



Q & A WITH JEFF GALEA OF BOCA THEATER & AUTOMATION

LIVING WITH THE ROSEWATER HUB

Last August Jeff Galea, the owner of Boca Theater and Automation, was the first person to order and receive a RoseWater Residential Energy HUB. Jeff was going to use it in his new location to improve power quality, provide battery backup and eventually integrate solar panels. Jeff took a risk on a new product from a new company and for that, we at RoseWater will be forever grateful.

Now that he has had the product for the better part of nine months, I wanted to get Jeff's unvarnished opinion on his experience with the product and our company.

What follows are the questions I asked and the answers he gave. I have not altered his responses in any way.

Jeff, You were the first person to buy a RoseWater HUB, what prompted you to take the risk on a new product?

There is an absolute certainty of brief and semi-brief power outages in South Florida where I run my AV business. This happens on bright sunny days and during the stormy season alike. It is a serious problem and in my experience, it is the primary problem that causes reliability issues with the systems I sell and support, as well as the systems I use to run my company.

Being an Electrical Engineer myself, I have of course seriously investigated the concept of building and delivering large scale power conditioning and UPS systems to my customers as an in-house product. I discovered that

WHAT IS THE ROSEWATER HUB?

"The most complete intelligent residential energy solution on the market today"

The RoseWater Energy Hub is the first all-in-one residential and light commercial power solution integrating three capabilities into one platform to serve the complete electrical needs of an entire premises, in essence transforming the electrical system in place into a microgrid:

- Power conditioned output protects and enhances the performance of all home and office electronics. With power quality higher than utilities, sensitive audio and video systems as well as home networking components, home automation and lighting control systems will perform at their best and last longer.
- Uninterruptable Power Supply with zero transfer time, and a large amount of battery back up will safely and securely allow you to ride out power failures.
- Ready for renewables – users adopting the RoseWater Energy Hub for power quality and back-up reasons can "go solar" for relatively little additional cost, for greener living.

The RoseWater Energy Hub offers a seamless total system integration solution, using a dual inverter system with solar input, that blends power conditioning, backup, and renewable energy management into one pre-assembled, configured and integrated industrial-grade platform. With everything integrated, prewired and tested, the potential for installation and set-up problems is greatly reduced at the jobsite.

To learn more about the HUB, please visit <http://www.rosewaterenergy.com/product-solutions>



while I could theoretically assemble the components to take care of my immediate problem of keeping my business powered and safe 24x7, building a system that is economical while being 100% reliable, scalable, repeatable, supportable, and ultimately upgradable as battery and solar technologies evolve is quite a different proposition. After following RoseWater's progress over the years and talking with the visionaries that designed its flagship product, it became abundantly clear to me that they not only understand the problem – but have assembled a highly capable team of engineers to build a product that simply is not possible to do on a small scale. RoseWater absolutely nailed it and I wanted to be first in line to utilize this visionary and absolutely necessary product.

What did you expect from the HUB?

This is the third facility I have built over the years; the other two utilized small commercially available UPS's powering our servers, workstations, and core AV gear. Each UPS utilized either two or four 12V batteries. To support a staff of 28 employees, a server room, and an AV rack, I maintained approximately 120 batteries powering in excess of 30 individual UPSs. During a power outage, it was a near certainty that one or more UPS would die unpredictably after a few minutes. It was like playing Russian Roulette with my business and its productivity, not to mention putting sensitive electronics at risk. When I was out of town during an outage, my business would be in chaos as my employees would not know what to do first: Should they shut down

“What I expected from the Hub was simple, carefree, reliability. That's what I have and now that I have lived with it for months, I can't imagine life without it.”

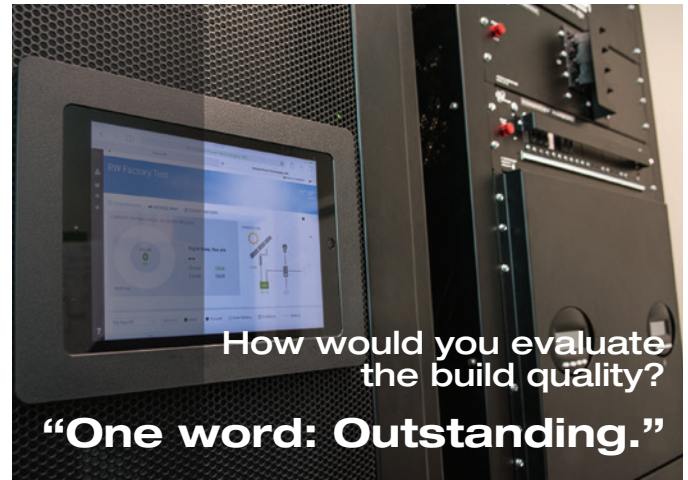
PCs and Servers to avoid failures? In what sequence? How long should they wait? If an outage happened during the night, I would wake up to a potential mess.

Has it met those expectations?

