

Client: **Sample**  
 Location: **Sample**  
 Account # **Sample**  
 Date Conducted **Sample**

**Demand Rates**  
 Delivery \$ 2.7093  
**Transmission**  
 Network Charge \$ 2.5868  
 Connection Charge \$ 1.9634  
**Energy**  
 I<sup>2</sup>R Heat Loss Multiplier 4%  
 Total Months Analyzed 12

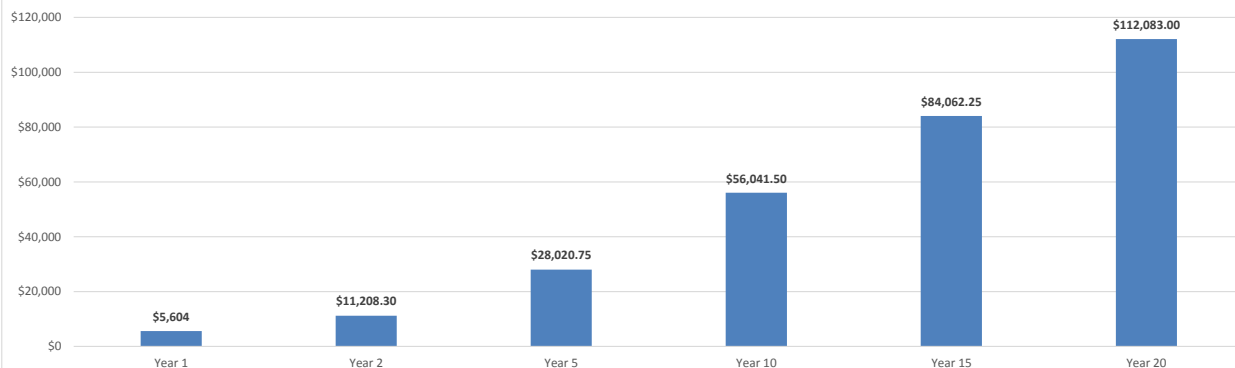
Desired PF 95.0%  
 Minimum kVAR Required 211  
 Min PF 80.0% Min kW 465  
 Max PF 82.1% Max kW 512  
 Avg PF 80.6% Avg kW 489

Demand Penalty \$ 4,945.17  
 I<sup>2</sup>R Loss Cost \$ 658.98  
 Total Potential Savings \$ 5,604.15  
 Average Savings Per Month \$ 467.01  
 Annualized Savings \$ 5,604.15  
 (Average Savings x 12)

