THE MADISON ENERGY GROUP

ENERGY EFFICIENCY SOLUTIONS

Case Study:

THE MADISON ENERGY GROUP
ENERGY EFFICIENCY SOLUTIONS

Proof of Concept Protocol

Purpose: Demonstrate product performance on specified equipment at multiple pre-determined locations.

Measure Baseline Data:

I. Identify equipment
II. Ensure unit is operating properly (normal duty cycle, no visible ice, reaches set point)
III. Ensure thermostat is accessible and compatible
IV. Ensure compressor motor is accessible for data logger connection
V. Record unit information: Type, Mfg, Model #

Compressor Power Source:

I. At the compressor
    i. Single phase (hot lead)
    ii. 3 Phase (1 of 3 hot leads)
II. Locate power rating (amperage/voltage) on compressor nameplate
III. Record on datasheet; Phase, Volts and Amps
IV. Record pilot start date/time on datasheet

Record Baseline Data:

I. Install EKM Omni-meter V.3
II. Record Baseline Data – 7 days
III. Validate baseline data

Measure Performance Data:

I. Install Madison technology
II. Record install start date/time
III. Record Performance Data – 7 days
IV. Validate Performance Data
V. Record pilot ending date/time
VI. Analyze results

EnerG² reduces energy consumption and compressor cycles in walk-in coolers and freezers by providing a more accurate means of temperature measurement through a specialized gel compound that simulates the food product temperature instead of the air temperature which fluctuates with more volatility. It retrofits to the existing thermostat air probe and requires no additional maintenance.

Guaranteed to Reduce Energy Costs 15 – 30%
Reduces Compressor Cycles by 40 – 60%
Prevents Wear and Tear
Extends Life of Equipment
12 Month ROI
Green Restaurant Associated Endorsed
Reduced CO2 Emissions – Go Green!
Lifetime Warranty

EnerG² is a device that was developed by The Madison Energy Group and contains a non-toxic, food safe gel compound that has similar thermal properties to that of food and beverage. It is therefore, not subject to the same wider and more volatile standard of deviation in temperature that air is. The technology of EnerG² is based on the fact that food and beverage products contain significantly differently thermal properties than air. This means that their temperatures rise and fall at different rates and at different intervals. This causes inefficiency in operation because typical measurement is of the environment (air) and not the actual food and beverage product. Air, having very little density, fluctuates with more volatility thereby causing the coolers to engage in cooling cycles unnecessarily, while EnerG² simulates the stable temperature curve of food product and allows the cooler to operate only when it needs to.

When applied, EnerG² easily retrofits over the external air probe in commercial coolers and freezers and converts the temperature measurement from the ambient air temperature to that of food and beverage temperature. We are now measuring the *intended target of measurement* of food and beverage temperature instead of the immediate environment surrounding the thermostat. This creates an inherently more efficient scenario and results in an average energy reduction of 15-30%. EnerG² is also effective at reducing carbon emissions by several thousand pounds annually. It also increases food safety by maintaining more stable temperature ranges and reduces maintenance costs on equipment by minimizing unnecessary compressor cycles.

HMS Engineering Ltd.

Phillip Stewart

Engineering Consultant

Background and Qualifications for Energy Analysis

Mr. Stewart joined the US Military in 1982 and became a marine engineer involved with mechanical, electrical and structural engineering. After completing his military tour in 1990, he was recruited by Walt Disney World as a Control Specialist and Engineer. During that period Mr. Stewart became extremely interested in energy management systems. After opening Pleasure Island, MGM Studios, Disney Vacation Club, he realized that it was time for new growth in my life and joined Florida's largest Service Company BGSI. Mr. Stewart became certified as a Master Engineer for Refrigeration and Food Equipment.

After years of international endeavours Mr. Stewart entered semi-retirement where he established his consulting company, HMS Engineering Ltd. in 2007.

As a Chief Engineer, Renewable Energy Consultant and Food Equipment expert, he continues to educate and assist many large companies on ways to reduce their energy consumption and increase their bottom line profits. Companies he has supported over the years include Sandals, Couples Resorts, Montego Bay Convention Centre, KFC, Wendy's, Burger King, Moes, Margaritaville, and many others.

The attached Baseline/Performance Test Report was prepared by Mr. Stewart and all findings are based on analysis of the raw data logger information collected onsite and provided to him.

I certify that neither I nor my company (HMS Ltd.) ever receive any compensation which correlates in any manner whatsoever to test report results and that the referenced report findings are accurate and unbiased.

Phillip Stewart

Chief Engineer
HMS Engineering Ltd.
Referenced Report No. __GU31919__ Dated __3/19/2019__

HMS Engineering

Client : The Madison Energy Group
5 Hargett St., 4th Floor
Raleigh, North Carolina 27601

Report Print Date: 19-Mar-19

Report No.: GU31919

Facility / Location: Guapos / Fairfax VA

Room/Equip. Tested: Walk-in Cooler - EnerG²

Calculation Basis

Compressor Motor: HP: 0.3 Volts: 230 RLA: 8.0 Phase: 3

Power Consumption: 2.84 kW Electricity Rate: $0.10 per kWh

Operating Basis

	(Without EnerG²)	With EnerG²	Change	% Change
Projected Run Hours / Yr:	6,881	5,392	-1,489	-21.6%
Projected Cycles / Yr:	13,189	6,012	-7,177	-54.4%

Energy Use & Cost Savings per Month

	(Without EnerG²)	With EnerG²	Change	% Change
Operating Hours / Month:	573	449	-124	-21.6%
KWh / Month:	1,629	1,276	-352	-21.6%
Energy Cost / Month	$169	$133	-$37	-21.6%

Mechanical Cost Savings per Month

	(Without EnerG²)	With EnerG²	Change	% Change
Cycles / Month:	1,099	501	-598	-54.4%
Compressor Maintenance Cost/ Month:	$42	$19	-$23	-54.4%

Combined Energy and Mechanical Cost Savings

	(Without EnerG²)	With EnerG²	Change	% Change
Energy & Mechanical Cost / Month:	$211	$152	-$59	-28.1%
Energy & Mechanical Cost / Year:	$2,532	$1,820	-$711.87	-28.1%

EnerG² Return on Investment Months: 10.10

SMARTware 11 - [Data Download]

File Edit View Logger Tools Data Window Help

Summary

GuaposCoolerVA.log (CT18040042)

