MINNESOTA ENERGY RESOURCES - PNG RATE IMPACT OF THE PROPOSED DEMAND CHANGE NOVEMBER 1, 2008 NNG

All costs in	Last	Last	Last	Most	Current Proposal Effective Nov.1,2008	Result of Proposed Change				
\$/MMBtu	Rate Case G011/ MR03-1372	Demand Change G011- M-06- Oct .06	Demand Change G011- M-07- Oct. 07	Recent PGA Oct. 2008		Change from Last Rate Case	Change from Last Demand Change	Change from Last PGA	Change from Last PGA \$	
1) General Service: Avg. Annual Use:		127		Mcf						
Commodity Cost	\$2.7873	\$5.1834	\$6.8682	\$5.9792	\$6.8586	\$4.0713	(\$0.0096)	14.71%	\$0.8794	
Demand Cost	\$0.7886	\$1.1097	\$1.1741	\$1.0903	\$0.9122	\$0.1236	(\$0.2619)	-16.33%	(\$0.1781	
Commodity Margin	\$1.2628	\$1.1771	\$1.1771	\$1.6263	\$1.6263	\$0.3635	\$0.4492	0.00%	\$0.0000	
Total Cost of Gas	\$4.8387	\$7.4702	\$9.2194	\$8.6958	\$9.3971	\$4.5584	\$0.1777	8.06%	\$0.7013	
Avg Annual Cost	\$614.51	\$948.72	\$1,170.86	\$1,104.37	\$1,193.43	\$578.92	\$22.57	8.06%	\$89.0651	
Effect of proposed commodity change on ave	rage annual bills:								\$111.68	
Effect of proposed demand change on average	annual bille:								(\$22.62	

2) Small Vol. Interruptible: Avg. Annual Use:		4,9	148	Mcf					
Commodity Cost	\$2.7873	\$5.1834	\$6.8682	\$5.9792	\$6.8586	\$4.0713	(\$0.0096)	14.71%	\$0.8794
Demand Cost	\$0.0000								
Commodity Margin	\$0.9000	\$0.9000	\$0.9000	\$1.2434	\$1.2434	\$0.3434	\$0.3434	0.00%	\$0.0000
Total Cost of Gas	\$3.6873	\$6.0834	\$7.7682	\$7.2226	\$8.1020	\$4.4147	\$0.3338	12.18%	\$0.8794
Avg Annual Cost	\$18,244.76	\$30,100.66	\$38,437.05	\$35,737.42	\$40,088.70	\$21,843.94	\$1,651.64	12.18%	\$4,351.2712
Effect of proposed commodity change on average annual bills:									\$4,351.27
Effect of proposed demand change on average annual bills:									\$0.00

3) Large Vol. Interruptible: Avg. Annual Use:		14,841		Mcf					
Commodity Cost	\$2.7873	\$5.1834	\$6.8682	\$5.9792	\$6.8586	\$4.0713	(\$0.0096)	14.71%	\$0.8794
Demand Cost									
Commodity Margin	\$0.2600	\$0.2600	\$0.2600	\$0.3592	\$0.3592	\$0.0992	\$0.0992	0.00%	\$0.0000
Total Cost of Gas	\$3.0473	\$5.4434	\$7.1282	\$6.3384	\$7.2178	\$4.1705	\$0.0896	13.87%	\$0.8794
Avg Annual Cost	\$45,224.98	\$80,785.50	\$105,789.62	\$94,068.19	\$107,119.37	\$61,894.39	\$1,329.75	13.87%	\$13,051.1754
Effect of proposed commodity change on average annual bills:									\$13,051.18
Effect of proposed demand change on average annual bills:									\$0.00

4) Small Vol. Firm: Avg. Annual Use:		4,948		Mcf					
		25		Mcf					
Commodity Cost	\$2.7873	\$5.1834	\$6.8682	\$5.9792	\$6.8586	\$4.0713	(\$0.0096)	14.71%	\$0.8794
Demand Cost	\$10.1223	\$12.9002	\$13.1430	\$12.0195	\$12.0195	\$1.8972	(\$1.1235)	0.00%	\$0.0000
Commodity Margin	\$0.9000	\$0.9000	\$0.9000	\$1.2434	\$1.2434	\$0.3434	\$0.3434	0.00%	\$0.0000
Demand Margin	\$1.5000	\$1.5000	\$1.5000	\$2.0724	\$2.0724	\$0.5724	\$0.5724	0.00%	\$0.0000
Total Cost of Gas	\$3.6873	\$6.0834	\$7.7682	\$7.2226	\$8.1020	\$4.4147	\$0.3338	12.18%	\$0.8794
Total Demand Cost	\$11.6223	\$14.4002	\$14.6430	\$14.0919	\$14.0919	\$2.4696	(\$0.5511)	0.00%	\$0.0000
Avg Annual Cost	\$18,535.32	\$30,460.67	\$38,803.13	\$36,089.72	\$40,440.99	\$21,905.68	\$1,637.86	12.06%	\$4,351.2712
Effect of proposed commodity change on average annual bills:									
Effect of proposed demand change on average annual bills:									\$0.00

