

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) |
| Four quarters: | (1.5173) | | (0.0464) | (1.5637) |

| | | Q216 | | | Q316 | | | Q416 | | | Q117 | | |
|---|--------------|----------------|----------------|------------------|----------------|----------------|------------------|----------------|----------------|------------------|----------------|----------------|------------------|
| | | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar |
| Total Steam mmBtu Sales - 2016-2017 | | 229,452 | 228,887 | 216,287 | 203,604 | 192,981 | 205,601 | 224,840 | 218,519 | 231,347 | 239,472 | 214,673 | 226,401 |
| Fuel Costs - 2016 | \$ | 540,107 | 560,439 | 549,475 | 588,627 | 548,928 | 592,556 | 687,350 | 614,607 | 746,066 | 771,548 | 650,968 | 627,488 |
| Coal Costs - 2016 | \$ | 335,321 | 174,979 | 339,766 | 357,573 | 295,802 | 351,262 | 364,534 | 347,944 | 370,394 | 400,460 | 329,890 | 379,214 |
| Gas Costs - 2016 | \$ | 204,785 | 385,459 | 209,709 | 230,609 | 253,126 | 241,294 | 323,261 | 266,664 | 350,521 | 367,535 | 317,311 | 248,274 |
| Oil Costs - 2016 | \$ | - | - | - | 445 | - | - | (445) | - | 25,151 | 3,553 | 3,767 | - |
| Hedge Costs - 2016 | \$ | - | - | - | - | - | - | - | - | - | - | - | - |
| Coal mmBtu Input Blr Nos. 5 | mmBtu | 159,488 | 78,238 | 155,026 | 155,823 | 133,816 | 157,038 | 156,825 | 152,457 | 173,919 | 182,478 | 151,298 | 177,986 |
| Gas mmBtu Input Blr Nos. 1-5 & 8 | mmBtu | 115,102 | 196,066 | 96,714 | 76,867 | 89,557 | 89,469 | 114,499 | 108,982 | 104,427 | 109,979 | 110,965 | 97,815 |
| No. 2 Oil mmBtu Input Blr Nos. 1-4 | mmBtu | - | - | - | - | - | - | - | (1) | 2,636 | 664 | 257 | - |
| Blr 1-5 Fuel to Steam Input | mmBtu | 274,590 | 274,304 | 251,740 | 232,690 | 223,373 | 246,507 | 271,324 | 261,438 | 280,982 | 293,121 | 262,520 | 275,801 |
| Production Test - Q1 (current quarter) | mmBtu | | | 392,752 | 67,248 | | 446,677 | 13,323 | | 483,201 | 0 | | 511,762 |
| Production Test - Q4 (four quarters) | mmBtu | | | 1,550,303 | 61,697 | | 1,894,709 | 25,291 | | 1,893,338 | 26,662 | | 1,948,042 |
| Production Coal Costs - Q1 | | | | 2.1644 | | | 2.2491 | | | 2.2410 | | | 2.1681 |
| Production Coal Costs - Q4 | | | | 2.8201 | | | 2.2879 | | | 2.2449 | | | 2.2063 |
| Production Gas Costs - Q1 | | | | 1.9612 | | | 2.8333 | | | 2.8680 | | | 2.9274 |
| Production Gas Costs - Q4 | | | | 2.2072 | | | 2.1260 | | | 2.3290 | | | 2.5934 |
| Appendix D | | | | | | | | | | | | | |
| Adjusted Production Standards - Q1 | mmBtu | | | 460,000 | | | 460,000 | | | 460,000 | | | 460,000 |
| Adjusted Production Standards - Q4 | mmBtu | | | 1,612,000 | | | 1,920,000 | | | 1,920,000 | | | 1,920,000 |
| Production Standards - Q1 | mmBtu | | | 460,000 | | | 460,000 | | | 460,000 | | | 460,000 |
| Production Standards - Q4 | mmBtu | | | 1,920,000 | | | 1,920,000 | | | 1,920,000 | | | 1,920,000 |
| 12 Months Actual Sales Test % (min 2,594,975 sales) | | | | 100.0000% | | | 100.0000% | | | 100.0000% | | | 100.0000% |
| Days Boiler #5 had Major Maintenance | | 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 | \$ | | | 1,650,020 | | | 1,730,111 | | | 2,048,023 | | | 2,050,004 |
| Production Standards - Coal * | | | | 0 | | | 29,965 | | | 59,853 | | | 0 |
| Production Standards - Gas * | | | | 0 | | | (37,748) | | | (62,097) | | | 0 |
| Quarterly Fuel Costs - Adjusted | \$ | | | <u>1,650,020</u> | | | <u>1,722,328</u> | | | <u>2,045,778</u> | | | <u>2,050,004</u> |
| Quarterly Blr 1-5 & 8 Fuel to Steam Input | mmBtu | | | 800,634 | | | 702,570 | | | 813,744 | | | 831,442 |
| | | | | 2.06 | | | 2.45 | | | 2.51 | | | 2.47 |
| 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 | \$ | | | 3,162,504 | | | 2,775,152 | | | 3,214,289 | | | 3,284,196 |
| (Over) or Under Collected Fuel Costs | \$ | | | (1,512,484) | | | (1,052,823) | | | (1,168,511) | | | (1,234,191) |
| 85% of change in actual fuel costs | \$ | | | (1,285,611) | | | (894,900) | | | (993,234) | | | (1,049,063) |
| Rolling 12-months Steam Btu Sales | mmBtu | | | 2,688,803 | | | 2,665,771 | | | 2,668,630 | | | 2,632,064 |
| Quarterly Cost Adjustment | | | | (0.4781) | | | (0.3357) | | | (0.3722) | | | (0.3986) |
| Cumulative - QCA | | | | (1.7257) | | | (1.7377) | | | (1.6703) | | | (1.5846) |

