Lands Energy Consulting

Detailed Monthly Projections through Sep 2015

Blue values are input, black calculated

Gas Price

On Pk Prices B4 Carbon

Off Pk Prices B4 Carbon

INPUT	2012
NWE-AECO BASIS	0.17

Mth-Year		INPUT NGX AECO LAST	ESTIMATE SYS DEL GAS PRICE	INPUT SD OnPeak LD PRICE	INPUT SD OffPeak LD PRICE	ESTIMATE IMPLIED HL Heat Rt	ESTIMATE CIN OnPk LD PRICE	ESTIMATE IMPLIED LL Heat Rt	ESTIMATE CIN OffPk LD PRICE
Use forward strips for 2012 to develop monthly Market Heat Rates for HLH and LLH for future years	For years 2013 - 2034 use the forecast monthly gas prices and the monthly market heat rates for on peak and off peak periods to forecast prices								
Jan-12	Calc Implied MHR	$ 3.565	3.74	34.94	25.51	9.34		6.82	
Feb-12	Calc Implied MHR	$ 3.670	3.84	34.21	22.01	8.90		5.73	
Mar-12	Calc Implied MHR	$ 3.638	3.81	31.24	19.37	8.19		5.08	
Apr-12	Calc Implied MHR	$ 3.590	3.76	31.15	17.78	8.27		4.72	
May-12	Calc Implied MHR	$ 3.605	3.78	25.94	12.26	6.86		3.24	
Jun-12	Calc Implied MHR	$ 3.600	3.77	22.43	16.55	5.94		4.38	
Jul-12	Calc Implied MHR	$ 3.610	3.78	35.37	21.32	9.35		5.63	
Aug-12	Calc Implied MHR	$ 3.630	3.80	41.50	22.31	10.91		5.86	
Sep-12	Calc Implied MHR	$ 3.650	3.82	31.82	19.61	8.32		5.13	
Oct-12	Calc Implied MHR	$ 3.713	3.89	35.24	20.88	9.07		5.37	
Nov-12	Calc Implied MHR	$ 3.928	4.10	33.42	19.88	8.15		4.85	
Dec-12	Calc Implied MHR	$ 4.168	4.34	30.63	22.88	7.05		5.27	
Jan-13	Forecast		5.06				47.26		34.50
Feb-13	Forecast		5.03				44.71		28.77
Mar-13	Forecast		4.97				40.73		25.25

Apr-13	Forecast	4.77	39.47	22.52
May-13	Forecast	4.73	32.45	15.34
Jun-13	Forecast	4.72	28.05	20.70
Jul-13	Forecast	4.74	44.25	26.68
Aug-13	Forecast	4.75	51.78	27.84
Sep-13	Forecast	4.79	39.87	24.57
Oct-13	Forecast	4.70	42.65	25.27
Nov-13	Forecast	4.93	40.18	23.90
Dec-13	Forecast	5.11	36.03	26.92
Jan-14	Forecast	5.12	47.82	34.90
Feb-14	Forecast	5.08	45.24	29.11
Mar-14	Forecast	5.03	41.21	25.55
Apr-14	Forecast	4.83	39.94	22.79
May-14	Forecast	4.78	32.84	15.52
Jun-14	Forecast	4.78	28.38	20.94
Jul-14	Forecast	4.79	44.78	26.99
Aug-14	Forecast	4.80	52.40	28.17
Sep-14	Forecast	4.85	40.34	24.86
Oct-14	Forecast	4.76	43.15	25.57
Nov-14	Forecast	4.99	40.65	24.18
Dec-14	Forecast	5.17	36.46	27.24
Jan-15	Forecast	5.48	51.25	37.41
Feb-15	Forecast	5.45	48.48	31.20
Mar-15	Forecast	5.39	44.17	27.39
Apr-15	Forecast	5.17	42.80	24.43
May-15	Forecast	5.13	35.19	16.63
Jun-15	Forecast	5.12	30.42	22.44
Jul-15	Forecast	5.13	47.99	28.93
Aug-15	Forecast	5.15	56.15	30.19
Sep-15	Forecast	5.20	43.23	26.64
Oct-15	Forecast	5.10	46.25	27.41
Nov-15	Forecast	5.35	43.57	25.92
Dec-15	Forecast	5.54	39.07	29.19
Jan-16	Forecast	5.80	54.19	39.56