Data File Name:	CT18040042 Guapos Cooler VA Baseline (*saved*)	
Logger Serial Number:	CT18040042	
Description:	DENT SMART LOGGER	
Elapsed Time Since Reset:	168.00	hrs
On-Time Since Reset:	131.96	hrs
Percent On Since Reset:	78.55	%
Connected Load:	No Load Defined	
Energy Cost:	Unknown	
Data Starts:	2/23/2019	12:00:00 PM
Data Ends:	3/2/2019	12:00:00 PM
Data Elapsed Time:	168.00	hrs
Estimated Annual Hours On:	6881	hrs
Number of Turn Ons:	253	
Percent On:	78.55	%
Data On-Time:	131.96	hrs
Average On-Time:	0.52	hrs
Longest On-Time:	0.78	hrs
Shortest On-Time:	<0.01	hrs
Number of Turn Offs:	254	
Percent Off:	21.45	%
Data Off-Time:	36.04	hrs
Average Off-Time:	0.14	hrs
Longest Off-Time:	0.21	hrs
Shortest Off-Time:	<0.01	hrs

SMARTware 11 - [Data Download]

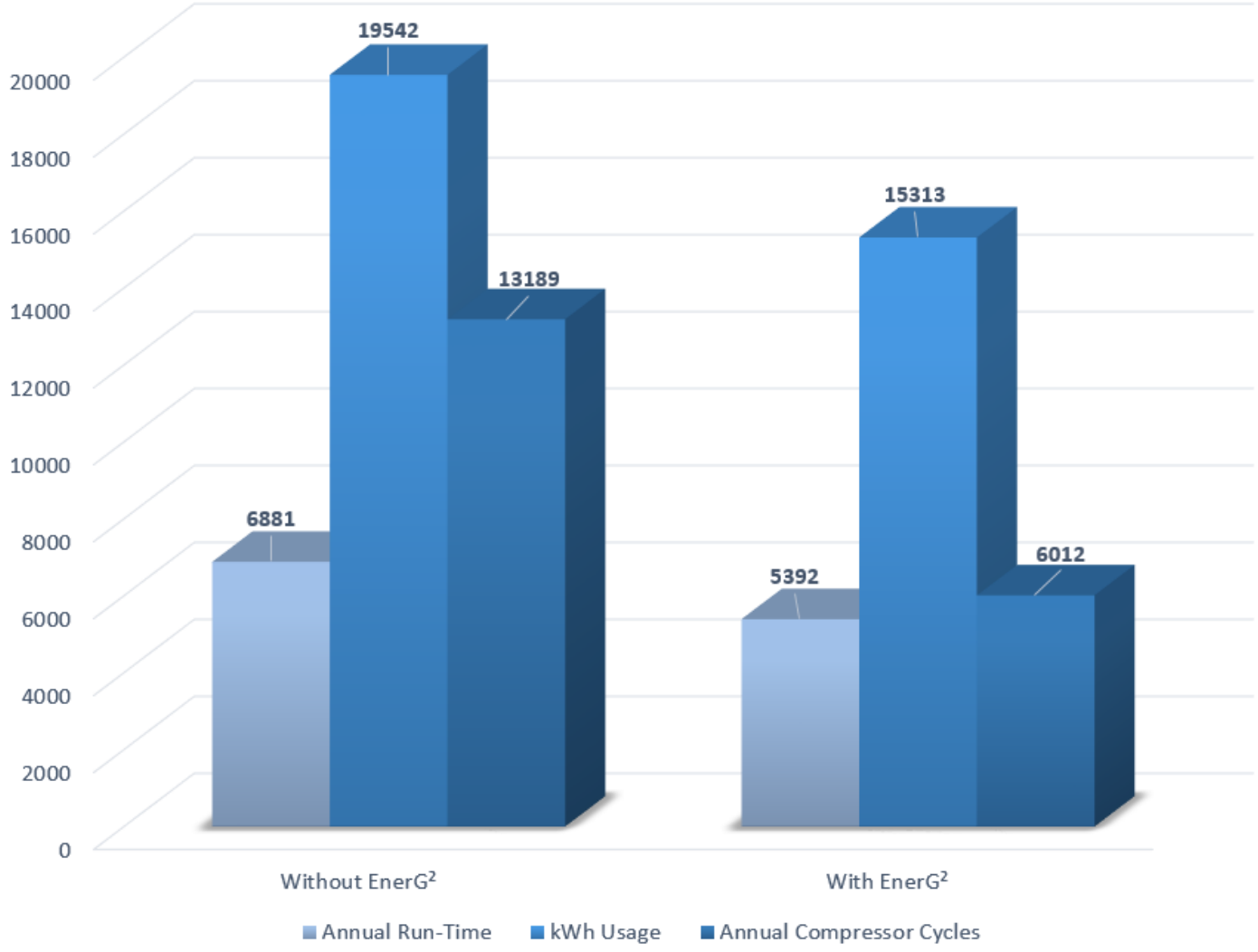
File Edit View Logger Tools Data Window Help

Summary

GuaposCoolerVA.log (CT18040042)

Data File Name:	CT18040042 Guapos Cooler VA Performance (*saved*)	
Logger Serial Number:	CT18040042	
Description:	DENT SMART LOGGER	
Elapsed Time Since Reset:	168.00	hrs
On-Time Since Reset:	103.41	hrs
Percent On Since Reset:	61.55	%
Connected Load:	No Load Defined	
Energy Cost:	Unknown	
Data Starts:	3/2/2019	12:00:00 PM
Data Ends:	3/9/2019	12:00:00 PM
Data Elapsed Time:	168.00	hrs
Estimated Annual Hours On:	5392	hrs
Number of Turn Ons:	115	
Percent On:	61.55	%
Data On-Time:	103.41	hrs
Average On-Time:	0.90	hrs
Longest On-Time:	1.35	hrs
Shortest On-Time:	<0.01	hrs
Number of Turn Offs:	116	
Percent Off:	38.45	%
Data Off-Time:	64.59	hrs
Average Off-Time:	0.56	hrs
Longest Off-Time:	0.84	hrs
Shortest Off-Time:	<0.01	hrs

CT18040042 Data Graph Series | Guapos Cooler VA



Serial Number: CT18040042
Description: DENT SMART LOGGER
On-Time Since Reset: 235.37 hrs
Off-Time Since Reset: 100.63 hrs

