

## **Retrofit Analysis – Before vs. After**

### **Before Upgrade**

File C:\xxx\xxx\DP3129x.LOG

Test began at 2/03/07 16:39:00

Test ended at 2/04/07 4:29:00

### **After Upgrade**

File C:\xxx\xxx\DP3129x.LOG

Test began at 2/04/07 6:51:00

Test ended at 2/04/07 13:59:00

<b><u>Measurement</u></b>	<b><u>Before</u></b>	<b><u>After</u></b>	<b><u>Units</u></b>	<b><u>Change</u></b>	<b><u>%Change</u></b>
Voltage, A Phase, Ave:	276.1	273.4	volts	-2.7	-1.0 %
Voltage, A Phase, Max:	280.1	275.6	volts	-4.5	-1.6 %
Voltage, A Phase, Min:	271.5	270.3	volts	-1.2	-0.4 %
Voltage, B Phase, Ave:	277.0	274.1	volts	-2.9	-1.0 %
Voltage, B Phase, Max:	281.0	276.1	volts	-4.9	-1.7 %
Voltage, B Phase, Min:	272.4	271.6	volts	-0.8	-0.3 %
Voltage, C Phase, Ave:	277.3	274.9	volts	-2.5	-0.9 %
Voltage, C Phase, Max:	281.4	277.7	volts	-3.7	-1.3 %
Voltage, C Phase, Min:	272.8	272.3	volts	-0.5	-0.2 %
Current, A Phase, Ave:	150.4	197.0	amps	46.6	31.0 %
Current, A Phase, Max:	202.8	245.5	amps	42.7	21.0 %
Current, A Phase, Min:	130.0	169.4	amps	39.4	30.3 %
Current, B Phase, Ave:	181.5	228.5	amps	47.1	25.9 %
Current, B Phase, Max:	226.2	280.5	amps	54.3	24.0 %
Current, B Phase, Min:	156.0	197.0	amps	41.0	26.3 %
Current, C Phase, Ave:	177.0	227.3	amps	50.2	28.4 %
Current, C Phase, Max:	247.6	278.0	amps	30.4	12.3 %
Current, C Phase, Min:	150.3	198.4	amps	48.1	32.0 %
Current, Neutral, Ave:	5.6	9.7	amps	4.1	72.3 %
Current, Neutral, Max:	8.7	13.7	amps	4.9	56.6 %
Current, Neutral, Min:	0.0	6.8	amps	6.8	0.0 %
True Power, A Phase, Ave:	37231.1	50684.7	Watts	13453.7	36.1 %
True Power, A Phase, Max:	51475.0	65843.0	Watts	14368.0	27.9 %
True Power, A Phase, Min:	28870.0	41882.0	Watts	13012.0	45.1 %
True Power, B Phase, Ave:	47470.4	60461.5	Watts	12991.1	27.4 %
True Power, B Phase, Max:	62003.0	75981.0	Watts	13978.0	22.5 %
True Power, B Phase, Min:	38669.0	50150.0	Watts	11481.0	29.7 %
True Power, C Phase, Ave:	46889.9	60643.6	Watts	13753.8	29.3 %
True Power, C Phase, Max:	66867.0	75878.0	Watts	9011.0	13.5 %
True Power, C Phase, Min:	38131.0	51418.0	Watts	13287.0	34.8 %
Total True Power:	131591.3	171789.9	Watts	40198.5	30.5 %
Power Factor, A Phase, Ave:	0.89	0.94		0.05	5.0 %
Power Factor, A Phase, Max:	0.95	0.98		0.03	3.2 %
Power Factor, A Phase, Min:	-0.88	-0.93		-0.05	0.0 %
Power Factor, B Phase, Ave:	0.94	0.96		0.02	2.2 %
Power Factor, B Phase, Max:	0.99	0.99		0.00	0.0 %
Power Factor, B Phase, Min:	-0.94	-0.96		-0.02	0.0 %
Power Factor, C Phase, Ave:	0.95	0.97		0.02	1.8 %
Power Factor, C Phase, Max:	1.00	1.00		0.00	0.0 %
Power Factor, C Phase, Min:	-0.95	-0.96		-0.01	0.0 %
Total Power Factor:	0.93	0.96		0.03	2.8 %
Frequency, Ave:	60.0	60.0	Hz	0.0	0.0 %
Frequency, Max:	60.1	60.1	Hz	0.0	0.0 %
Frequency, Min:	59.6	59.6	Hz	0.0	0.0 %

THD, Voltage, A Phase:	2.1	3.0	%	0.9	43.6 %
THD, Voltage, B Phase:	2.4	2.8	%	0.4	18.4 %
THD, Voltage, C Phase:	2.2	2.7	%	0.5	21.7 %
THD, Current, A Phase:	15.5	14.4	%	-1.1	-7.0 %
THD, Current, B Phase:	12.0	11.1	%	-0.9	-7.4 %
THD, Current, C Phase:	11.3	10.9	%	-0.4	-3.9 %
THD, Current, Neutral:	3.8	3.2	%	-0.6	-16.2 %
Energy, Total Elapsed:	1557.108	1225.366	KWH	-331.742	-21.3 %
Cost, Total Elapsed:	\$186.85	\$147.04		\$-39.81	-21.3 %
Cost, estimated per month: (at \$0.12000/KWH)	\$11,534.88	\$15,058.26		\$,3523.38	30.5 %
Peak Demand:	140,563.0	180,378.0	Watts	39,815.0	28.3 %
Demand Period:	2/04/07 4:13:00	2/04/07 10:01:00			
Peak Ave VA:	148,870.0	186,932.0	VA	38,062.0	25.6 %
Peak VA Period:	2/04/07 4:13:00	2/04/07 10:01:00			

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