Feb-16	Forecast		5.76		51.27		32.99
Mar-16	Forecast		5.70		46.70		28.96
Apr-16	Forecast		5.47		45.26		25.83
May-16	Forecast		5.42		37.21		17.59
Jun-16	Forecast		5.41		32.16		23.73
Jul-16	Forecast		5.43		50.75		30.59
Aug-16	Forecast		5.44		59.38		31.92
Sep-16	Forecast		5.50		45.72		28.17
Oct-16	Forecast		5.39		48.90		28.98
Nov-16	Forecast		5.65		46.07		27.41
Dec-16	Forecast		5.86		41.31		30.87
Jan-17	Forecast		6.33		59.16		43.19
Feb-17	Forecast		6.29		55.97		36.02
Mar-17	Forecast		6.22		50.99		31.62
Apr-17	Forecast		5.97		49.41		28.20
May-17	Forecast		5.92		40.63		19.20
Jun-17	Forecast		5.91		35.12		25.91
Jul-17	Forecast		5.93		55.40		33.40
Aug-17	Forecast		5.94		64.83		34.85
Sep-17	Forecast		6.00		49.91		30.76
Oct-17	Forecast		5.89		53.39		31.64
Nov-17	Forecast		6.17		50.30		29.92
Dec-17	Forecast		6.39		45.10		33.70
Jan-18	Forecast		6.91		64.59		47.15
Feb-18	Forecast		6.87		61.11		39.33
Mar-18	Forecast		6.79		55.67		34.52
Apr-18	Forecast		6.52		53.95		30.79
May-18	Forecast		6.46		44.35		20.96
Jun-18	Forecast		6.45		38.34		28.29
Jul-18	Forecast		6.47		60.49		36.46
Aug-18	Forecast		6.49		70.78		38.05
Sep-18	Forecast		6.55		54.49		33.58
Oct-18	Forecast		6.43		58.29		34.54
Nov-18	Forecast		6.74		54.91		32.67

Dec-18	Forecast	6.98	49.24	36.79
Jan-19	Forecast	7.55	70.52	51.48
Feb-19	Forecast	7.50	66.72	42.93
Mar-19	Forecast	7.42	60.78	37.69
Apr-19	Forecast	7.12	58.90	33.61
May-19	Forecast	7.05	48.43	22.89
Jun-19	Forecast	7.04	41.86	30.89
Jul-19	Forecast	7.07	66.04	39.81
Aug-19	Forecast	7.08	77.27	41.54
Sep-19	Forecast	7.15	59.49	36.67
Oct-19	Forecast	7.02	63.64	37.71
Nov-19	Forecast	7.36	59.95	35.67
Dec-19	Forecast	7.62	53.76	40.17
Jan-20	Forecast	8.24	76.99	56.20
Feb-20	Forecast	8.19	72.84	46.88
Mar-20	Forecast	8.10	66.36	41.14
Apr-20	Forecast	7.77	64.30	36.70
May-20	Forecast	7.70	52.87	24.99
Jun-20	Forecast	7.69	45.70	33.72
Jul-20	Forecast	7.71	72.10	43.46
Aug-20	Forecast	7.73	84.36	45.35
Sep-20	Forecast	7.81	64.95	40.03
Oct-20	Forecast	7.66	69.48	41.17
Nov-20	Forecast	8.03	65.45	38.94
Dec-20	Forecast	8.32	58.70	43.86
Jan-21	Forecast	9.00	84.06	61.36
Feb-21	Forecast	8.94	79.53	51.18
Mar-21	Forecast	8.84	72.45	44.92
Apr-21	Forecast	8.48	70.21	40.07
May-21	Forecast	8.41	57.72	27.28
Jun-21	Forecast	8.40	49.89	36.81
Jul-21	Forecast	8.42	78.72	47.45
Aug-21	Forecast	8.44	92.11	49.51
Sep-21	Forecast	8.52	70.92	43.70