Date	TOU/Day (hrs)
Saturday, February 23, 2019	9.43
Sunday, February 24, 2019	15.85
Monday, February 25, 2019	18.12
Tuesday, February 26, 2019	16.36
Wednesday, February 27, 2019	20.87
Thursday, February 28, 2019	19.04
Friday, March 1, 2019	21.98
Saturday, March 2, 2019	20.62
Sunday, March 3, 2019	13.89
Monday, March 4, 2019	13.44
Tuesday, March 5, 2019	14.01
Wednesday, March 6, 2019	13.09
Thursday, March 7, 2019	15.40
Friday, March 8, 2019	15.66
Saturday, March 9, 2019	7.61

HMS Engineering

Client : The Madison Energy Group
5 Hargett St., 4th Floor
Raleigh, North Carolina 27601

Report Print Date: 19-Mar-19

Report No.: GU31919

Facility / Location: Guapos / Gaithersburg MD

Room/Equip. Tested: Walk-in Freezer

Calculation Basis

Compressor Motor: HP: 0.3 Volts: 230 RLA: 12.0 Phase: 3

Power Consumption: 2.84 kW Electricity Rate: $0.10 per kWh

Operating Basis

	(Without EnerG²)	With EnerG²	Change	% Change
Projected Run Hours / Yr:	7,242	5,639	-1,603	-22.1%
Projected Cycles / Yr:	15,426	4,987	-10,439	-67.7%

Energy Use & Cost Savings per Month

	(Without EnerG²)	With EnerG²	Change	% Change
Operating Hours / Month:	604	470	-134	-22.1%
KWh / Month:	1,714	1,335	-379	-22.1%
Energy Cost / Month	$178	$139	-$39	-22.1%

Mechanical Cost Savings per Month

	(Without EnerG²)	With EnerG²	Change	% Change
Cycles / Month:	1,286	416	-870	-67.7%
Compressor Maintenance Cost/ Month:	$42	$13	-$28	-67.7%

Combined Energy and Mechanical Cost Savings

	(Without EnerG²)	With EnerG²	Change	% Change
Energy & Mechanical Cost / Month:	$220	$152	-$68	-30.8%
Energy & Mechanical Cost / Year:	$2,639	$1,827	-$811.82	-30.8%

EnerG² Return on Investment Months: 13.29

SMARTware 11 - [Data Download]

File Edit View Logger Tools Data Window Help

Summary

GuaposFreezeMD.log (CT18040006

Data File Name:	CT18040006 Guapos Freezer MD Baseline (*saved*)	
Logger Serial Number:	CT18040006	
Description:	DENT SMART LOGGER	
Elapsed Time Since Reset:	168.00	hrs
On-Time Since Reset:	138.89	hrs
Percent On Since Reset:	82.67	%
Connected Load:	No Load Defined	
Energy Cost:	Unknown	
Data Starts:	3/1/2019	12:00:00 PM
Data Ends:	3/8/2019	12:00:00 PM
Data Elapsed Time:	168.00	hrs
Estimated Annual Hours On:	7242	hrs
Number of Turn Ons:	296	
Percent On:	82.67	%
Data On-Time:	138.89	hrs
Average On-Time:	0.47	hrs
Longest On-Time:	0.70	hrs
Shortest On-Time:	<0.01	hrs
Number of Turn Offs:	297	
Percent Off:	17.33	%
Data Off-Time:	29.11	hrs
Average Off-Time:	0.10	hrs
Longest Off-Time:	0.15	hrs
Shortest Off-Time:	<0.01	hrs

SMARTware 11 - [Data Download]

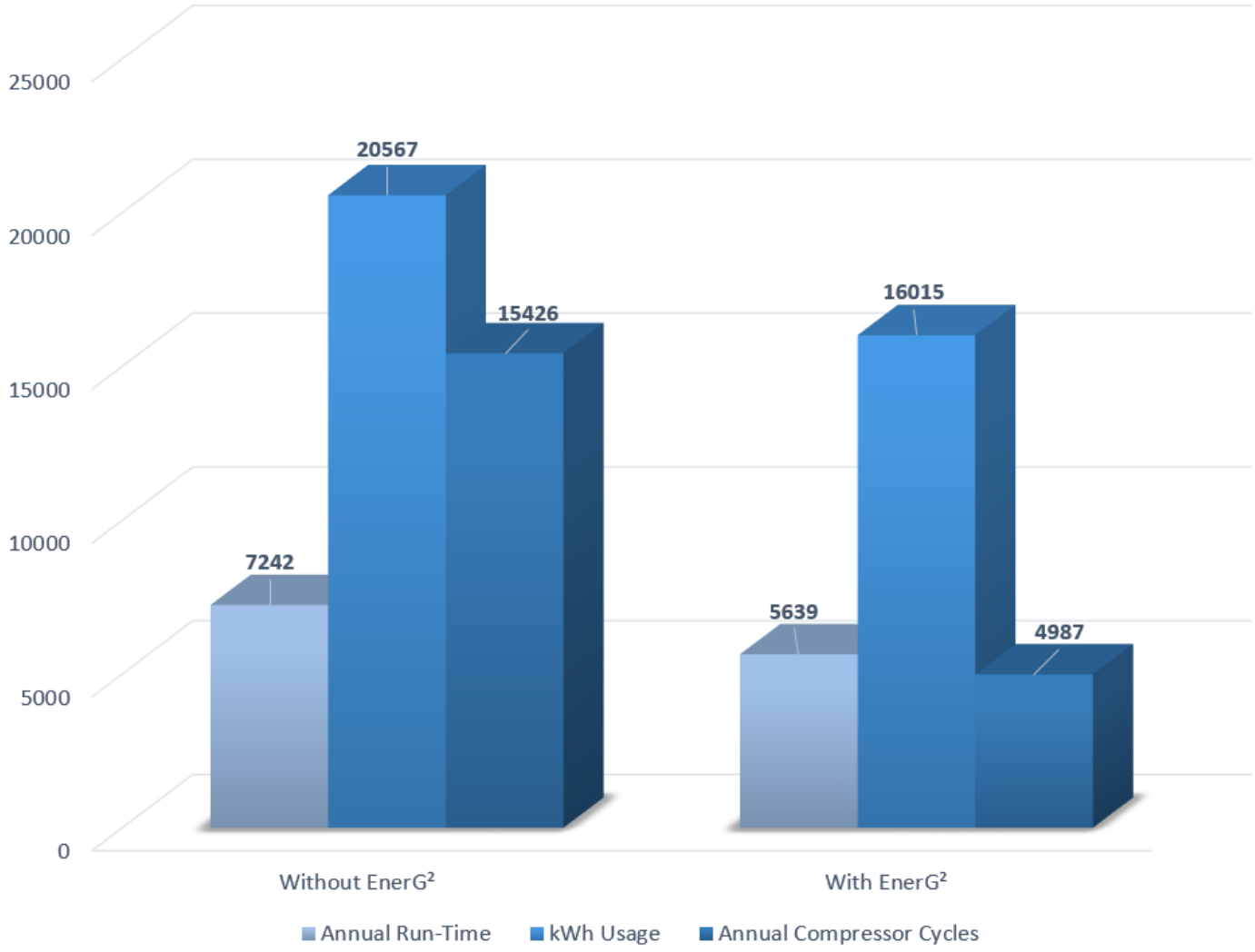
File Edit View Logger Tools Data Window Help