As I write this review from my office in Boca Raton, FL – we are going on 37 minutes of no power. Without RoseWater powering my building, its work stations, servers, and AV gear – I would not be writing this now. Not only would I not be listening to my favorite background music while I work comfortably at my desk, but my employees would be wandering around without access to business critical information that directs their activities, the VOIP phones would be down, and I would be stressed out wondering when the power will come back on. With RoseWater, it's business as usual, no worries, and no downtime. We did not miss a beat – literally and figuratively!

Florida is notorious for power problems, has the HUB mitigated or eliminated the typical issues created by poor power quality?

I have had zero power-related failures since installing the Hub and absolutely zero hum and noise in my high-end AV systems. I have an extremely expensive projector in our Theater



demo room, and it has never suffered a power outage – something that would have caused one or both of its bulbs to blow in the past.

I would say, yes, absolutely, the power-related problems I lived with and fought relentlessly without the Hub are completely gone.

Can you comment on the power quality produced by the HUB?

Many people are told that a generator is a good solution for backup power. This is a mistake – a generator takes time to kick on; even a second would be too long as sensitive systems would not tolerate the blip. Very brief outages do not trigger a generator as it simply can't start up and trigger the transfer switch that fast. And even worse, we see many cases where the power flickers off and on several times before settling off or on. During this time, sensitive equipment is thrashing off and on and the generator isn't doing anything because the outages are too brief. When the power is off long enough to cycle the generator on, it generates the dirtiest power imaginable which causes problems with everything from business equipment to lighting control, and all the AV in-between. In fact, I have clients with generators that go into



self-test periodically and even the test cycle causes unintended problems.

With the Hub, I am getting a clean 60 cycle sinewave during an outage, while powered, and all the in-between times. When the power fluctuates several times before settling off or on, connected equipment is completely isolated.

How has RoseWater been to work with?

My experience has been flawless. It appears to me that RoseWater has built a professional organization geared to serving high-end clients.



Have they been responsive to your needs?

RoseWater noticed potential issues in their lab that I had not yet experienced, and may never have experienced. Because they understand the concept of “mission critical”, they proactively contacted me and scheduled an upgrade, with zero downtime, that corrected a problem I didn’t know I had. I’d say they were pretty responsive.

How would you evaluate the installation process?

Preparation is the key, and we were prepared. I designed my new building’s power distribution infrastructure knowing exactly what would be powered by the Hub and where

it would be located. RoseWater sent me a floor template so I could precisely work out the location and pre-drill holes in the slab to bolt the unit down. Working with my on-site electricians and under careful review of RoseWater, I had a critical load panel pre-wired, conduit to the roof for future PV panels, and a 150A feed from our MDF ready to go prior to their arrival.

The batteries and other accessories were shipped in advance on a

pallet, and the unit arrived as scheduled on a large truck with a lift gate. RoseWater’s deployment team flew in and supervised the delivery. The units were packaged well, but obviously heavy, bulky, and too tall for our entry door without tilting the unit. The team decided the truck that was sent was not adequate, and hand truck was needed, and it would therefore be too risky to try to install the unit without rethinking the process. They rescheduled everything for the following day, handling all the logistics themselves. On the second attempt, the day-1 issues were solved and the Hub was brought in the building and bolted into the slab without incident. The rest of the installation was textbook – like watching a scene from a NASA control room where a team lead was reading pre-written procedural steps aloud while the other engineers were acknowledging the steps and executing them methodically. It was a complicated, but completely controlled precision operation. The unit on turned without incident and has been powering our facility ever since.



How are your clients reacting to the HUB?

I have given breakfast talks to architects and builders who have heard that we have a unit, and I show the Hub to everyone who visits. It certainly has generated a lot of interest. While it's certainly not an impulse buy, clients with generators already have critical load panels and understand the problems associated with generated power – so it resonates with them and they are taking notice. Clients and GCs building new homes are talking with me about preparation, and there is serious interest from our marine clients. It will take some time to introduce a product of this scale into the marketplace, but every time we have an outage and the phones start ringing from customers with issues, we continue to plant the seed that there is a definitive solution, it can be demonstrated in a live mission critical environment, and is available today. When you couple these key benefits with its ability to automatically store power from PV panels and buffer generated power,

I believe RoseWater is on the cusp of delivering truly disruptive technology to the market.

I want to thank Jeff for taking the time to respond to my questions. If anyone reading this has any questions for me or Jeff please send the questions to me and I will make sure they get answered.



Joe Piccirilli
Managing Director
and CEO,
RoseWater Energy Group



Do you consider the HUB an important product to your business?

“There is absolutely no doubt in my mind that this unit is crucial to my business”

ROSEWATER ENERGY GROUP

RoseWater Energy Group creates innovative and intelligent energy management systems for governments, utilities, industries, and residential consumers. Focused on the mission to create the next generation of renewable smart grid systems leveraging the best battery storage technologies, RoseWater works with their clients to design, build, integrate and manage power system assets specific to their needs. The Residential Energy Management Hub is the first and only power management product to be featured within a micro-grid in the head office of a major utility company. THE NEXT GENERATION OF ENERGY IS UPON US, AND ROSEWATER ENERGY WILL PREPARE YOU FOR IT.