5) Large Vol. Firm: Avg. Annual Use:		14,841		Mcf					
		75		Mcf					
Commodity Cost	\$1.6138	\$5.1834	\$6.8682	\$5.9792	\$6.8586	\$5.2448	(\$0.0096)	14.71%	\$0.8794
Demand Cost	\$10.1223	\$12.9002	\$13.1430	\$12.0195	\$12.0195	\$1.8972	(\$1.1235)	0.00%	\$0.0000
Commodity Margin	\$1.8069	\$0.2600	\$0.2600	\$0.3592	\$0.3592	(\$1.4477)	\$0.0992	0.00%	\$0.0000
Demand Margin	\$1.2000	\$1.2000	\$1.2000	\$1.6579	\$1.6579	\$0.4579	\$0.4579	0.00%	\$0.0000
Total Cost of Gas	\$3.4207	\$5.4434	\$7.1282	\$6.3384	\$7.2178	\$3.7971	\$0.0896	13.87%	\$0.8794
Total Demand Cost	\$11.3223	\$14.1002	\$14.3430	\$13.6774	\$13.6774	\$2.3551	(\$0.6656)	0.00%	\$0.0000
Avg Annual Cost	\$51,615.78	\$81,843.01	\$106,865.34	\$95,094.00	\$108,145.17	\$18,846.93	\$1,279.83	13.72%	\$13,051.1754
Effect of proposed commodity change on average annual bills:									\$13,051.18
Effect of proposed demand change on average annual bills:									\$0.00

Note: Average Annual Average based on PNG Annual Automatic Adjustment Report in Docket No. E,G999/AA-05-1403