Summary

GuaposFreezeMD.log (CT18040006

Data File Name:	CT18040006 Guapos Freezer MD Performance (*saved*)	
Logger Serial Number:	CT18040006	
Description:	DENT SMART LOGGER	
Elapsed Time Since Reset:	168.00	hrs
On-Time Since Reset:	108.15	hrs
Percent On Since Reset:	64.37	%
Connected Load:	No Load Defined	
Energy Cost:	Unknown	
Data Starts:	3/8/2019	12:00:00 PM
Data Ends:	3/15/2019	12:00:00 PM
Data Elapsed Time:	168.00	hrs
Estimated Annual Hours On:	5639	hrs
Number of Turn Ons:	96	
Percent On:	64.37	%
Data On-Time:	108.15	hrs
Average On-Time:	1.13	hrs
Longest On-Time:	1.69	hrs
Shortest On-Time:	<0.01	hrs
Number of Turn Offs:	97	
Percent Off:	35.63	%
Data Off-Time:	59.85	hrs
Average Off-Time:	0.62	hrs
Longest Off-Time:	0.93	hrs
Shortest Off-Time:	<0.01	hrs

CT18040006 Data Graph Series | Guapos Freezer MD



Serial Number: CT18040006
Description: DENT SMART LOGGER
On-Time Since Reset: 247.04 hrs
Off-Time Since Reset: 88.96 hrs

Date	TOU/Day (hrs)
Friday, March 1, 2019	10.26
Saturday, March 2, 2019	21.17
Sunday, March 3, 2019	18.05
Monday, March 4, 2019	17.59
Tuesday, March 5, 2019	20.99
Wednesday, March 6, 2019	19.81
Thursday, March 7, 2019	20.78
Friday, March 8, 2019	20.48
Saturday, March 9, 2019	16.90
Sunday, March 10, 2019	14.33
Monday, March 11, 2019	13.27
Tuesday, March 12, 2019	13.77
Wednesday, March 13, 2019	14.97
Thursday, March 14, 2019	16.82
Friday, March 15, 2019	7.85

intelliHVAC

INTELLIGENT SOLUTIONS FOR HEATING AND AIR

IntelliHVAC reduces energy consumption in HVAC units through efficient fan control and compressor cycling. The combination of these two technologies optimizes performance by allowing the fans, which use 8 to 15 times less energy than the compressors to capture latent energy that would otherwise be lost. It is retrofitted at the 24-volt terminal and requires no additional maintenance.

Guaranteed to Reduce Energy Costs 10 – 30%
Reduces Compressor Cycles by 20%
Prevents Wear and Tear
Extends Life of Equipment
12 - 18 Month ROI
Reduced CO2 Emissions – Go Green!
Lifetime Warranty

IntelliHVAC is a dual microprocessor technology that easily retrofits to any existing central air HVAC system. It contains both a *post-purge* and *compressor cycle functions* that work together to create a significantly more efficient environment within the system. The inefficiency and therefore *opportunity* is that there is still latent cold energy on the coil or heat energy in the exchanger and this energy is wasted as it dissipates within the system. IntelliHVAC captures this excess energy through its *post-purge function*. This process is known as latent recovery and has been verified by numerous utility companies.

When the HVAC system reaches set point, IntelliHVAC will extend and optimize the fan run-time based on the previous compressor cycle to ensure that the latent hot or cold energy has been captured and that all of that air is circulated all the way through the duct system so that it is not wasted. IntelliHVAC continues to monitor the system and adjust the post purge cycle based on its proven algorithm.

IntelliHVAC also has a *compressor cycle function* that increases the overall energy savings cycling the compressor off for 5 minutes for every 25 minutes of continuous run-time. This allows the fan, which uses 8 to 15 less energy than the compressor to capture the latent energy from the coil or heat exchanger. IntelliHVAC will run the fan for the equivalent amount of time that the compressor is off to ensure that air continues to circulate and there are no negative effects to the indoor air temperature quality.

Tower Engineering
Craig Andes
Owner / HVAC Engineer

J. Craig Andes, MBA

With close to 40 years of experience, Mr. Andes has been an industry veteran since 1977 and has a keen eye toward efficiency for his customers. Mr. Andes has owned and operated numerous businesses including several mechanical companies, an insulating company, has built numerous structures, and has directed large service-oriented companies. Mr. Andes has also been hired as a consultant by several companies to assist them in their growth and process management.

Currently Mr. Andes owns and operates Tower Engineering in the Raleigh, NC metro market.

After earning his MBA at Union University in Jackson, TN, Mr. Andes is able to merge the real-world practical side of HVAC with financial feasibility and ROI making for good common-sense guidance.

With regard to Madison Energy Group, Mr. Andes serves as an independent, 3rd party consultant and assists the company specifically with the IntelliHVAC technology. Mr. Andes has helped Madison Energy consult with companies such as Starbucks, Darden Restaurants, CBL Properties, and others in helping them to understand the mechanics of their systems as well as the benefits of the IntelliHVAC technology. Mr. Andes also manages the pilot program process, analysis and reporting on behalf of Madison.

The attached reporting is hereby approved and certified by Mr. Andes as accurate in its entirety. Mr. Andes is not compensated in any manner that is based on test results.

