

<u>Dixie</u> <u>Drain</u> <u>&</u> <u>Plumbing</u>

HVAC-Controls Service & Retrofit

P.O. Box 53088 Knoxville, TN 37950-3088 PH 865-909-9353 Fax:865-766-0275 P.O. Box 8795 Chattanooga, TN 37414-8795 PH 423-295-4132 Fax:865-766-0275 Plumbing/Drain Cleaning
*a Division of air Reliant Services
2365 Ackworth Due West Blvd
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March 19, 2010

Dale A Erickson II SATIC Inc 2801 Connery Way, Suite A Missoula, MT 59808

Dear Dale:

I am writing this letter as a testimonial for the SATIC Global Energy Saver. Let me first give you some information on my background and experience in the field of energy conservation and HVAC/Electrical/Facilities maintenance-repair-retrofit.

- * I currently am the President of Air Reliant Services LLC. We perform repair and maintenance work for commercial retail as well as property management companies. We also do the same for several light industrial clients. One of the main focuses of our services is reduction of energy consumption via optimizing equipment performance by maintaining the systems so they will run at or near design efficiencies. We also assist in Energy Saving Contracting Initiatives with both electro-mechanical and water conservation engineering firms.
- * Before this phase of my career, I managed the East Tennessee Area Office for ARS Service Express. A national HVAC contracting firm with worth in excess of 500 million dollars. My position included both technical management duties as well as business procurement team management.
- * Previous to ARS, I worked with Trane Company in their Energy Savings Contracting Division. This required facilitating and assisting both sales and engineering expertise for assessment, presentation, and implementation of the measures determined to best maximize the Return On Investment for the client, and to optimize their facilities' energy savings.
- * Previous to Trane I was a Field Service Technician and later the E TN Sales Manager for a Nashville based Mechanical Contractor and was with the firm for 16 years. As my position grew in responsibility, my main focus was sales and installation of Building Automation Systems.
- * Military experience: US Navy Nuclear Propulsion Program Graduate.
- * Family: Blessed husband to a wonderful spouse (Lori) and father of six children.

I was introduced to the SATIC Energy Saver by Chip Dykeman and his nephew Ryan approximately seven months ago. I have always been one to investigate thoroughly the claims of product manufacturers before I will present the same to my customer base.

I have been communicating with personnel in your Missoula operation about the SATIC and its application history and was very impressed with the testimonials of your customer base. I still however needed to verify the product worked for myself, so with your company's assistance I set up the following test with the help of Trane Company Knoxville and Southeast regional ESCO team.





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Sequoyah Elementary School SATIC test Feb 2010.

The product works based upon power factor correction and harmonics reduction. It basically conditions the electrical power supplied to the device it is installed on as well as any other device that is connected to that branch circuit. Our utility provides power at about an 87-89% power factor. The SATIC raises the factor to 95+%. This causes the amperage consumed by the equipment to decrease and in turn lowers the wattage consumed, because voltage remains constant. This results in more design horsepower being utilized to drive the load and perform the work of the motor. Reducing harmonics causes less heat buildup in the motor windings resulting in longer life cycle for the equipment. The less efficient (older) the motor is the more savings will be delivered as a result of utilizing the SATIC product.

We reviewed the findings of our test at the Sequoyah Elementary school. We established a base line by monitoring the evaporator motor amp draw with Data Loggers at five minute integrals over a 14 day 24 hour per day time frame. We then placed the STAIC on the same equipment and monitored the equipment in the same manner with the same Data Loggers 14 days 24/7.

This test resulted in 40% reduction in power usage once the SATIC was installed. The calculated ROI was 9.5 months at the existing load on the equipment (heating only with only the evaporator motor running). This far exceeded our expectations and should not be considered typical, but I believe that an estimated savings of at least 25-30% on motor loads is very, very reasonable.

The SATIC Energy Saver has exceeded my expectations and I am pleased to say that we will now be offering this as a key segment of our energy savings initiatives for our customers. We are now making arrangements to move to the "next steps" with the local school system by installing the units on selected loads at their worst school for power factor quality. If the product (and I fully expect it will) performs well, then we have an excellent opportunity to implement this program for school systems in our area.

The only negative factor I have encountered at this time is that the product is rated for 120/230 single and three phase applications. Most commercial systems are 277/480 volt single and three phase electrical systems. The SATIC R&D team has assured me that this rating will be available within 1-2 months from the date of this letter.

I highly recommend both this product and the team at its corporate headquarters. The product delivers the performance expected and the support from the staff is second to none.