MINNESOTA ENERGY RESOURCES - PNG

Attachment 11 Rate Impacts NNG

1) General Service: Avg.	Annual Use:			127	Mcf				
_	Last Demand	Last Demand	Last Demand	Most Recent	Nov1/08 PGA	% Change	% Change	% Change	\$ Change
	Change	Change	Change	PGA	w/ Proposed	From Last	From Last	From Last	From Last
Recovery	M-04-1766	M-06-XXXX	M-07-XXXX	Oct 1/08	Demand Changes**	Rate Case	Demand Filing	PGA	PGA
Commodity Rate	\$2.7873	\$5.1834	\$6.8682	\$5.9792	\$6.8586	146.07%	-0.14%	14.71%	\$0.8794
Demand Rate	\$0.7886	\$1.1097	\$1,1741	\$1.0903	\$0.9122	15.67%	-22.31%	-16.33%	(\$0.1781)
Margin	\$1.2628	\$1.1771	\$1.1771	\$1.6263	\$1.6263	28.79%	38.16%	0.00%	\$0.0000
Total Recovery	\$4.8387	\$7,4702	\$9.2194	\$8.6958	\$9.3971	94.21%	1.93%	8.06%	\$0.7013
Avg. Annual Bill*	\$614.51	\$948.72	\$1,170.86	\$1,104.37	\$1,193.43	94.21%	1.93%	8.06%	\$89.0651
Effect of proposed commod		* * * * * * * * * * * * * * * * * * * *	ψ1,170.00	ψ1,104.37	ψ1,130.43	34.2170	1.3376	0.0076	\$111.6838
Effect of proposed demand									(\$22.6187)
2) Small Volume Interrup			4,948	4,948	Mcf				(ΨΖΖ.0107)
z, cinali volanie interrup	Last Demand	Last Demand	Most Recent	Most Recent	Nov1/08 PGA	% Change	% Change	% Change	\$ Change
l i	Change	Change	Change	PGA	w/ Proposed	From Last	From Last	From Last	From Last
Recovery	M-04-1766	M-06-XXXX	M-07-XXXX	Oct 1/08	Demand Changes**	Rate Case	Demand Filing	PGA	PGA
Commodity Rate	\$2.7873	\$5.1834	\$6.8682	\$5.9792	\$6.8586	146.07%	-0.14%	14.71%	\$0.8794
Demand Rate	φ2.7673	φυ. 1004	φ0.0002	φ3.9792	φυ.ουου	140.07 %	-0.1476	14.7 170	\$0.0000
	#0.0000	#0.0000	© 0.0000	C4 0404	£4.0404	00.400/	00.400/	0.000/	
Margin	\$0.9000	\$0.9000	\$0.9000	\$1.2434	\$1.2434	38.16%	38.16%	0.00%	\$0.0000
Total Recovery	\$3.6873	\$6.0834	\$7.7682	\$7.2226	\$8.1020	119.73%	4.30%	12.18%	\$0.8794
Avg. Annual Bill*	\$18,244.76	\$30,100.66	\$38,437.05	\$35,737.42	\$40,088.70	119.73%	4.30%	12.18%	\$4,351.2712
Effect of proposed commod									\$4,351.2712
Effect of proposed demand									\$0.0000
3) Large Volume Interrup			14,841	14,841					
1	Last Demand	Last Demand	Most Recent	Most Recent	Nov1/08 PGA	% Change	% Change	% Change	\$ Change
	Change	Change	PGA	PGA	w/ Proposed	From Last	From Last	From Last	From Last
Recovery	M-04-1766	M-06-XXXX	M-07-XXXX	Oct 1/08	Demand Changes**	Rate Case	Demand Filing	PGA	PGA
Commodity Rate	\$2.7873	\$5.1834	\$6.8682	\$5.9792	\$6.8586	146.07%	-0.14%	14.71%	\$0.8794
Demand Rate	·	·		•	·				\$0.0000
Margin	\$0.2600	\$0.2600	\$0.2600	\$0.3592	\$0.3592	38.15%	38.15%	0.00%	\$0.0000
Total Recovery	\$3.0473	\$5.4434	\$7.1282	\$6.3384	\$7.2178	136.86%	1.26%	13.87%	\$0.8794
Avg. Annual Bill*	\$45,224.98	\$80,785.50	\$105,789.62	\$94,068.19	\$107,119.37	136.86%	1.26%	13.87%	\$13,051.1754
Effect of proposed commod			Ψ100,700.02	φο-1,000.10	ψ101,110.01	100.0070	1.2070	10.07 70	\$13,051.1754
Effect of proposed demand									\$0.0000
4) Small Volume Firm: Av		e aririuai bilis.		4,948	Mcf				ψ0.0000
	ual CD Volumes:				Mcf				
Avg. Aim	Last Demand	Last Demand	Most Recent	Most Recent	Nov1/08 PGA	% Change	% Change	% Change	\$ Change
	Change	Change	PGA	PGA	w/ Proposed	From Last	From Last	From Last	From Last
Recovery	M-04-1766	M-06-XXXX	M-07-XXXX	Oct 1/08	Demand Changes**	Rate Case	Demand Filing	PGA	PGA
Commodity Rate	\$2.7873	\$5.1834	\$6.8682	\$5.9792	\$6.8586	146.07%	-0.14%	14.71%	\$0.8794
Demand Rate	\$10.1223	\$12.9002	\$13.1430	\$12.0195	\$12.0195	18.74%	-8.55%	0.00%	\$0.0000
Comm. Margin	\$0.9000	\$0.9000	\$0.9000	\$1.2434	\$1.2434	38.16%	38.16%	0.00%	\$0.0000
SV Dem. Margin	\$1.5000	\$1.5000	\$1.5000	\$2.0724	\$2.0724	38.16%	38.16%	0.00%	\$0.0000
Total Commodity Cost	\$3.6873	\$6.0834	\$7.7682	\$7.2226	\$7.9425	115.40%	2.24%	9.97%	\$0.7199
Total Demand Cost	\$11.6223	\$14.4002	\$14.6430	\$14.0919	\$14.0919	21.25%	-3.76%	0.00%	\$0.0000
Avg. Annual Bill*	\$18,535.32	\$30,460.67	\$38,803.13	\$36,089.72	\$39,651.79	113.93%	2.19%	9.87%	\$3,562.0652
Effect of proposed commod	dity change on aver	age annual bills:							\$4,351.2712
Effect of proposed demand	change on averag	e annual bills:							\$0.0000
5) Large Volume Firm: Av				14,841	Mcf				
	ual CD Units:				Mcf				
g	Last Demand	Last Demand	Most Recent	Most Recent	Nov1/08 PGA	% Change	% Change	% Change	\$ Change
1	Change	Change	PGA	PGA	w/ Proposed	From Last	From Last	From Last	From Last
Recovery	M-04-1766	M-06-XXXX	M-07-XXXX	Oct 1/08	Demand Changes**	Rate Case	Demand Filing	PGA	PGA
Commodity Rate	\$1.6138	\$5.1834	\$6.8682	\$5.9792	\$6.6991	315.11%	-2.46%	12.04%	\$0.7199
Demand Rate	\$10.1223	\$12.9002	\$13.1430	\$12.0195	\$12.0195	18.74%	-8.55%	0.00%	\$0.0000
Comm. Margin	\$10.1223	\$0.2600	\$0.2600	\$0.3592	\$0.3592	-80.12%	-6.55% 38.15%	0.00%	\$0.0000
LV Dem. Margin	\$1.2000	\$1.2000	\$1.2000	\$1.6579	\$1.6579	38.16%	38.16%	0.00%	\$0.0000
Total Commodity Cost	\$3.4207	\$5.4434	\$7.1282	\$6.3384	\$7.0583	106.34%	-0.98%	11.36%	\$0.7199
Total Demand Cost	\$11.3223	\$14.1002	\$14.3430	\$13.6774	\$13.6774	20.80%	-4.64%	0.00%	\$0.0000
Avg. Annual Bill*	\$51,615.78	\$81,843.01	\$106,865.34	\$95,094.00	\$105,778.04	104.93%	-1.02%	11.24%	\$10,684.0359
Effect of proposed commod									\$10,684.0359
Effect of proposed demand	change on averag	e annual bills:							\$0.0000