J. Craig Andes

Tower Engineering
Owner / HVAC Engineer
Date: 3/21/2019

Report Date:	3/21/2019

Craig Andes
HVAC Engineering Contractor

On Behalf of:	The Madison Energy Group
For Client:	Guapos

Kwh Rate:	0.10

Location: **Fairfax VA**

		Start Date	Install Date	Time	Baseline kWh Consumed	End Date	Time	Performance kWh Consumed
Area:	RTU 1	2/23/2019	3/2/2019	12:00PM	**942.6**	3/9/2019	12:00 PM	**795.1**
Meter #	28269							
				kWh/Month	4,039.71		**kWh/Month**	3,407.57
				kWh/Yr	49,149.86		**kWh/Yr**	41,458.79

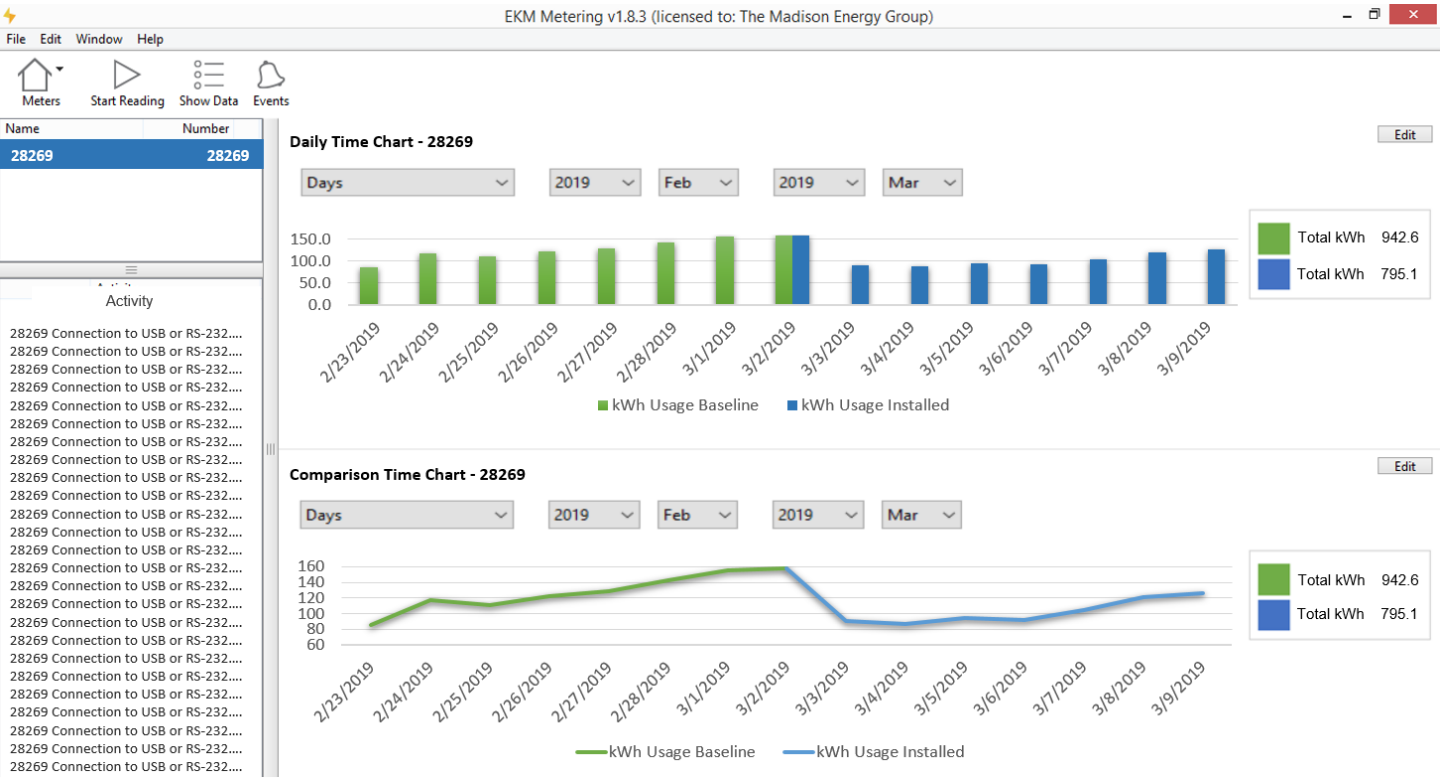
RTU Summary		
kWh Diff./Period		147.5
kWh Diff./Yr		7,691.07
% Change		16%
Savings/Yr	$	799.87