Oct-21	Forecast				8.37							75.86		44.95					
Nov-21	Forecast				8.77							71.46		42.51					
Dec-21	Forecast				9.09							64.09		47.88					
Jan-22	Forecast				9.82							91.77		66.99					
Feb-22	Forecast				9.76							86.83		55.87					
Mar-22	Forecast				9.65							79.10		49.04					
Apr-22	Forecast				9.26							76.65		43.74					
May-22	Forecast				9.18							63.02		29.79					
Jun-22	Forecast				9.17							54.47		40.19					
Jul-22	Forecast				9.20							85.94		51.80					
Aug-22	Forecast				9.22							100.56		54.06					
Sep-22	Forecast				9.31							77.42		47.72					
Oct-22	Forecast				9.14							82.82		49.08					
Nov-22	Forecast				9.58							78.02		46.42					
Dec-22	Forecast				9.92							69.97		52.27					
Jan-23	Forecast				10.72							100.20		73.14					
Feb-23	Forecast				10.66							94.80		61.00					
Mar-23	Forecast				10.54							86.36		53.54					
Apr-23	Forecast				10.11							83.68		47.76					
May-23	Forecast				10.02							68.80		32.52					
Jun-23	Forecast				10.01							59.47		43.88					
Jul-23	Forecast				10.04							93.83		56.56					
Aug-23	Forecast				10.07							109.79		59.02					
Sep-23	Forecast				10.16							84.53		52.09					
Oct-23	Forecast				9.97							90.42		53.58					
Nov-23	Forecast				10.45							85.18		50.67					
Dec-23	Forecast				10.83							76.39		57.07					
Jan-24	Forecast				11.71							109.39		79.85					
Feb-24	Forecast				11.63							103.50		66.60					
Mar-24	Forecast				11.51							94.28		58.46					
Apr-24	Forecast				11.04							91.36		52.14					
May-24	Forecast				10.94							75.12		35.51					
Jun-24	Forecast				10.93							64.93		47.91					
Jul-24	Forecast				10.96							102.44		61.75					

Aug-24	Forecast				10.99							119.87		64.44					
Sep-24	Forecast				11.09							92.29		56.88					
Oct-24	Forecast				10.89							98.72		58.50					
Nov-24	Forecast				11.41							93.00		55.33					
Dec-24	Forecast				11.82							83.40		62.31					
Jan-25	Forecast				12.78							119.43		87.18					
Feb-25	Forecast				12.70							113.00		72.71					
Mar-25	Forecast				12.56							102.94		63.82					
Apr-25	Forecast				12.05							99.75		56.93					
May-25	Forecast				11.95							82.01		38.76					
Jun-25	Forecast				11.93							70.89		52.31					
Jul-25	Forecast				11.97							111.84		67.42					
Aug-25	Forecast				12.00							130.87		70.35					
Sep-25	Forecast				12.11							100.76		62.10					
Oct-25	Forecast				11.89							107.78		63.87					
Nov-25	Forecast				12.46							101.53		60.40					
Dec-25	Forecast				12.91							91.05		68.03					
Jan-26	Forecast				13.96							130.39		95.18					
Feb-26	Forecast				13.87							123.37		79.39					
Mar-26	Forecast				13.72							112.38		69.68					
Apr-26	Forecast				13.16							108.90		62.15					
May-26	Forecast				13.04							89.54		42.32					
Jun-26	Forecast				13.02							77.40		57.11					
Jul-26	Forecast				13.07							122.11		73.60					
Aug-26	Forecast				13.10							142.88		76.81					
Sep-26	Forecast				13.22							110.01		67.80					
Oct-26	Forecast				12.98							117.67		69.73					
Nov-26	Forecast				13.61							110.85		65.95					
Dec-26	Forecast				14.09							99.41		74.27					
Jan-27	Forecast				15.24							142.36		103.92					
Feb-27	Forecast				15.14							134.69		86.67					
Mar-27	Forecast				14.97							122.70		76.08					
Apr-27	Forecast				14.37							118.90		67.86					
May-27	Forecast				14.24							97.76		46.21					

