

Marriott Hotel-Guam USES System Performance Results – Summation T-3 (8 units)

DM II Pro Data Logger recording graphs Timed Interval Samplings Results: Averaged between 11:40 to 12:00 Aug 10, 2012

Graph Title	USES System OFF (11:40 to 11:50 AM)	USES System ON (11:50 to 12:00)	Change/ Savings
Real Power	350,000 Watts	330,000 Watts	- 20,000 Watts
Apparent Power	420,000 Volt Amps	340,000 Volt Amps	- 80,000 Volt Amps
Current	500 Amps	400 Amps	- 100 Amps
Reactive Power	220,000 VAR	60,000 VAR	- 160,000 VAR
Voltage	277Volts	281Volts	+ 4 Volts
Power Factor	.83	.99	+ 16

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

20,000 Watts / 2 = 10,000 Watts 80,000 VA / 2 = 40,000 VA Total 50,000 = 70 kWh / 8 units = approx. 6.25 kWh per USES unit.

6.25 kWh x (9) USES units (normal number of USES units running) = 56.25 kWh

Anticipated savings resulting from all above changes is 50 to 56 kWh reduction. = 53 as a conservative average.

If we take the 53 kWh conservative average and divide by (9) USES units then the average becomes 5.88 kWh per USES unit.

2. Actual new projected monthly savings results based on the recorded information from graphs. Daily : 53 kWh x 24 hours x 30 days = 38,160 kWh (3) USES off : (3) USES units x 5.88 kWh each x 10 hours x 30 days = 5,292 kWh (2) USES off : (2) USES units x 5.88 kWh each x 7 hours x 30 days = 2,470 kWh

38,160 kWh - 5,292 kWh - 2,470 kWh 30,398 kWh Total 30,398 kWh x .28 = \$8,511.44/mo. x 12 = \$102,137.00/Yr. (Monthly/Annual savings T-3 only)

All Three Services Summation

kWh reductions T-1 48,348 kWh

T-2

19,380 kWh

T-3 30,398 kWh

Total 98,126 kWh x .28 = \$27,475.28/month x 12 months = \$329,703.36 Annually