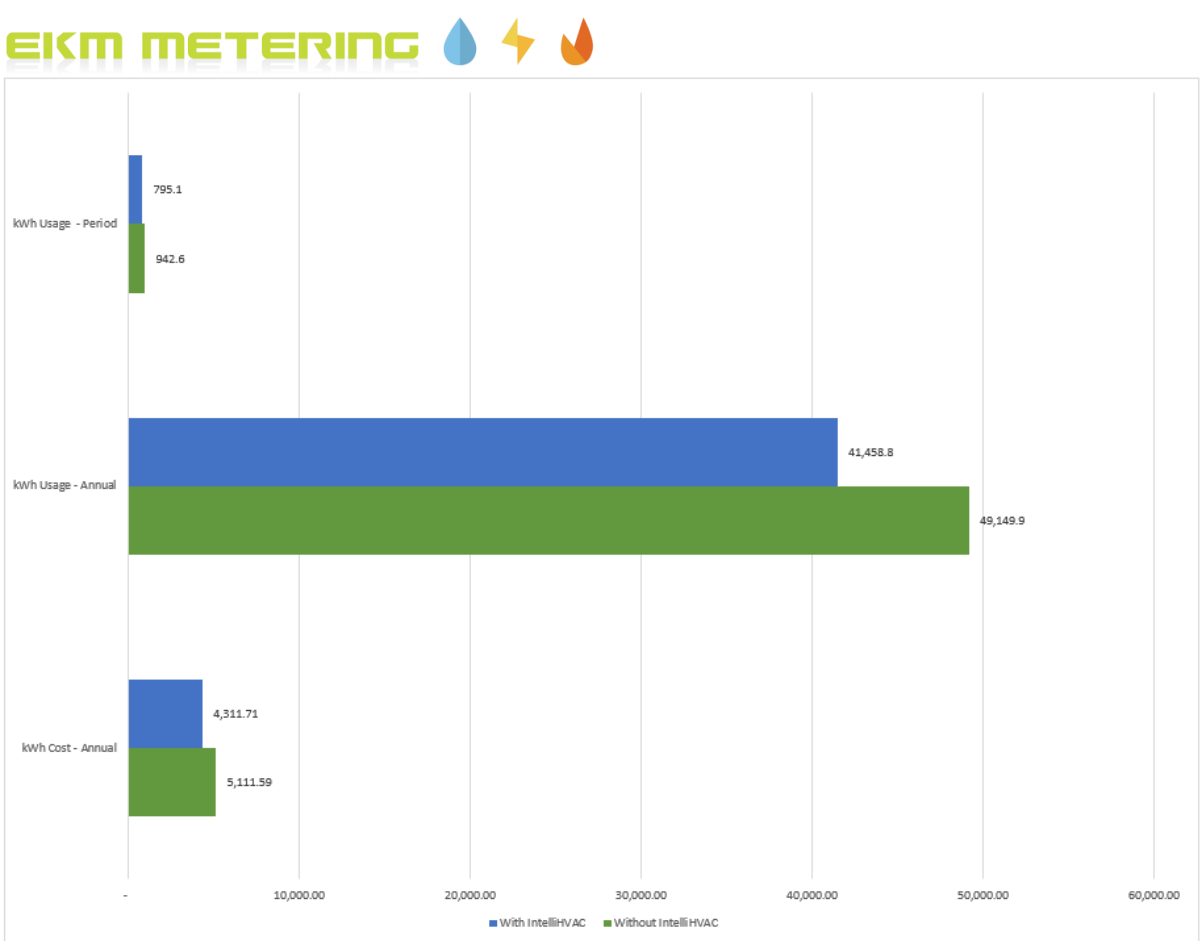
Location: **Gaithersburg MD**

		Start Date	Install Date	Time	Baseline kWh Consumed	End Date	Time	Performance kWh Consumed
Area:	RTU 1	3/1/2019	3/8/2019	12:00PM	**1,009.7**	3/15/2019	12:00 PM	**840.9**
Meter #	15569							
				kWh/Month	4,327.29		**kWh/Month**	3,603.86
				kWh/Year	52,648.64		**kWh/Year**	43,846.93

RTU Summary		
kWh Diff./Period		168.80
kWh Diff./Yr		8,801.71
% Change		17%
Savings/Yr	$	915.38

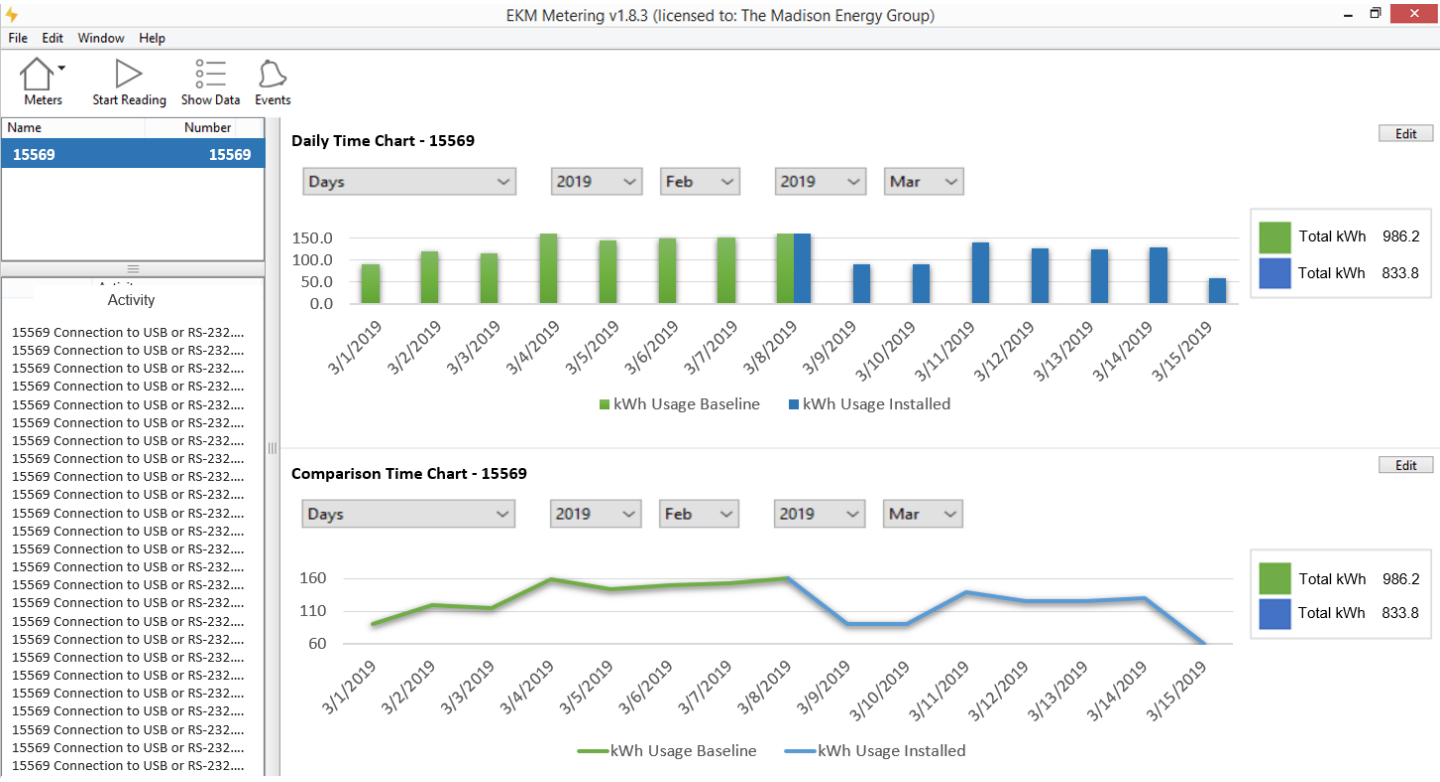
Project Summary			
Total kWh/Yr Reduced		16,492.79	
Average Annual Savings	$	857.62	
Normalized for Season	$	1,457.96	
Projected ROI		8.22	**Months**