* Referring to the tariff page 6.8, Item D; when gas costs are less than coal costs and the coal standard is not met, costs are not imputed to an increased coal cost level.

| | | Q217 | | | Q317 | | | Q417 | | | Q118 | | | |
|--|-------|----------------|----------------|------------------|----------------|----------------|------------------|--------|--|--|------|--|--|--|
| | | Apr | May | Jun | Jul | Aug | Sep | | | | | | | |
| Total Steam mmBtu Sales - 2017-2018 | | 219,250 | 214,477 | 200,680 | 194,024 | 203,091 | 178,477 | | | | | | | |
| Fuel Costs - 2016 | | 653,742 | 601,255 | 606,901 | 553,842 | 559,168 | 555,161 | | | | | | | |
| Coal Costs - 2016 | \$ | 369,065 | 352,554 | 147,427 | 348,290 | 334,432 | 101,499 | | | | | | | |
| Gas Costs - 2016 | \$ | 284,677 | 248,701 | 459,474 | 205,552 | 224,736 | 453,662 | | | | | | | |
| Oil Costs - 2016 | \$ | - | - | - | - | - | - | | | | | | | |
| Hedge Costs - 2016 | \$ | - | - | - | - | - | - | | | | | | | |
| Coal mmBtu Input Blr Nos. 5 | mmBtu | 172,169 | 162,085 | 68,250 | 162,890 | 156,320 | 49,919 | | | | | | | |
| Gas mmBtu Input Blr Nos. 1-5 & 8 | mmBtu | 86,263 | 87,164 | 161,376 | 73,533 | 88,766 | 172,324 | | | | | | | |
| No. 2 Oil mmBtu Input Blr Nos. 1-4 | mmBtu | - | - | - | - | - | - | | | | | | | |
| Blr 1-5 Fuel to Steam Input | mmBtu | 258,432 | 249,249 | 229,626 | 236,423 | 245,086 | 222,243 | | | | | | | |
| Production Test - Q1 (current quarter) | mmBtu | | | 402,504 | 56,941 | | 369,129 | 85,602 | | | | | | |
| Production Test - Q4 (four quarters) | mmBtu | | | 1,896,097 | 21,587 | | 1,814,845 | 83,162 | | | | | | |
| Production Coal Costs - Q1 | | | | 2.1591 | | | 2.1245 | | | | | | | |
| Production Coal Costs - Q4 | | | | 2.7433 | | | 2.1769 | | | | | | | |
| Production Gas Costs - Q1 | | | | 2.9655 | | | 2.6416 | | | | | | | |
| Production Gas Costs - Q4 | | | | 2.9025 | | | 2.8496 | | | | | | | |
| Appendix D | | | | | | | | | | | | | | |
| Adjusted Production Standards - Q1 | mmBtu | | | 459,445 | | | 454,731 | | | | | | | |
| Adjusted Production Standards - Q4 | mmBtu | | | 1,917,684 | | | 1,898,007 | | | | | | | |
| 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) | | | | 99.8794% | | | 98.8546% | | | | | | | |
| Days Boiler #5 had Major Maintenance - scheduled outage only | | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| Boiler #5 Major Maintenance Adjustment Q1 | | | | 100.0000% | | | 100.0000% | | | | | | | |
