

Free Analysis

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

Demand Rates
 Delivery \$ 16.0664
 Transmission \$ 1.6048
 Network Charge \$ 1.0743
 Connection Charge
Energy
 Estimated cost of iR Losses 4%
 Total Months Analyzed 12

Desired PF 95.0%
 Minimum KVAR Required 1029
 Min PF 59.1%
 Max PF 70.0%
 Avg PF 63.2%
 Min KW 613
 Max KW 1060
 Avg KW 860

Demand Penalty \$ 82,618.92
 iR Loss Cost \$ 7,499.48
 Total Potential Savings \$ 90,118.40
 Average Savings Per Month \$ 7,509.87
 Annualized Savings \$ 90,118.40
 (Average Savings x 12)

Demand Readings & Adjustments				Demand Charges and Penalties				Estimated Cost of Line Losses								
Billing Reference Date	Demand Reading	System KVAR	Required KVAR	Power Factor	Rate Adjustment	kW @ 100% KVA @ 90%	Delivery	Transmission Network	Transmission Connection	Total KW Demand	Total KVA Demand	Actual Demand \$ Billed	Demand Penalty \$ Billed	Total Energy \$ Billed	iR Loss Multiplier	iR Loss \$ Billed
September 17, 2004	982.00	1327	1004	59.5%	982.00	982.00	\$ 15,777.20	\$ 1,575.91	\$ 1,054.96	\$ 18,408.08	\$ 27,853.94	\$ 27,853.94	\$ 9,445.86	\$ 24,809.49	0.02432016	\$ 603.37
October 1, 2004	982.00	1327	1004	59.5%	982.00	982.00	\$ 15,777.20	\$ 1,575.91	\$ 1,054.96	\$ 18,408.08	\$ 27,853.94	\$ 27,853.94	\$ 9,445.86	\$ 26,077.16	0.02432016	\$ 634.20
November 1, 2004	1008.00	1327	1004	65.3%	1008.00	1008.00	\$ 16,194.93	\$ 1,617.64	\$ 1,092.89	\$ 18,895.46	\$ 26,031.88	\$ 26,031.88	\$ 7,136.41	\$ 36,902.55	0.02108519	\$ 778.10
December 1, 2004	734.00	1168	837	70.0%	734.00	734.00	\$ 11,792.74	\$ 1,177.92	\$ 788.54	\$ 13,759.20	\$ 26,031.88	\$ 17,680.76	\$ 3,921.56	\$ 10,301.41	0.01825866	\$ 188.09
January 5, 2005	632.00	748	507	61.2%	632.00	632.00	\$ 10,153.96	\$ 1,014.23	\$ 678.96	\$ 11,847.16	\$ 17,680.76	\$ 17,410.82	\$ 5,563.66	\$ 6,650.30	0.02337784	\$ 155.47
February 5, 2005	663.00	816	608	64.2%	663.00	663.00	\$ 14,922.47	\$ 1,490.54	\$ 997.81	\$ 12,428.27	\$ 17,410.82	\$ 17,410.82	\$ 4,962.55	\$ 7,609.30	0.02170719	\$ 165.18
March 5, 2005	613.00	791	573	59.1%	613.00	613.00	\$ 9,848.70	\$ 983.74	\$ 658.55	\$ 11,490.99	\$ 17,512.05	\$ 17,512.05	\$ 6,021.05	\$ 11,764.94	0.02464251	\$ 288.74
April 5, 2005	946.00	1037	727	67.4%	946.00	946.00	\$ 15,198.81	\$ 1,518.14	\$ 1,016.29	\$ 17,733.24	\$ 23,686.81	\$ 23,686.81	\$ 5,953.57	\$ 29,683.54	0.01987848	\$ 590.06
May 5, 2005	830.00	1016	743	63.3%	830.00	830.00	\$ 13,335.11	\$ 1,331.98	\$ 891.67	\$ 15,558.77	\$ 22,134.69	\$ 22,134.69	\$ 6,575.92	\$ 45,060.27	0.02226214	\$ 1,003.14
June 5, 2005	993.00	1124	798	66.2%	993.00	993.00	\$ 15,953.64	\$ 1,593.57	\$ 1,066.78	\$ 18,614.28	\$ 25,306.43	\$ 25,306.43	\$ 6,692.14	\$ 46,706.95	0.02057644	\$ 961.06
July 5, 2005	879.00	1111	823	62.0%	879.00	879.00	\$ 14,122.37	\$ 1,410.62	\$ 944.31	\$ 16,477.29	\$ 23,906.14	\$ 23,906.14	\$ 7,428.84	\$ 43,633.88	0.02294504	\$ 1,001.18
August 5, 2005	1060.00	1377	1029	61.0%	1060.00	1060.00	\$ 17,030.38	\$ 1,701.09	\$ 1,138.76	\$ 19,870.23	\$ 29,321.71	\$ 29,321.71	\$ 9,451.48	\$ 48,094.99	0.02351363	\$ 1,130.89
	1738.00				1738.00	1564.20	\$ 25,131.06	\$ 2,510.23	\$ 1,680.42	\$ 276,109.97	\$ 276,109.97	\$ 82,618.92	\$ 7,499.48	\$ 337,294.78		\$ 7,499.48

