

KCP&L GMO - Steam
Case No. HR-2005-0436

<u>Qtr/Year</u>	<u>QCA Rate</u>	<u>Qtr/Year</u>	<u>Recon Rate</u>	<u>Cumulative Rate</u>
Q115	(0.4322)	Q413	(0.0056)	(1.0652)
Q215	(0.3904)	Q114	(0.0010)	(1.3165)
Q315	(0.3237)	Q214	(0.0004)	(1.4403)
Q415	(0.4396)	Q314	0.0051	(1.5878)
Q116	(0.4843)	Q414	0.0075	(1.6268)
Q216	(0.4781)	Q115	0.0094	(1.7041)
Q316	(0.3357)	Q215	0.0008	(1.7149)
Q416	(0.3722)	Q315	(0.0061)	(1.6587)
Q117	(0.3986)	Q415	(0.0093)	(1.5898)
Q217	(0.3596)	Q116	(0.0133)	(1.4940)
Q317	(0.3869)	Q216	(0.0177)	(1.5637)
Q417	(0.4661)	Q316	(0.0150)	(1.6665)
Q118	(0.4269)	Q416	(0.0117)	(1.6972)
Q218	(0.4319)	Q117	0.0012	(1.7550)
Q318	(0.4092)	Q217	0.0136	(1.7460)
Four quarters:	(1.7341)		(0.0119)	(1.7460)

	Q217			Q317			Q417			Q118			
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
Total Steam mmBtu Sales - 2017-2018	219,250	214,477	200,680	194,024	203,091	178,477	215,896	213,520	240,032	253,851	228,382	255,636	
Fuel Costs	\$	653,742	601,255	606,901	553,842	559,168	555,161	612,732	607,355	711,586	1,062,664	613,724	651,539
Coal Costs	\$	369,065	352,554	147,427	348,290	334,432	101,499	294,157	303,586	324,952	300,911	323,597	313,859
Gas Costs	\$	284,677	248,701	459,474	205,552	224,736	453,662	318,575	303,769	352,216	436,062	290,127	325,981
Oil Costs	\$	-	-	-	-	-	-	-	-	34,418	325,691	-	11,699
Hedge Costs	\$	-	-	-	-	-	-	-	-	-	-	-	-
Coal mmBtu Input Blr Nos. 5	mmBtu	172,169	162,085	68,250	162,890	156,320	49,919	144,496	148,875	160,056	149,303	157,545	153,685
Gas mmBtu Input Blr Nos. 1-5 & 8	mmBtu	86,263	87,164	161,376	73,533	88,766	172,324	124,618	117,981	137,525	151,013	121,741	155,115
No. 2 Oil mmBtu Input Blr Nos. 1-4	mmBtu	-	-	-	-	-	-	-	-	2,330	22,072	-	791
Blr 1-5 Fuel to Steam Input	mmBtu	258,432	249,249	229,626	236,423	245,086	222,243	269,114	266,856	299,911	322,388	279,286	309,591
Production Test - Q1 (current quarter)	mmBtu			402,504	56,941			85,602		453,427	372		460,533
Production Test - Q4 (four quarters)	mmBtu			1,896,097	21,587			83,162		1,841,571	52,546		1,842,888
Production Coal Costs - Q1				2,1591				2,1245		2,0349			2,0376
Production Coal Costs - Q4				2,7433				2,1769		2,1220			2,0849
Production Gas Costs - Q1				2,9655				2,6416		2,5638			2,4591
Production Gas Costs - Q4				2,9025				2,8496		2,7658			2,6421
Appendix D													
Adjusted Production Standards - Q1	mmBtu			459,445						453,799			460,000
Adjusted Production Standards - Q4	mmBtu			1,917,684						1,894,117			1,920,000
Production Standards - Q1	mmBtu			460,000						460,000			460,000
Production Standards - Q4	mmBtu			1,920,000						1,920,000			1,920,000
12 Months Actual Sales Test % (min 2,594,975 sales)				99.8794%				98.8546%		98.6519%			100.0000%
Days Boiler #5 had Major Maintenance - scheduled outage only		0	0	0	0	0	0	0	0	0	0	0	0
Boiler #5 Major Maintenance Adjustment Q1				100.0000%				100.0000%		100.0000%			100.0000%
Boiler #5 Major Maintenance Adjustment Q4				100.0000%				100.0000%		100.0000%			100.0000%
Quarterly Fuel Costs - Actual	\$	Q1	Q4	1,861,898	Q1	Q4	1,668,171	Q1	Q4	1,931,673	Q1	Q4	2,327,927
Production Standards - Coal		122,942	59,219	122,942	181,863	181,036	181,036	757	111,502	111,502	0	160,772	160,772
Production Standards - Gas		(168,858)	(62,657)	(168,858)	(226,129)	(236,981)	(236,981)	(953)	(145,331)	(145,331)	0	(203,740)	(203,740)
Quarterly Fuel Costs - Adjusted	\$	(45,916)	(3,437)	1,815,982	(44,266)	(55,945)	1,612,226	(197)	(33,830)	1,897,843	0	(42,967)	2,284,960
Quarterly Blr 1-5 & 8 Fuel to Steam Input	mmBtu			737,307			703,752			835,881			911,265
				2.46			2.29			2.27			2.51
Base fuel amount (per million BTU)	mmBtu	3.9500	3.9500	3.9500	3.9500	3.9500	3.9500	3.9500	3.9500	3.9500	3.9500	3.9500	3.9500
Quarterly Fuel Costs - Collected	\$			2,912,363			2,779,820			3,301,730			3,599,497
(Over) or Under Collected Fuel Costs	\$			(1,096,381)			(1,167,595)			(1,403,887)			(1,314,537)
85% of change in actual fuel costs	\$			(931,924)			(992,455)			(1,193,304)			(1,117,357)
Rolling 12-months Steam Btu Sales	mmBtu			-			-			-			-
Quarterly Cost Adjustment				2,591,845			2,565,251			2,559,993			2,617,316
				(0.3596)			(0.3869)			(0.4661)			(0.4269)
Cumulative - QCA				(1.4661)			(1.5173)			(1.6112)			(1.6395)