EKM Metering v1.8.3 (licensed to: The Madison Energy Group)
File Edit Window Help
Meters
Start Reading
Show Data
Events
Name
Number
28269
28269
Activity
28269 Connection to USB or RS-232....
Daily Time Chart - 28269
Edit
Days
2019
Feb
2019
Mar
150.0
100.0
50.0
0.0
2/23/2019
2/24/2019
2/25/2019
2/26/2019
2/27/2019
2/28/2019
3/1/2019
3/2/2019
3/3/2019
3/4/2019
3/5/2019
3/6/2019
3/7/2019
3/8/2019
3/9/2019
kWh Usage Baseline
kWh Usage Installed
Total kWh 942.6
Total kWh 795.1
Comparison Time Chart - 28269
Edit
Days
2019
Feb
2019
Mar
160
140
120
100
80
60
2/23/2019
2/24/2019
2/25/2019
2/26/2019
2/27/2019
2/28/2019
3/1/2019
3/2/2019
3/3/2019
3/4/2019
3/5/2019
3/6/2019
3/7/2019
3/8/2019
3/9/2019
kWh Usage Baseline
kWh Usage Installed
Total kWh 942.6
Total kWh 795.1


EKM METERING
kWh Usage - Period
795.1
942.6
kWh Usage - Annual
41,458.8
49,149.9
kWh Cost - Annual
4,311.71
5,111.59
-
10,000.00
20,000.00
30,000.00
40,000.00
50,000.00
60,000.00
With IntelliHVAC
Without IntelliHVAC

EKM-OmniMeter v.3
Guapos Fairfax RTU 1 LogFile
Total kWh Usage for Period: 1737.7

Date	Kilowatt Hour	Avg. Voltage	Avg. Amps	Avg. Watts	Avg. Cosî¸ (Power Factor)
2/23/2019	84.9	118.7	24.8	2532	LO.86
2/24/2019	117.8	118.2	25.2	2526	LO.85
2/25/2019	110.9	118.9	25.0	2544	LO.86
2/26/2019	122.2	118.8	24.6	2510	LO.85
2/27/2019	129.0	119.4	24.8	2506	LO.85
2/28/2019	143.1	118.9	25.0	2548	LO.86
3/1/2019	155.7	118.8	25.2	2522	LO.87
3/2/2019	158.0	117.6	24.6	2488	LO.86
3/3/2019	90.2	117.3	24.8	2480	LO.87
3/4/2019	87.3	117.5	24.6	2454	LO.85
3/5/2019	95.0	118.3	24.4	2446	LO.86
3/6/2019	92.2	117.8	24.4	2434	LO.86
3/7/2019	104.9	117.6	24.4	2438	LO.87
3/8/2019	120.7	117.4	24.2	2436	LO.87
3/9/2019	125.8	116.3	24.2	2428	LO.85


EKM Metering v1.8.3 (licensed to: The Madison Energy Group)
File Edit Window Help
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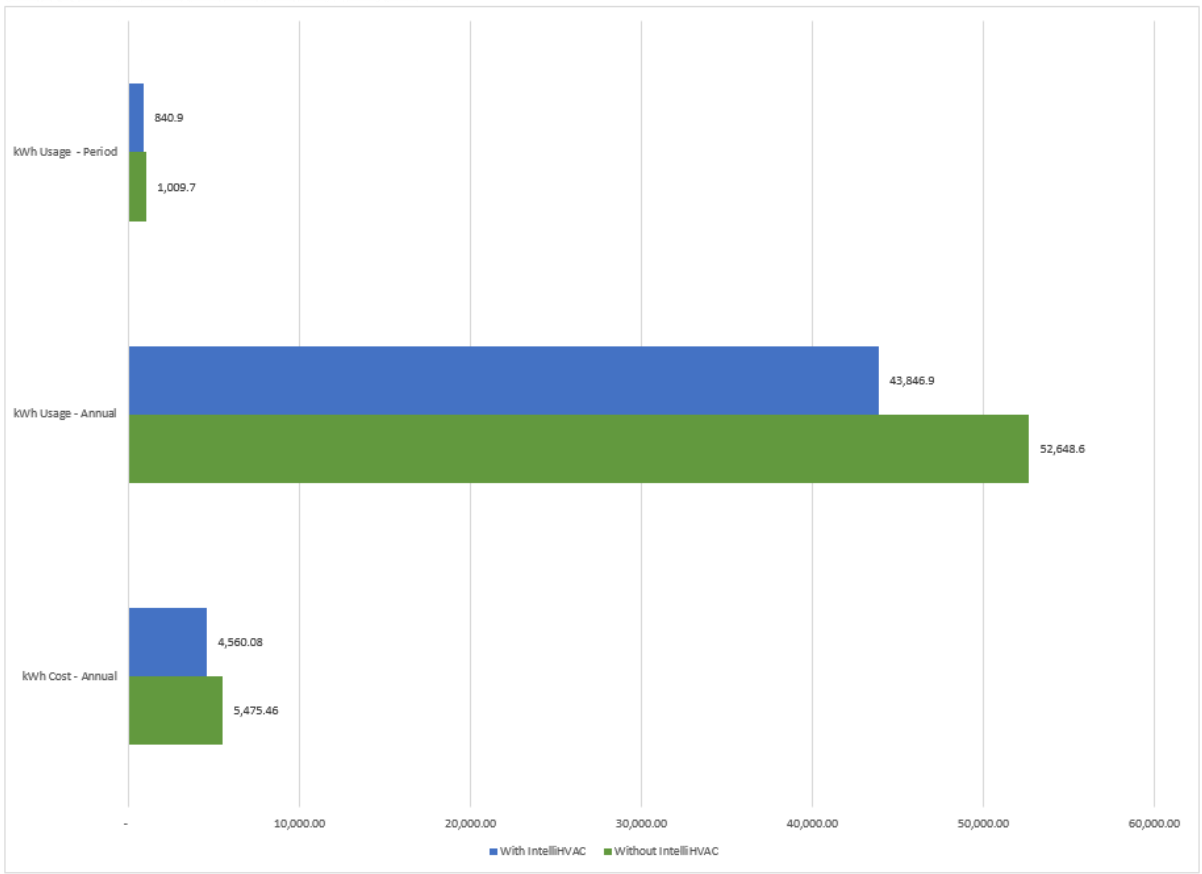
Start Reading
Show Data
Events
Name
Number
15569
15569
Activity
15569 Connection to USB or RS-232....
Daily Time Chart - 15569
Edit
Days
2019
Feb
2019
Mar
150.0
100.0
50.0
0.0
3/1/2019
3/2/2019
3/3/2019
3/4/2019
3/5/2019
3/6/2019
3/7/2019
3/8/2019
3/9/2019
3/10/2019
3/11/2019
3/12/2019
3/13/2019
3/14/2019
3/15/2019
kWh Usage Baseline
kWh Usage Installed
Total kWh 986.2
Total kWh 833.8
Comparison Time Chart - 15569
Edit
Days
2019
Feb
2019
Mar
160
110
60
kWh Usage Baseline
kWh Usage Installed
Total kWh 986.2
Total kWh 833.8