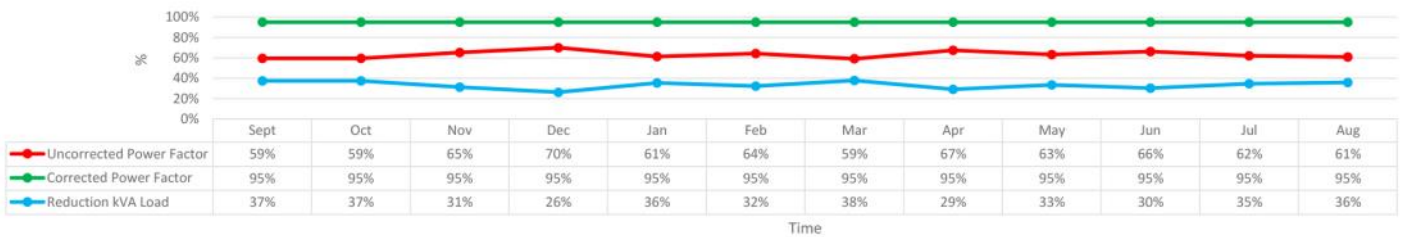
Note: This spreadsheet is designed as a forecast tool. It uses the previous historical 12 month of actual hydro billings to determine potential savings if power factor correction is implemented at the facility. It also estimates the total correction size needed to realize the forecast. Demand Penalty costs represent 30% of the charged demand on this billing. This could be eliminated if the power factor is corrected above the utility 90% threshold for power factor.

Note: This Sample billing analysis based on the rates and rate structure of a utility in Ontario. Each utility has its own rates and rate structure.

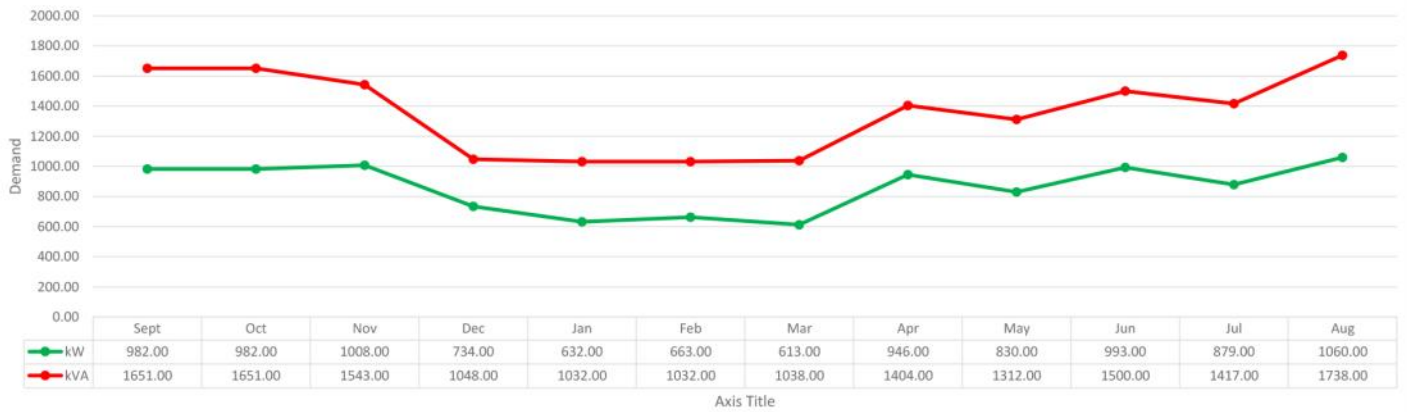
Demand Charges and Penalties



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



Historical kW and kVA Demand



Demand kW and KVA with PF Correction Installed

