



U.S. GENERAL SERVICES ADMINISTRATION
Great Lakes Region

January 28, 2000

Mr. David J. Schanin
Bayview Technology Group, Incorporated
1091 Industrial Road, Suite 106
San Carlos, CA 94070

SUBJECT: GSA Region 5 Evaluation of the VendingMiser™

Dear David,

Thank you for the opportunity to conduct an on-site evaluation of your product. The results were very positive, and I would like to share them with you. The VendingMiser was tested on a Dixie-Narco Model DN501E vending machine on the 38th floor of the John C. Kluczynski Building in Chicago, IL. No candy machines were connected in tandem with the soda machine as the access to the back of the machine, outlet placement and cord length were an issue. This soda machine tested is representative of all machines in the building. We ran both a one-day and a 93-hour test without the VendingMiser, and a one-week test with the VendingMiser.

The average uncorrected energy consumption without the VendingMiser was .383kW/hr. (The two readings of .378kW/hr and .378kW/hr were deemed very close and were averaged.) When the VendingMiser was enabled, our energy usage dropped dramatically. The average energy consumption with the VendingMiser enabled was .187kW/hr. Since we took interim readings, we also saw that the average workday reading was approximately .216kW/hr, while our weekend reading (Friday at 3pm to Monday at 3pm) was .148kW/hr. This served to further confirm that our facility, an office building occupied primarily Monday through Friday, would benefit from significant energy reductions on the weekends using the VendingMiser. After our analysis using our current electricity cost and increasing the DataLogger readings by 12% (as instructed), we estimate that we will save approximately \$132/yr on each vending machine and our payback will be approximately 1.07 years. For your information, I have enclosed our spreadsheet showing our readings and calculations.

Thank you for the opportunity to evaluate the VendingMiser. The evaluation served to verify the energy and monetary savings we had projected using your spreadsheet. We would be very interested in information on other energy-saving products that Bayview Technology Group, Inc. develops in the future.

Sincerely,

Julie Nochumson
Regional Energy Coordinator
Great Lakes Region

Enclosure

230 South Dearborn Street, Chicago, IL 60604-1696



VendingMiser Verification Trial - 38th floor Kluczynski Building

Without VendingMiser						
2 verification tests						
Start Time	Start Date	Stop Time	Stop Date	Time elapsed (hr)	kWh	Kw/h
3:31	1/14/1930	12:30	1/18/2000	93.0	35.22	0.37871
3:05	1/25/2000	3:05	1/26/2000	24.0	9.305	0.38771
Average Value						0.38321

With VendingMiser - 7 day test							
Start Time	Start Date	Stop Time	Stop Date	Time elapsed (hr)	kWh	Kw/h	Actual reading
Interim readings							
2:23	1/18/2000	2:23	1/19/2000	24.0	5.667	0.23613	5.667
2:23	1/19/2000	2:23	1/20/2000	24.0	5.06	0.21083	10.73
2:23	1/20/2000	2:23	1/21/2000	24.0	5.31	0.22125	16.04
2:23	1/21/2000	2:23	1/24/2000	72.0	10.68	0.14833	26.72
2:23	1/24/2000	2:23	1/25/2000	24.0	4.74	0.19750	31.46
One week test							
2:23	1/18/2000	2:23	1/25/2000	168.00	31.46	0.18726	

Vending Miser Energy Savings:
51.13%

Summary	With Vending Miser	Without Vending Miser
\$/kWh (Kluczynski Bldg.)	\$0.069	\$0.069
Average kW/hr	0.18726	0.38321
Data Logger Adjustment (increase readings by 12%)	0.20973	0.42919
\$/hour	\$0.01	\$0.03
\$/day	\$0.35	\$0.71
\$/week	\$2.43	\$4.98
\$/year	\$126.42	\$258.71

Savings/yr	\$132.29
Cost of Vending Miser	\$142.00
Payback (in years)	1.07
Estimated 3 year savings in Kluczynski (9 machines)	\$2,293.76
Estimated savings each additional year	\$1,190.59