^{*} Average Annual Bill amount does not include customer charges.

** Commodity includes Unstream costs

stream costs.							
	,						Total
5	3	3	•	3 -	•		Change
(\$/Mcf)	(Percent)	(Percent)	(\$/Mcf)	(Percent)	(\$/Mcf)		(Percent)
\$0.8794	14.71%	87.94%	(\$0.1781)	-16.33%	0.7013		8.06%
\$0.8794	14.71%	87.94%	\$0.0000	0.00%	0.8794		12.18%
\$0.8794	14.71%	87.94%	\$0.0000	0.00%	0.8794		13.87%
\$0.8794	14.71%	87.94%	\$0.0000	0.00%	0.7199	***	9.97%
\$0.7199	12.04%	71.99%	\$0.0000	0.00%	0.7199	***	11.36%
3	Commodity Change (\$/Mcf) \$0.8794 \$0.8794 \$0.8794	Commodity Change (\$/Mcf) (Percent) \$0.8794 14.71% \$0.8794 14.71% \$0.8794 14.71% \$0.8794 14.71%	Commodity Change (\$/Mcf) Commodity Change (Percent) Commodity Change (Percent) \$0.8794 14.71% 87.94% \$0.8794 14.71% 87.94% \$0.8794 14.71% 87.94% \$0.8794 14.71% 87.94% \$0.8794 14.71% 87.94% \$0.8794 14.71% 87.94%	Commodity Change (\$/Mcf) Commodity Change (Percent) Commodity Change (Percent) Demand Change (\$/Mcf) \$0.8794 14.71% 87.94% (\$0.1781) \$0.8794 14.71% 87.94% \$0.0000 \$0.8794 14.71% 87.94% \$0.0000 \$0.8794 14.71% 87.94% \$0.0000 \$0.8794 14.71% 87.94% \$0.0000	Commodity Change (\$/Mcf) Commodity Change (Percent) Commodity Change (Percent) Demand Change (\$/Mcf) Demand Change (\$/Mcf) \$0.8794 14.71% 87.94% \$0.0000 0.00% \$0.8794 14.71% 87.94% \$0.0000 0.00% \$0.8794 14.71% 87.94% \$0.0000 0.00% \$0.8794 14.71% 87.94% \$0.0000 0.00% \$0.8794 14.71% 87.94% \$0.0000 0.00% \$0.8794 14.71% 87.94% \$0.0000 0.00%	Commodity Change (\$/Mcf) Commodity Change (Percent) Commodity Change (Percent) Demand Change (\$/Mcf) Total Change (\$/Mcf) \$0.8794 14.71% 87.94% (\$0.1781) -16.33% 0.7013 \$0.8794 14.71% 87.94% \$0.0000 0.00% 0.8794 \$0.8794 14.71% 87.94% \$0.0000 0.00% 0.8794 \$0.8794 14.71% 87.94% \$0.0000 0.00% 0.7199	Commodity Change (\$/Mcf) Commodity Change (Percent) Commodity Change (Percent) Demand Change (\$/Mcf) Total Change (\$/Mcf) \$0.8794 14.71% 87.94% (\$0.1781) -16.33% 0.7013 \$0.8794 14.71% 87.94% \$0.0000 0.00% 0.8794 \$0.8794 14.71% 87.94% \$0.0000 0.00% 0.8794 \$0.8794 14.71% 87.94% \$0.0000 0.00% 0.8794 \$0.8794 14.71% 87.94% \$0.0000 0.00% 0.7199 ****

^{***} Joint total change includes only commodity change since not all joint customers purchase CD units.