		Q218			Q318			Q418			Q119		
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Total Steam mmBtu Sales - 2018-2019		237,083	219,071	212,897	214,979	220,497	190,263						
Fuel Costs													
	\$	622,843	534,113	553,275	574,867	592,453	506,610						
Coal Costs	\$	269,635	308,140	306,015	297,275	342,608	154,254						
Gas Costs	\$	343,401	225,973	247,259	277,592	249,845	352,356						
Oil Costs	\$	9,807		-									
Hedge Costs	\$												
Coal mmBtu Input Blr Nos. 5	mmBtu	131,547	148,151	147,086	141,890	164,481	72,494						
Gas mmBtu Input Blr Nos. 1-5 & 8	mmBtu	137,783	103,737	102,640	109,577	100,948	163,436						
No. 2 Oil mmBtu Input Blr Nos. 1-4	mmBtu	661	-	-	-	-	-						
Blr 1-5 Fuel to Steam Input	mmBtu	269,991	251,888	249,726	251,467	265,429	235,930						
Production Test - Q1 (current quarter)	mmBtu			426,784	33,216		378,865	4,468					
Production Test - Q4 (four quarters)	mmBtu			1,922,693	0		1,849,267	0					
Production Coal Costs - Q1				2.0708			2.0961						
Production Coal Costs - Q4				2.5473			2.0580						
Production Gas Costs - Q1				2.3728			2.3526						
Production Gas Costs - Q4				2.5070			2.4396						
Appendix D													
Adjusted Production Standards - Q1	mmBtu			460,000			383,333						
Adjusted Production Standards - Q4	mmBtu			1,920,000			1,841,096						
Production Standards - Q1	mmBtu			460,000			460,000						
Production Standards - Q4	mmBtu			1,920,000			1,920,000						
12 Months Actual Sales Test % (min 2,594,975 sales)				100.0000%			100.0000%						
Days Boiler #5 had Major Maintenance - scheduled outage only		0	0	0	0	0	15						
Boiler #5 Major Maintenance Adjustment Q1				100.0000%			83.3333%						
Boiler #5 Major Maintenance Adjustment Q4				100.0000%			95.8904%						
Quarterly Fuel Costs - Actual	\$	Q1	Q4	1,710,231	Q1	Q4	1,673,930						
Production Standards - Coal		68,784	0	68,784	9,366	0	9,366						
Production Standards - Gas		(78,816)	0	(78,816)	(10,512)	0	(10,512)						
Quarterly Fuel Costs - Adjusted	\$	(10,032)	0	1,700,199	(1,146)	0	1,672,784						
Quarterly Blr 1-5 & 8 Fuel to Steam Input	mmBtu			771,605			752,826						
				2.20			2.22						
Base fuel amount (per million BTU)	mmBtu	3.9500	3.9500	3.9500	3.9500	3.9500	3.9500						
Quarterly Fuel Costs - Collected	\$			3,047,840			2,973,663						
(Over) or Under Collected Fuel Costs	\$			(1,347,641)			(1,300,879)						
85% of change in actual fuel costs	\$			(1,145,495)			(1,105,747)						
Rolling 12-months Steam Btu Sales	mmBtu		-	2,651,960		-	2,702,107						
Quarterly Cost Adjustment				(0.4319)			(0.4092)						
Cumulative - QCA				(1.7118)			(1.7341)						

