

Marianas Linen Supply - Guam USES System Performance Results – Summation (3 XL units)

DM II Pro Data Logger recording graphs Timed Interval Samplings Results: Averaged between 9:10 to 9:20 Jan, 02, 2013

Graph Title	USES System OFF (9:10 to 9:15 AM)	USES System ON (9:15 to 9:20 AM)	Change/ Savings
Real Power	174,000 Watts	164,000 Watts	- 10,000 Watts
Apparent Powe	er 205,000 Volt Amps	170,000 Volt Amps	- 35,000 Volt Amps
Current	255 Amps	210 Amps	- 41 Amps
Reactive Power	105,000 VAR	40,000 VAR	- 65,000 VAR
Voltage	271 Volts	272.5 Volts	+ 1.5 Volts
Power Factor	.855	.970	+ 11.5

KWH and Demand as billed by the Utility Company is based on all above factors.

50% of Real Power Savings plus 50% of Apparent Power Savings totaled together = Total kWh typically billed

10,000 Watts / 2 = 5,000 Watts

35,000 VA / 2 = 17,500 VA

Total 22,500 = 22.5 kWh

22.5 kWh X 28 days X 8 hrs per day = 5,040 kWh/month X .317 (kWh cost) = \$ 1,597.68/month

= 14.0% kWh reduction per month and 14.0% dollar savings per month.

Savings of an additional 1.5 % of total bill is anticipated as a GPA credit for increasing Power Factor from .855 to .970

14% USES System savings + 1.5% GPA credit = 15.5% total savings = \$1,766.07/month

\$29,916.00 total USES System cost / \$1,766.07 / month savings =16.94 months ROI

Original projected kWh reduction on proposal is 3,584 kWh /month X .317 (kWh cost) = \$ 1,136.12/month

= 10% kWh reduction per month and 10% dollar savings per month with 22.54 months ROI