Natural Gas- ARF (effective January 1, 2009)

Quantity		Price	$/GJ	$ 0.50	$ 1.00	$ 1.50	$ 2.00	$ 2.50	$ 3.00	$ 3.50	$ 4.00	$ 4.50	$ 5.00	$ 5.50	$ 6.00	$ 6.50	$ 7.00	$ 7.50	$ 8.00	$ 8.50	$ 9.00	$ 9.50	$ 10.00	$ 10.50	$ 11.00	$ 11.50	$ 12.00	$ 12.50	$ 13.00	$ 13.50	$ 14.00	$ 14.50	$ 15.00
			$/Mcf	$ 0.53	$ 1.06	$ 1.58	$ 2.11	$ 2.64	$ 3.17	$ 3.69	$ 4.22	$ 4.75	$ 5.28	$ 5.80	$ 6.33	$ 6.86	$ 7.39	$ 7.91	$ 8.44	$ 8.97	$ 9.50	$ 10.02	$ 10.55	$ 11.08	$ 11.61	$ 12.13	$ 12.66	$ 13.19	$ 13.72	$ 14.24	$ 14.77	$ 15.30	$ 15.83
			Price Rate	-18%	-16%	-14%	-11%	-9%	-7%	-5%	-2%	0%	2%	5%	7%	9%	11%	13%	14%	16%	17%	19%	20%	22%	23%	24%	24%	25%	25%	26%	26%	27%	27%
e3m^3/d	Mcf/d	Quantity Rate		**Combined Royalty Rate**																												
0	0	-20%		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	6%	7%	7%
0	10	-19%		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	6%	7%	7%	8%	8%	9%
1	20	-17%		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	7%	7%	8%	8%	9%	9%	10%	10%
1	40	-14%		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	7%	9%	9%	10%	10%	11%	11%	12%	12%	13%
2	60	-12%		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	7%	9%	10%	12%	12%	13%	13%	14%	14%	15%	16%
2	80	-9%		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	7%	9%	10%	12%	13%	15%	15%	16%	16%	17%	17%	18%	18%	19%
3	100	-6%		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	7%	8%	10%	11%	13%	14%	16%	17%	18%	18%	19%	19%	20%	20%	21%	21%
3	120	-3%		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	8%	10%	11%	13%	14%	16%	17%	19%	20%	21%	21%	22%	22%	23%	23%	24%	24%
4	140	0%		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	7%	9%	11%	13%	14%	16%	17%	19%	20%	22%	23%	24%	24%	25%	25%	26%	26%	27%	27%
5	160	3%		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	7%	9%	12%	14%	15%	17%	18%	20%	21%	23%	24%	26%	26%	27%	27%	28%	28%	29%	29%	30%
5	180	5%		5%	5%	5%	5%	5%	5%	5%	5%	5%	8%	10%	12%	14%	17%	18%	20%	21%	23%	24%	26%	27%	29%	29%	30%	30%	31%	31%	32%	32%	33%
6	200	8%		5%	5%	5%	5%	5%	5%	5%	6%	8%	11%	13%	15%	17%	20%	21%	23%	24%	26%	27%	29%	30%	32%	32%	33%	33%	34%	34%	35%	35%	36%
6	220	11%		5%	5%	5%	5%	5%	5%	6%	8%	11%	13%	15%	17%	20%	22%	23%	25%	26%	28%	29%	31%	32%	34%	34%	35%	35%	36%	36%	37%	37%	38%
7	240	12%		5%	5%	5%	5%	5%	6%	8%	10%	12%	15%	17%	19%	21%	24%	25%	27%	28%	30%	31%	33%	34%	36%	36%	37%	37%	38%	38%	39%	39%	40%
7	260	14%		5%	5%	5%	5%	5%	7%	10%	12%	14%	16%	19%	21%	23%	25%	27%	28%	30%	31%	33%	34%	36%	37%	38%	38%	39%	39%	40%	40%	41%	41%
8	280	16%		5%	5%	5%	5%	7%	9%	11%	14%	16%	18%	20%	23%	25%	27%	29%	30%	32%	33%	35%	36%	38%	39%	40%	40%	41%	41%	42%	42%	43%	43%
8	300	17%		5%	5%	5%	6%	8%	11%	13%	15%	17%	20%	22%	24%	26%	29%	30%	32%	33%	35%	36%	38%	39%	41%	41%	42%	42%	43%	43%	44%	44%	45%
9	320	19%		5%	5%	6%	8%	10%	12%	15%	17%	19%	21%	24%	26%	28%	30%	32%	33%	35%	36%	38%	39%	41%	42%	43%	43%	44%	44%	45%	45%	46%	46%
10	340	21%		5%	5%	7%	10%	12%	14%	16%	19%	21%	23%	25%	28%	30%	32%	34%	35%	37%	38%	40%	41%	43%	44%	45%	45%	46%	46%	47%	47%	48%	48%
10	360	23%		5%	7%	9%	11%	14%	16%	18%	20%	23%	25%	27%	29%	32%	34%	35%	37%	38%	40%	41%	43%	44%	46%	46%	47%	47%	48%	48%	49%	49%	50%
11	380	24%		6%	9%	11%	13%	15%	18%	20%	22%	24%	27%	29%	31%	33%	36%	37%	39%	40%	42%	43%	45%	46%	48%	48%	49%	49%	50%	50%	50%	50%	50%
11	400	25%		7%	10%	12%	14%	16%	19%	21%	23%	25%	28%	30%	32%	34%	37%	38%	40%	41%	43%	44%	46%	47%	49%	49%	50%	50%	50%	50%	50%	50%	50%
12	420	26%		8%	10%	12%	15%	17%	19%	21%	24%	26%	28%	30%	33%	35%	37%	39%	40%	42%	43%	45%	46%	48%	49%	50%	50%	50%	50%	50%	50%	50%	50%
12	440	26%		8%	11%	13%	15%	17%	20%	22%	24%	26%	29%	31%	33%	35%	38%	39%	41%	42%	44%	45%	47%	48%	50%	50%	50%	50%	50%	50%	50%	50%	50%
13	460	27%		9%	11%	14%	16%	18%	20%	23%	25%	27%	29%	32%	34%	36%	38%	40%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%
14	480	28%		10%	12%	14%	16%	19%	21%	23%	25%	28%	30%	32%	34%	37%	39%	40%	42%	43%	45%	46%	48%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%
14	500	28%		10%	12%	15%	17%	19%	21%	24%	26%	28%	30%	33%	35%	37%	39%	41%	42%	44%	45%	47%	48%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
15	520	29%		11%	13%	15%	17%	20%	22%	24%	26%	29%	31%	33%	35%	38%	40%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
15	540	29%		11%	14%	16%	18%	20%	23%	25%	27%	29%	32%	34%	36%	38%	41%	42%	44%	45%	47%	48%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
16	560	30%		12%	14%	16%	19%	21%	23%	25%	28%	30%	32%	34%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
16	580	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
17	600	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
18	620	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
18	640	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
19	660	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
19	680	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
20	700	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
20	720	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
21	740	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
22	760	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
22	780	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
23	800	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
23	820	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
24	840	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
24	860	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
25	880	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
25	900	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
26	920	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
27	940	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
27	960	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
28	980	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
28	1,000	30%		12%	14%	17%	19%	21%	23%	26%	28%	30%	32%	35%	37%	39%	41%	43%	44%	46%	47%	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%