Total Steam mmBtu Sales - 12-month rolling total

	<u>2016</u>	<u>15-16 rolling</u>	<u>2017</u>	<u>16-17 rolling</u>	<u>2018</u>	<u>17-18 rolling</u>
January	243,642		239,472		253,851	
February	230,350		214,673		228,382	
March	243,120	2,679,975	226,401	2,632,064	255,636	2,617,316
April	229,452		219,250		237,083	
May	228,887		214,477		219,071	
June	216,287	2,688,803	200,680	2,591,845 *	212,897	2,651,960
July	203,604		194,024		214,979	
August	192,981		203,091		220,497	
September	205,601	2,665,771	178,477	2,565,251 *	190,263	2,702,107
October	224,840		215,896			
November	218,519		213,520			
December	231,347	2,668,630	240,032	2,559,993 *		

*12-months actual sales test, minimum 2,594,975 sales

Fuel Costs - Recovered with Quarterly Cost Adjustment Table Factor:

Qtrly filing	Journal	rate	ck	(0.4269) Q118	(0.4661) Q417	(0.3869) Q317	(0.3596) Q217	(0.3986) Q117	(0.3722) Q416	(0.3357) Q316	(0.4781) Q216	(0.4843) Q116
Mar-16	373STMQCA	(0.4843) effective Jun-2016										(1,297,973)
Jun-16	373STMQCA	(0.4781) effective Sep-2016									(1,285,611)	
Sep-16	373STMQCA	(0.3357) effective Dec-2016								(894,900)		
Dec-16	373STMQCA	(0.3722) effective Mar-2017							(993,234)			
Mar-17	373STMQCA	(0.3986) effective Jun-2017						(1,049,063)				
Jun-17	373STMQCA	(0.3596) effective Sep-2017					(931,924)					
Sep-17	373STMQCA	(0.3869) effective Dec-2017				(992,455)						
Dec-17	373STMQCA	(0.4661) effective Mar-2018			(1,193,304)							
Mar-18	373STMQCA	(0.4269) effective Jun-2018		(1,117,357)								
Billed QCA												
Usage Month	Billed Month	Billed per CIS+	MMBTU									
Jun-16	Jul-16	\$ 351,855.68	216,287	-								104,747.79
Jul-16	Aug-16	\$ 331,301.08	203,652	-								98,628.66
Aug-16	Sep-16	\$ 313,941.49	192,981	-								93,460.70
Transfer Q114 Bal to Q215 r factor												
Sep-16	Oct-16	\$ 350,364.67	205,601	-							98,297.84	99,572.56
Oct-16	Nov-16	\$ 383,149.83	224,840	-							107,496.00	108,890.01
Nov-16	Dec-16	\$ 372,378.22	218,519	-							104,473.93	105,828.75
Adjust July 2016 billed		\$ (78.09)	(48)	in Q315								
Transfer Q214 Bal to Q315 r factor												
Dec-16	Jan-17	\$ 396,736.97	231,347	-						77,663.19	110,607.00	112,041.35
Jan-17	Feb-17	\$ 410,670.54	239,472	-						80,390.75	114,491.56	115,976.29
Feb-17	Mar-17	\$ 368,142.73	214,673	-						72,065.73	102,635.16	103,966.13
Transfer Q314 Bal to Q415 r factor												
Mar-17	Apr-17	\$ 375,531.36	226,401	-					84,266.45	76,002.82	108,242.32	109,646.02
Apr-17	May-17	\$ 363,669.97	219,250	-					81,604.85	73,602.23	104,823.43	106,182.76
May-17	Jun-17	\$ 355,753.00	214,477	-					79,828.34	71,999.93	102,541.45	103,871.21
Transfer Q414 Bal to Q116 r factor												
Jun-17	Jul-17	\$ 319,041.07	200,680	-				79,991.05	74,693.10	67,368.28	95,945.10	
Jul-17	Aug-17	\$ 308,459.34	194,024	-				77,337.97	72,215.73	65,133.86	92,762.86	
Aug-17	Sep-17	\$ 322,874.07	203,091	-				80,952.07	75,590.47	68,177.65	97,097.80	
Transfer Q115 Bal to Q216 r factor												
Sep-17	Oct-17	\$ 266,644.64	178,477	-			64,180.33	71,140.93	66,429.14	59,914.73		
Oct-17	Nov-17	\$ 322,548.62	215,896	-			77,636.20	86,056.15	80,356.49	72,476.28		
Nov-17	Dec-17	\$ 318,998.89	213,520	-			76,781.79	85,109.07	79,472.14	71,678.68		
Transfer Q215 Bal to Q316 r factor												
Dec-17	Jan-18	\$ 375,338.04	240,032	-		92,868.38	86,315.51	95,676.76	89,339.89	31.72		
Jan-18	Feb-18	\$ 396,946.81	253,851	-		98,214.95	91,284.82	101,185.01	94,483.35			
Feb-18	Mar-18	\$ 357,120.93	228,382	-		88,361.00	82,126.17	91,033.07	85,003.77			
Transfer Q315 Bal to Q416 r factor												
Mar-18	Apr-18	\$ 426,017.40	255,636	-		119,151.94	98,905.57	91,926.71	101,896.51			
Apr-18	May-18	\$ 395,098.82	237,083	-		110,504.39	91,727.41	85,255.05	94,501.28			
May-18	Jun-18	\$ 365,081.83	219,071	-		102,108.99	84,758.57	78,777.93	87,321.71			
Transfer Q415 Bal to Q117 r factor												
Jun-18	Jul-18	\$ 361,328.79	212,897	-		99,231.29	82,369.85	76,557.76	29.77			
Jul-18	Aug-18	\$ 364,862.36	214,979	-		91,774.54	100,201.71	83,175.38	77,306.44			
Aug-18	Sep-18	\$ 377,313.98	220,497	-	(3,086.47)	94,130.17	102,773.65	85,310.29	79,290.72			
Transfer Q116 Bal to Q217 r factor												
												1,190.66
Balance per QCA period - Reconciliation Amount												
				(759,343.29)	(470,650.45)	(113,150.85)	36,706.09	3,168.35	(30,496.17)	(38,394.15)	(45,373.73)	(34,590.61)