| Boiler #5 Major Maintenance Adjustment Q4 | | | | 100.0000% | | | 100.0000% | | | | | | | |
| Quarterly Fuel Costs - Actual | \$ | Q1 | Q4 | 1,861,898 | Q1 | Q4 | 1,668,171 | | | | | | | |
| Production Standards - Coal | | 122,942 | 59,219 | 122,942 | 181,863 | 181,036 | 181,036 | | | | | | | |
| Production Standards - Gas | | (168,858) | (62,657) | (168,858) | (226,129) | (236,981) | (236,981) | | | | | | | |
| Quarterly Fuel Costs - Adjusted | \$ | (45,916) | (3,437) | 1,815,982 | (44,266) | (55,945) | 1,612,226 | | | | | | | |
| Quarterly Blr 1-5 & 8 Fuel to Steam Input | mmBtu | | | 737,307 | | | 703,752 | | | | | | | |
| | | | | 2.46 | | | 2.29 | | | | | | | |
| Base fuel amount (per million BTU) | mmBtu | 3.9500 | 3.9500 | 3.9500 | 3.9500 | 3.9500 | 3.9500 | | | | | | | |
| Quarterly Fuel Costs - Collected | \$ | | | 2,912,363 | | | 2,779,820 | | | | | | | |
| (Over) or Under Collected Fuel Costs | \$ | | | (1,096,381) | | | (1,167,595) | | | | | | | |
| 85% of change in actual fuel costs | \$ | | | (931,924) | | | (992,455) | | | | | | | |
| Rolling 12-months Steam Btu Sales | mmBtu | | - | 2,591,845 | | - | 2,565,251 | | | | | | | |
| Quarterly Cost Adjustment | | | | (0.3596) | | | (0.3869) | | | | | | | |
| Cumulative - QCA | | | | (1.4661) | | | (1.5173) | | | | | | | |

Total Steam mmBtu Sales - 12-month rolling total

| | <u>2015</u> | <u>14-15 rolling</u> | <u>2016</u> | <u>15-16 rolling</u> | <u>2017</u> | <u>16-17 rolling</u> |
|-----------|-------------|----------------------|-------------|----------------------|-------------|----------------------|
| January | 259,226 | | 243,642 | | 239,472 | |
| February | 236,680 | | 230,350 | | 214,673 | |
| March | 246,648 | 2,629,153 | 243,120 | 2,679,975 | 226,401 | 2,632,064 |
| April | 222,436 | | 229,452 | | 219,250 | |
| May | 223,426 | | 228,887 | | 214,477 | |
| June | 219,936 | 2,645,962 | 216,287 | 2,688,803 | 200,680 | 2,591,845 * |
| July | 214,266 | | 203,604 | | 194,024 | |
| August | 221,709 | | 192,981 | | 203,091 | |
| September | 189,243 | 2,723,221 | 205,601 | 2,665,771 | 178,477 | 2,565,251 * |
| October | 220,854 | | 224,840 | | | |
| November | 217,440 | | 218,519 | | | |
| December | 233,553 | 2,705,417 | 231,347 | 2,668,630 | | |