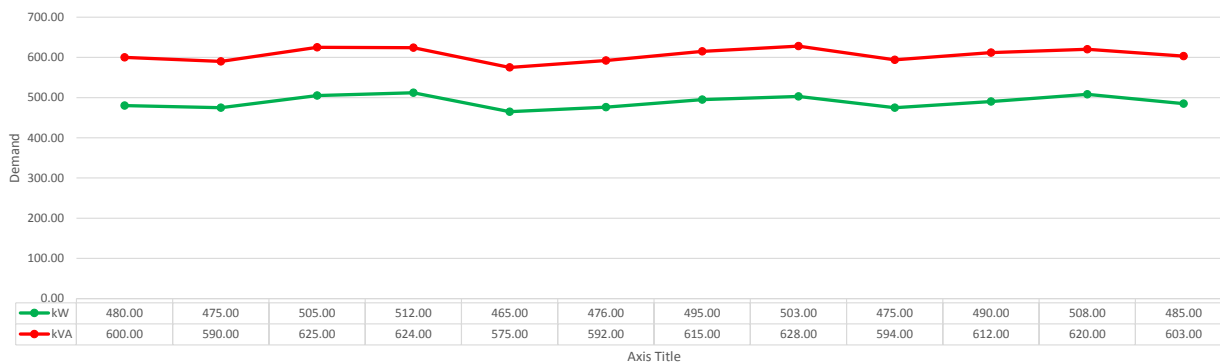
| Billing Reference Date | Demand Readings & Adjustments |                  |             |               |              |                   |                     | Demand Charges and Penalties |                            |                            |                    |                     |                          |                          | Estimated Cost of Line Losses |                      |                     |
|------------------------|-------------------------------|------------------|-------------|---------------|--------------|-------------------|---------------------|------------------------------|----------------------------|----------------------------|--------------------|---------------------|--------------------------|--------------------------|-------------------------------|----------------------|---------------------|
|                        | Demand                        | Demand Reading   | System kVAR | Required kVAR | Power Factor | Rate Adjustment 1 | kW @ 100% kVA @ 90% | Delivery \$                  | Transmission Network \$    | Transmission Connection \$ | Total KW Demand \$ | Total kVA Demand \$ | Actual Demand \$ Billed  | Demand Penalty \$ Billed | Total Energy \$ Billed        | Heat Loss Multiplier | Heat Loss \$ Billed |
| January 1, 2018        | kW<br>kVA                     | 480.00<br>600.00 | 360         | 202           | 80.0%        | 480.00<br>600.00  | 480.00<br>540.00    | \$ 1,300.46<br>\$ 1,463.02   | \$ 1,241.66<br>\$ 1,396.87 | \$ 942.43<br>\$ 1,060.24   | \$ 3,484.56        | \$ 3,920.13         | \$ 3,920.13<br>\$ 435.57 | \$ 3,650.00              | 0.01163435                    | \$ 42.47             |                     |
| February 1, 2018       | kW<br>kVA                     | 475.00<br>590.00 | 350         | 194           | 80.5%        | 475.00<br>590.00  | 475.00<br>531.00    | \$ 1,286.92<br>\$ 1,438.64   | \$ 1,228.73<br>\$ 1,373.59 | \$ 932.62<br>\$ 1,042.57   | \$ 3,448.26        | \$ 3,854.80         | \$ 3,854.80<br>\$ 406.53 | \$ 4,200.00              | 0.01127262                    | \$ 47.35             |                     |
| March 1, 2018          | kW<br>kVA                     | 505.00<br>625.00 | 368         | 202           | 80.8%        | 505.00<br>625.00  | 505.00<br>562.50    | \$ 1,368.20<br>\$ 1,523.98   | \$ 1,306.33<br>\$ 1,455.08 | \$ 991.52<br>\$ 1,104.41   | \$ 3,666.05        | \$ 4,083.47         | \$ 4,083.47<br>\$ 417.42 | \$ 4,125.00              | 0.01106420                    | \$ 45.64             |                     |
| April 1, 2018          | kW<br>kVA                     | 512.00<br>624.00 | 357         | 188           | 82.1%        | 512.00<br>624.00  | 512.00<br>561.60    | \$ 1,387.16<br>\$ 1,521.54   | \$ 1,324.44<br>\$ 1,452.75 | \$ 1,005.26<br>\$ 1,102.65 | \$ 3,716.86        | \$ 4,076.94         | \$ 4,076.94<br>\$ 360.07 | \$ 6,250.00              | 0.01016105                    | \$ 63.51             |                     |
| May 1, 2018            | kW<br>kVA                     | 465.00<br>575.00 | 338         | 185           | 80.9%        | 465.00<br>575.00  | 465.00<br>517.50    | \$ 1,259.82<br>\$ 1,402.06   | \$ 1,202.86<br>\$ 1,338.67 | \$ 912.98<br>\$ 1,016.06   | \$ 3,375.67        | \$ 3,756.79         | \$ 3,756.79<br>\$ 381.12 | \$ 4,800.00              | 0.01101435                    | \$ 52.87             |                     |
| June 1, 2018           | kW<br>kVA                     | 476.00<br>592.00 | 352         | 196           | 80.4%        | 476.00<br>592.00  | 476.00<br>532.80    | \$ 1,289.63<br>\$ 1,443.52   | \$ 1,231.32<br>\$ 1,378.25 | \$ 934.58<br>\$ 1,046.10   | \$ 3,455.52        | \$ 3,867.86         | \$ 3,867.86<br>\$ 412.34 | \$ 4,765.00              | 0.01134613                    | \$ 54.06             |                     |
| July 1, 2018           | kW<br>kVA                     | 495.00<br>615.00 | 365         | 202           | 80.5%        | 495.00<br>615.00  | 495.00<br>553.50    | \$ 1,341.10<br>\$ 1,499.60   | \$ 1,280.47<br>\$ 1,431.79 | \$ 971.88<br>\$ 1,086.74   | \$ 3,593.45        | \$ 4,018.13         | \$ 4,018.13<br>\$ 424.68 | \$ 4,690.00              | 0.01128737                    | \$ 52.94             |                     |
| August 1, 2018         | kW<br>kVA                     | 503.00<br>628.00 | 376         | 211           | 80.1%        | 503.00<br>628.00  | 503.00<br>565.20    | \$ 1,362.78<br>\$ 1,531.30   | \$ 1,301.16<br>\$ 1,462.06 | \$ 987.59<br>\$ 1,109.71   | \$ 3,651.53        | \$ 4,103.07         | \$ 4,103.07<br>\$ 451.54 | \$ 5,100.00              | 0.01156656                    | \$ 58.99             |                     |
| September 1, 2018      | kW<br>kVA                     | 475.00<br>594.00 | 357         | 201           | 80.0%        | 475.00<br>594.00  | 475.00<br>534.60    | \$ 1,286.92<br>\$ 1,448.39   | \$ 1,228.73<br>\$ 1,382.90 | \$ 932.62<br>\$ 1,049.63   | \$ 3,448.26        | \$ 3,880.93         | \$ 3,880.93<br>\$ 432.67 | \$ 5,250.00              | 0.01165822                    | \$ 61.21             |                     |
| October 1, 2018        | kW<br>kVA                     | 490.00<br>612.00 | 367         | 206           | 80.1%        | 490.00<br>612.00  | 490.00<br>550.80    | \$ 1,327.56<br>\$ 1,492.28   | \$ 1,267.53<br>\$ 1,424.81 | \$ 962.07<br>\$ 1,081.44   | \$ 3,557.16        | \$ 3,998.53         | \$ 3,998.53<br>\$ 441.38 | \$ 5,190.00              | 0.01158798                    | \$ 60.14             |                     |
| November 1, 2018       | kW<br>kVA                     | 508.00<br>620.00 | 355         | 188           | 81.9%        | 508.00<br>620.00  | 508.00<br>558.00    | \$ 1,376.32<br>\$ 1,511.79   | \$ 1,314.09<br>\$ 1,443.43 | \$ 997.41<br>\$ 1,095.58   | \$ 3,687.83        | \$ 4,050.80         | \$ 4,050.80<br>\$ 362.98 | \$ 5,630.00              | 0.01024521                    | \$ 57.68             |                     |
| December 1, 2018       | kW<br>kVA                     | 485.00<br>603.00 | 358         | 199           | 80.4%        | 485.00<br>603.00  | 485.00<br>542.70    | \$ 1,314.01<br>\$ 1,470.34   | \$ 1,254.60<br>\$ 1,403.86 | \$ 952.25<br>\$ 1,065.54   | \$ 3,520.86        | \$ 3,939.73         | \$ 3,939.73<br>\$ 418.87 | \$ 5,485.00              | 0.01132776                    | \$ 62.13             |                     |
| <b>Total</b>           |                               |                  |             |               |              |                   |                     |                              |                            |                            |                    | \$ 47,551.18        | \$ 4,945.17              | \$ 59,135.00             |                               | \$ 658.98            |                     |

