.37
958.93 880.75

Old
760.1504

0.088942

Nov 48
Dec 116 68 0.586206897 0.413793
Jan 176 68 0.386363636 0.613636
Feb 168 68 0.404761905 0.595238
Mar 138 68 0.492753623 0.507246
Apr 91 68 0.747252747 0.252747

1.207325

0.11423

0.203172

Connection and Reconnection Fees

15.6 22.6
29.6 1.8439
45.2 41.67214
0.753333 31.39301 46.5
37.44067 5.78 0.775
2.87 2.87 32.29591
40.31067 40.04301 5.78