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

Fuel Costs - Recovered with Quarterly Cost Adjustment Table Factor:

| Qtrly Billing | Journal | rate | (0.3869) Q317 | (0.3596) Q217 | (0.3986) Q117 | (0.3722) Q416 | (0.3357) Q316 | (0.4781) Q216 | (0.4843) Q116 | (0.4396) Q415 | (0.3237) Q315 | (0.3904) Q215 | (0.4322) Q115 |
|---|-----------|---------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Dec-14 | 373STMQCA | (0.2873) | | | | | | | | | | | |
| Mar-15 | 373STMQCA | (0.4322) | | | | | | | | | | | |
| Jun-15 | 373STMQCA | (0.3904) | | | | | | | | | | (1,033,113) | (1,136,360) |
| Sep-15 | 373STMQCA | (0.3237) | | | | | | | | | | | |
| Dec-15 | 373STMQCA | (0.4396) effective Mar-16 | | | | | | | | (1,189,232) | (881,631) | | |
| Mar-16 | 373STMQCA | (0.4843) effective Jun-16 | | | | | | | (1,297,973) | | | | |
| Jun-16 | 373STMQCA | (0.4781) effective Sep-16 | | | | | | (1,285,611) | | | | | |
| Sep-16 | 373STMQCA | (0.3357) effective Dec-16 | | | | | (894,900) | | | | | | |
| Dec-16 | 373STMQCA | (0.3722) effective Mar-17 | | | (1,049,063) | (993,234) | | | | | | | |
| Mar-17 | 373STMQCA | (0.3986) effective Jun-17 | | | | | | | | | | | |
| Jun-17 | 373STMQCA | (0.3596) effective Sep-17 | | (931,924) | | | | | | | | | |
| Sep-17 | 373STMQCA | (0.3869) effective Dec-17 | (992,455) | | | | | | | | | | |
| Billed QCA | | | | | | | | | | | | | |
| Usage Month Billed Month Billed per CIS+ MMBTU | | | | | | | | | | | | | |
| Mar-15 | Apr-15 | \$ 166,265.42 | | | | | | | | | | | |
| Apr-15 | May-15 | \$ 149,944.10 | | | | | | | | | | | |
| May-15 | Jun-15 | \$ 150,611.48 | | | | | | | | | | | |
| Transfer Q412 Bal to Q114 r factor | | | | | | | | | | | | | |
| Jun-15 | Jul-15 | \$ 234,275.83 | | | | | | | | | | | 95,056.35 |
| Jul-15 | Aug-15 | \$ 228,236.14 | | | | | | | | | | | 92,605.76 |
| Aug-15 | Sep-15 | \$ 236,164.43 | | | | | | | | | | | 95,822.63 |
| Transfer Q113 Bal to Q214 r factor | | | | | | | | | | | | | |
| Sep-15 | Oct-15 | \$ 249,138.41 | | | | | | | | | | 73,880.47 | 81,790.82 |
| Oct-15 | Nov-15 | \$ 290,754.28 | | | | | | | | | | 86,221.40 | 95,453.10 |
| Nov-15 | Dec-15 | \$ 286,259.76 | | | | | | | | | | 84,888.58 | 93,977.57 |
| Transfer Q213 Bal to Q314 r factor | | | | | | | | | | | | | |
| Dec-15 | Jan-16 | \$ 336,386.39 | | | | | | | | | 75,601.11 | 91,179.09 | 100,941.61 |
| Jan-16 | Feb-16 | \$ 354,423.26 | | | | | | | | | 79,654.79 | 96,068.07 | 106,354.05 |
| Feb-16 | Mar-16 | \$ 331,773.11 | | | | | | | | | 74,564.30 | 89,928.64 | 99,557.27 |
| Transfer Q313 Bal to Q414 r factor | | | | | | | | | | | | | |
| Mar-16 | Apr-16 | \$ 386,025.94 | | | | | | | | 106,875.55 | 78,697.94 | 94,914.05 | 105,076.47 |
| Apr-16 | May-16 | \$ 364,323.89 | | | | | | | | 100,867.10 | 74,273.61 | 89,578.06 | 99,169.17 |
| May-16 | Jun-16 | \$ 363,426.78 | | | | | | | | 100,618.73 | 74,090.72 | 89,357.48 | 98,924.96 |
| Adjust Jan 2016 billed | | \$ (3,505.70) | | | | | | | | | | | (3,505.70) |