EKM METERING
kWh Usage - Period
840.9
1,009.7
kWh Usage - Annual
43,846.9
52,648.6
kWh Cost - Annual
4,560.08
5,475.46
-
10,000.00
20,000.00
30,000.00
40,000.00
50,000.00
60,000.00
With IntelliHVAC
Without IntelliHVAC

EKM METERING

EKM-OmniMeter v.3
Guapos Gaithersburg RTU 1 LogFile
Total kWh Usage for Period: 1850.6

Date	Kilowatt Hour	Avg. Voltage	Avg. Amps	Avg. Watts	Avg. Cosî¸ (Power Factor)
3/1/2019	90.0	123.6	24.4	2608	LO.85
3/2/2019	119.9	124.1	26.2	2632	LO.85
3/3/2019	114.4	124.2	25.6	2610	LO.86
3/4/2019	159.4	123.6	25.8	2632	LO.87
3/5/2019	144.2	124.3	25.4	2592	LO.86
3/6/2019	149.3	124.2	25.8	2570	LO.86
3/7/2019	152.5	123.5	25.2	2562	LO.85
3/8/2019	160.0	123.5	25.4	2606	LO.87
3/9/2019	90.2	123.4	25.8	2482	LO.86
3/10/2019	91.3	123.1	25.6	2498	LO.86
3/11/2019	139.6	122.9	25.8	2500	LO.85
3/12/2019	125.5	122.5	25.8	2458	LO.87
3/13/2019	125.1	123.1	25.2	2456	LO.86
3/14/2019	129.7	123.4	25.0	2482	LO.86
3/15/2019	59.5	122.3	25.0	2486	LO.85

The Madison Energy Group
ENERGY EFFICIENCY SOLUTIONS

Proof of Concept Performance Summary

Program Duration - 2/23/2019 - 3/15/2019

EnerG² Summary

Annual Savings - Cooler	$	711.87			
Annual Savings - Freezer	$	811.82			
Average Annual Savings per Unit	$	761.85			
Projected Annual Savings for		18	units	$	13,713.21
Projected Savings Over 10 Years				$	137,132.10
Return on Investment ----------			9.43		Months

IntelliHVAC Summary

Annual Savings - RTU 1	$	799.87			
Annual Savings - RTU 2	$	915.38			
Average Annual Savings per Unit	$	857.63			
Annual Savings Normalized for Season	$	1,457.96			
Projected Annual Savings for		27	units	$	39,364.92
Projected Savings Over 10 Years				$	393,649.20
Return on Investment ----------			8.22		Months

Overall Summary of Performance

Combined Monthly Energy Savings	$	4,423.18
Combined Annual Energy Savings	$	53,078.13
Combined Energy Savings Over 10 Years	$	530,781.30
Cumulative Return on Investment/Months		9.92

MADISON ENERGY GROUP
ENERGY EFFICIENCY SOLUTIONS

Limited Lifetime Replacement Warranty

Guarantor: The Madison Energy Group, located at 5 West Hargett St. 4th Floor Raleigh, NC 27601 will fulfill and administer the obligations of this performance guarantee.

This performance guarantee certifies that The Madison Energy Group's (manufacturer) EnerG^2 will perform satisfactorily during the guarantee period in accordance with its original energy saving standards. If the unit is defective when received or becomes defective, it will be replaced in accordance with this Limited Lifetime Warranty/Performance Guarantee. Please call The Madison Energy Group at 919-443-2404 Option 2 if this occurs.

The performance guarantee does not cover negligent, fraudulent and/or intentional damage. If the EnerG^2 unit is damaged, another EnerG^2 unit will be sent immediately as a replacement. For coverage to be valid, the client must register with The Madison Energy Group and provide proof of purchase in the form of a paid invoice from either The Madison Energy Group or one of its qualified, contracted distributors. The unit must also e installed properly along with manufacturer specifications.

This performance guarantee is effective from the date of purchase, provided that adequate proof of purchase is maintained, the product is properly registered (see below) and the product is installed properly. The Madison Energy Group must be notified immediately of any defects in the unit with all records being made available for inspection. Defects will be verified. This guarantee is exclusive and in lieu of any other performance guarantee or warranty of merchantability or fitness for a particular purpose.

In no event shall The Madison Energy Group be liable for any special, indirect, incidental or consequential damages. This guarantee, covering the replacement of the EnerG^2 unit is void is the product covered by the guarantee has been subject to: intentional damage, alteration, tampering, acts of God and other insurance perils, faulty installation or claims covered by insurance or service contract. The coverage applies only to EnerG^2 and no other product. Claims not submitted in accordance with the terms and conditions of this guarantee are void. Damage by unreasonable or unintended use, neglect, improper service or other causes not arising of defects in material or workmanship are not covered.

To Make a Claim: For service please contact The Madison Energy Group support line at 919-443-2404

To Register: In order for coverage to be valid, you must register your EnerG^2 within 30 days of purchase at www.themadisonenergygroup.com. Coverage is non-transferable.

PHONE: 919-443-2404
FAX: 919-800-3700
INFO@THEMADISONENERGYGROUP.COM

5 WEST HARGETT ST. · 4TH FLOOR
RALEIGH, NC 27601
WWW.THEMADISONENERGYGROUP.COM

MADISON ENERGY GROUP
ENERGY EFFICIENCY SOLUTIONS

Limited Lifetime Replacement Warranty

Guarantor: The Madison Energy Group, located at 5 West Hargett St. 4th Floor Raleigh, NC 27601 will fulfill and administer the obligations of this performance guarantee.

This performance guarantee certifies that The Madison Energy Group's (manufacturer) IntelliHVAC will perform satisfactorily during the guarantee period in accordance with its original energy saving standards. If the unit is defective when received or becomes defective, it will be replaced in accordance with this Limited Lifetime Warranty/Performance Guarantee. Please call The Madison Energy Group at 919-443-2404 Option 2 if this occurs.

The performance guarantee does not cover negligent, fraudulent and/or intentional damage. If the IntelliHVAC unit is damaged, another IntelliHVAC unit will be sent immediately as a replacement. For coverage to be valid, the client must register with The Madison Energy Group and provide proof of purchase in the form of a paid invoice from either The Madison Energy Group or one of its qualified, contracted distributors. The unit must also e installed properly along with manufacturer specifications.

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