Jun-27	Forecast	14.22	84.50	62.35
Jul-27	Forecast	14.26	133.32	80.36
Aug-27	Forecast	14.30	155.99	83.86
Sep-27	Forecast	14.44	120.10	74.02
Oct-27	Forecast	14.17	128.47	76.13
Nov-27	Forecast	14.85	121.03	72.00
Dec-27	Forecast	15.39	108.54	81.09
Jan-28	Forecast	16.63	155.43	113.45
Feb-28	Forecast	16.53	147.05	94.63
Mar-28	Forecast	16.35	133.96	83.06
Apr-28	Forecast	15.69	129.81	74.08
May-28	Forecast	15.55	106.73	50.45
Jun-28	Forecast	15.52	92.26	68.07
Jul-28	Forecast	15.57	145.55	87.74
Aug-28	Forecast	15.61	170.31	91.55
Sep-28	Forecast	15.76	131.12	80.81
Oct-28	Forecast	15.47	140.27	83.12
Nov-28	Forecast	16.22	132.14	78.61
Dec-28	Forecast	16.80	118.50	88.53
Jan-29	Forecast	18.16	169.69	123.87
Feb-29	Forecast	18.05	160.55	103.31
Mar-29	Forecast	17.85	146.25	90.68
Apr-29	Forecast	17.13	141.73	80.88
May-29	Forecast	16.98	116.53	55.08
Jun-29	Forecast	16.95	100.72	74.32
Jul-29	Forecast	17.00	158.91	95.79
Aug-29	Forecast	17.05	185.94	99.96
Sep-29	Forecast	17.21	143.16	88.23
Oct-29	Forecast	16.89	153.14	90.75
Nov-29	Forecast	17.71	144.26	85.82
Dec-29	Forecast	18.34	129.37	96.66
Jan-30	Forecast	19.83	185.27	135.24
Feb-30	Forecast	19.70	175.28	112.80
Mar-30	Forecast	19.49	159.67	99.00

Apr-30	Forecast	18.70	154.73	88.31
May-30	Forecast	18.53	127.22	60.13
Jun-30	Forecast	18.51	109.97	81.14
Jul-30	Forecast	18.56	173.49	104.58
Aug-30	Forecast	18.61	203.00	109.13
Sep-30	Forecast	18.79	156.30	96.32
Oct-30	Forecast	18.44	167.19	99.08
Nov-30	Forecast	19.33	157.50	93.70
Dec-30	Forecast	20.02	141.25	105.53
Jan-31	Forecast	21.65	202.27	147.65
Feb-31	Forecast	21.51	191.37	123.15
Mar-31	Forecast	21.28	174.33	108.09
Apr-31	Forecast	20.42	168.94	96.41
May-31	Forecast	20.24	138.90	65.65
Jun-31	Forecast	20.20	120.06	88.59
Jul-31	Forecast	20.27	189.42	114.18
Aug-31	Forecast	20.32	221.64	119.15
Sep-31	Forecast	20.51	170.64	105.16
Oct-31	Forecast	20.14	182.54	108.17
Nov-31	Forecast	21.11	171.96	102.30
Dec-31	Forecast	21.86	154.21	115.21
Jan-32	Forecast	23.63	220.83	161.20
Feb-32	Forecast	23.48	208.93	134.45
Mar-32	Forecast	23.23	190.33	118.01
Apr-32	Forecast	22.29	184.44	105.26
May-32	Forecast	22.09	151.64	71.68
Jun-32	Forecast	22.06	131.08	96.72
Jul-32	Forecast	22.13	206.80	124.66
Aug-32	Forecast	22.19	241.98	130.08
Sep-32	Forecast	22.39	186.30	114.82
Oct-32	Forecast	21.98	199.29	118.10
Nov-32	Forecast	23.04	187.74	111.69
Dec-32	Forecast	23.87	168.36	125.79