Note: This spreadsheet is designed as a forecast tool. It uses the previous historical 12 month of actual hydro billings to determine potential savings if power factor correction is implemented at the facility. It also estimates the total correction size needed to realize the forecast.

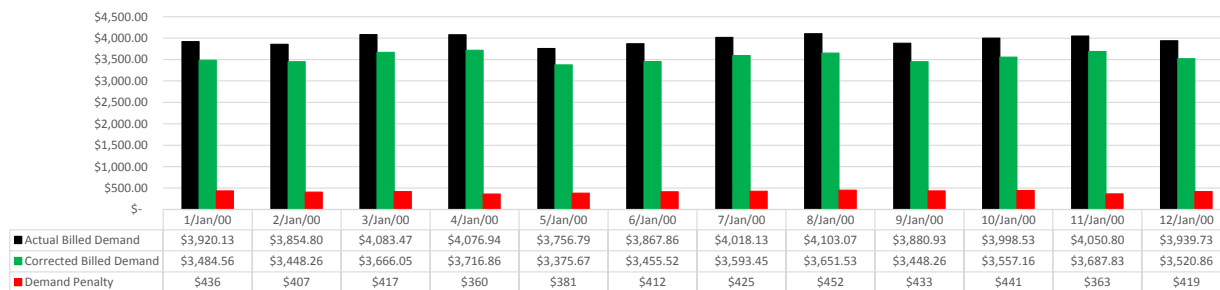
Forecasted Savings Over Expected Life of Power Factor Correction Equipment



Historical kW and kVA Demand



Demand Charges and Penalties



Actual PF, Corrected PF & kVA reduction with installed PFC in %