| Transfer Q413 Bal to Q115 r factor | | | | | | | | | | | | | |
| Jun-16 | Jul-16 | \$ 351,855.68 | | | | | | | 104,747.79 | 95,079.77 | 70,012.10 | 84,438.43 | 327.10 |
| Jul-16 | Aug-16 | \$ 331,301.08 | | | | | | | 98,628.66 | 89,525.42 | 65,922.15 | 79,505.76 | |
| Aug-16 | Sep-16 | \$ 313,941.49 | | | | | | | 93,460.70 | 84,834.45 | 62,467.95 | 75,339.78 | |
| Transfer Q114 Bal to Q215 r factor | | | | | | | | | | | | | |
| Sep-16 | Oct-16 | \$ 350,364.67 | | | | | | 98,297.84 | 99,572.56 | 90,382.20 | 66,553.06 | (114.04) | |
| Oct-16 | Nov-16 | \$ 383,149.83 | | | | | | 107,496.00 | 108,890.01 | 98,839.66 | 72,780.70 | | |
| Nov-16 | Dec-16 | \$ 372,378.22 | | | | | | 104,473.93 | 105,828.75 | 96,060.95 | 70,734.60 | | |
| Adjust July 2016 billed | | \$ (78.09) | | | | | | | | | | (78.09) | |
| Transfer Q214 Bal to Q315 r factor | | | | | | | | | | | | | |
| Dec-16 | Jan-17 | \$ 396,736.97 | | | | | 77,663.19 | 110,607.00 | 112,041.35 | 101,700.14 | 22.85 | | |
| Jan-17 | Feb-17 | \$ 410,670.54 | | | | | 80,390.75 | 114,491.56 | 115,976.29 | 105,271.91 | | | |
| Feb-17 | Mar-17 | \$ 368,142.73 | | | | | 72,065.73 | 102,635.16 | 103,966.13 | 94,370.26 | | | |
| Transfer Q314 Bal to Q415 r factor | | | | | | | | | | | | | |
| Mar-17 | Apr-17 | \$ 375,531.36 | | | | 84,266.45 | 76,002.82 | 108,242.32 | 109,646.02 | 286.03 | | | |
| Apr-17 | May-17 | \$ 363,669.97 | | | | 81,604.85 | 73,602.23 | 104,823.43 | 106,182.76 | | | | |
| May-17 | Jun-17 | \$ 355,753.00 | | | | 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 | | | 79,991.05 | 74,693.10 | 67,368.28 | 95,945.10 | 570.16 | | | | |
| Jul-17 | Aug-17 | \$ 308,459.34 | | | 77,337.97 | 72,215.73 | 65,133.86 | 92,762.86 | | | | | |
| Aug-17 | Sep-17 | \$ 322,874.07 | | | 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 | | | | | | | | 822.82 | | | |
| Balance per QCA period - Reconciliation Amount | | | | | | | | | | | | | |
| | | | (992,455.00) | (867,743.67) | (739,640.98) | (458,605.92) | (182,580.83) | (45,373.73) | (34,590.61) | (24,519.83) | (16,333.21) | 2,072.77 | 25,191.16 |

Fuel Costs - Recovered with Reconciliation Table factor:

| Usage Month | Billed Month | Q216 | Q116 | Q415 | Q315 | Q215 | Q115 | | | | | | |
|--|--------------|------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|------------|--------|---|
| Balance per QCA period - Reconciliation Amount: \$ (45,373.73) \$ (34,590.61) \$ (24,519.83) \$ (16,333.21) \$ 2,072.77 \$ 25,191.16 | | | | | | | | | | | | | |
| Rolling 12-months Steam Btu Sales: 2,565,251 2,591,845 2,632,064 2,668,630 2,665,771 2,688,803 | | | | | | | | | | | | | |
| R-Factor: (0.0177) (0.0133) (0.0093) (0.0061) 0.0008 0.0094 | | | | | | | | | | | | | |
| Balance per QCA period - After R-Factor Recovery | | | | | | | | | | | | | |
| | | | (992,455.00) | (867,743.67) | (739,640.98) | (458,605.92) | (182,580.83) | (45,373.73) | (32,216.87) | (17,300.50) | (7,571.15) | 375.26 | - |