Sincerely,

Larry J. Anderson

Larry Anderson
President of Air Reliant Services L.L.C.
865-909-9353 landerson@airreliantservices.com







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September 27, 2011

Greg Stallings Trane Commercial Systems 202 King Drive Franklinton, NC 27525 Plumbing/Drain Cleaning
*A Division of Air Reliant Services

RE: Meeting at Knoxville Trane Office 3-17-10 Attendees: Greg Stallings, Dr Keith Willis, Eric Simon, Larry Anderson

Dear Greg:

Thank you for facilitating the meeting with Keith and Eric this morning. Here is synopsis of our meeting and next steps as outlined by Keith, Eric, and yourself.

Two products were discussed, the SATIC Global Energy Saver power conditioning product and the Geyser Heat Pump domestic water heating product.

I: SATIC

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This test resulted in 40% reduction in power usage once the SATIC was installed. The calculated ROI was 9.5 months at the existing load on the equipment (heating only with only the evaporator motor running).

The current design of the SATIC product is for 208/230 volt single phase or three phase power and 120 volt single phase powered equipment. Greg asked when the product would be available for 460 volt equipment and I responded within 30 to 60 days.





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II: GEYSER:

The Geyser Heat Pump Water Heating system uses heat recovery from the condenser of the unit's refrigerant system to heat water with an on board heat exchanger. This product has been proven to heat water at 40-60% less energy consumption than a standard 40 to 120 gallon electric water heater. It is proven technology and qualifies for the federal tax credit for new high efficiency energy conservation equipment.

We also ran a test at the Sequoyah Elementary School over a 28 day period. Our results were compromised due to an un-insulated sensor for the Geyser to sense the water temperature in the existing water heater holding tank. We have since corrected the problem and are now running a test on the equipment for 14 days utilizing the Data Loggers to monitor power consumption. The results of this final test will be available on March 31, 2010.

The Data Loggers did however reveal that the water heater ran at an average of 3.120 kw/hr consumption during energized cycles to heat water and the Geyser ran at .840 kw/hr when energized to heat water. The un-insulated sensor did however cause the Geyser to run for extended periods of time and therefore drastically reduced the savings due to the compromised test conditions.

NEXT STEPS:

GEYSER:

Keith requested we complete the test on the Geyser and report our findings. Greg stated that there may be a good application for the Geyser in the school system for heating domestic water in the public restrooms of the schools. Keith also requested we send him specs on the Geyser, to determine if it will be able to meet demand for hot water in this application. Both of these requests are being addressed at the time of this report. I am attaching spec sheets for each product along with some case studies for the same.

SATIC:

Keith requested we test this product at the Farragut High or Middle Schools. He also suggested the following parameters and actions:

1: Determine which is the "wild" leg on the electrical system to ensure we monitor the most stable phase of the distribution system.







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- 2: Identify which equipment we want to monitor and test for 30 day increments vs. the 14 day slot of the initial test.
- 3: Identify which general purpose 120/208 volt systems we may want to include in the test to determine the savings on non-motor driven loads that are available for power consumption reduction.
- 4: Eric and Greg agreed in principle with my request that we establish a minimum acceptable level of power savings for the test, install the product, and if the expectations are met, the customer purchase the installed items at a predetermined price and the product remains on site.
- 5: We should monitor all phases of each conditioned branch circuit.
- 6: The test period should be the same as the 30 day billing period for Knox County Schools from Knoxville Utilities Board.

This concludes the synopsis of our initial meeting at the Knoxville Trane Office today (3-17-10). Please contact me with any questions, concerns, or corrections.

Thank you for your time and consideration.

Sincerely,

Larry J. Anderson

Larry Anderson President Air Reliant Services/Dixie Drain & Plumbing 865-909-9353 865-680-3506 cell 865-766-0275 fax landerson@airreliantservices.com

CC: Dr Keith Willis Eric Simon





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This product will result in savings on not only motor loads, but general purpose electrical circuits as well. It also provides surge and lightning protection for the equipment it is mounted on in then field.







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ROI calculation:

Before SATIC was implemented:

5.25 amp avg x 217 x 1.732 / 1000 = 1.973 kw x 336 hrs = 662.93 kwhrX.10 per kwhr = 66.29 per 14 days

After SATIC was implemented:

2.94 amp avg x 217 x 1.732 / 1000 x 336 = 371.27 kwhrs x .10 per kwhr = 37.13 per 14 day period

Savings: 66.29 - 37.13 = 29.16 svgs per 14 days

29.16/14=2.08 per day

2.08 x 300 school days = 624.00 per year

Payback 3 Satic units at 488.00 installed per a/c

488.00 / 624.00 = .78 years or 9.5 months

These calculations were run without compressors running on the 7.5 ton RTU. During full load conditions, the savings dollars increase dramatically!

We welcome the opportunity to discuss this product and its possible applications in your business facilities. Please feel free to call me with any questions or should you want to schedule an appointment to discuss the SATIC Global Energy Saver.

Larry J. Anderson President Air Reliant Services LLC PO Box 53088 Knoxville, TN 37950-3088 landerson@airreliantservices.com