Billing error to be corrected in November 2018 - s/b \$374,227.51

Fuel Costs - Recovered with Reconciliation Table factor:

	Q217	Q117	Q416	Q316	Q216	Q116
Balance per QCA period - Reconciliation Amount:	\$ 36,706.09	\$ 3,168.35	\$ (30,496.17)	\$ (38,394.15)	\$ (45,373.73)	\$ (34,590.61)
Rolling 12-months Steam Btu Sales:	2,702,107	2,651,960	2,617,316	2,559,993	2,565,251	2,591,845
R-Factor:	0.0136	0.0012	(0.0117)	(0.0150)	(0.0177)	(0.0133)
effective:	Dec-2018	Sep-2018	Jun-2018	Mar-2018	Dec-2017	Sep-2017
Usage Month	Billed Month					
Sep-17	Oct-17					2,373.74
Oct-17	Nov-17					2,871.42
Nov-17	Dec-17					2,839.82
Transfer Q215 Bal to Q316 r factor						
Dec-17	Jan-18				4,248.57	3,192.43
Jan-18	Feb-18				4,493.16	3,376.22
Feb-18	Mar-18				4,042.36	3,037.48
Transfer Q315 Bal to Q416 r factor						
Mar-18	Apr-18			3,834.54	4,524.76	3,399.96
Apr-18	May-18			3,556.25	4,196.37	3,153.20
May-18	Jun-18			3,286.07	3,877.56	2,913.64
Transfer Q415 Bal to Q117 r factor						
Jun-18	Jul-18		2,490.89	3,193.46	3,768.28	2,831.53
Jul-18	Aug-18		2,515.25	3,224.69	3,805.13	2,859.22
Aug-18	Sep-18		2,579.81	3,307.46	3,902.80	2,932.61
Transfer Q116 Bal to Q217 r factor						
						(1,190.66)
Balance per QCA period - After R-Factor Recovery						
				(759,343.29)	(470,650.45)	(113,150.85)
				36,706.09	2,940.03	(20,684.14)
					(15,137.73)	(5,147.08)
						-