REGEN Energy Goes OpenADR

REGEN Energy wanted its Swarm Energy Management solution for electrical heating, cooling or discretionary loads to be less expensive and complex than other energy management systems, while still reducing peak electrical demand by up to 30 percent in commercial and light industrial properties. Achieving OpenADR 2.0a certification not only enabled the company to qualify for utility incentives but also ensures its distribution partners and customers are compliant with any OpenADR utility program. The company shared the following on the benefits it receives using OpenADR:

What is your solution, application, product that uses OpenADR technology?

REGEN Energy’s Swarm Energy Management consists of wireless automated demand management and demand response controllers that can be easily installed onto any electrical heating, cooling or discretionary load. Once installed, the REGEN controllers work together to intelligently communicate and manage the duty cycles of the loads being controlled. Utilizing REGEN’s patented swarm-based intelligence, the controllers dramatically reduce peak electrical demand by up to 30 percent of load under control in commercial and light industrial properties and allow for effective scheduling of overnight and weekend loads.

By being OpenADR-certified, REGEN’s simple Swarm Energy Management technology also enables building owners to participate in automated demand response, whether directly with a utility or through a load aggregator, at a fraction of the cost and complexity compared to an energy management system (EMS). In some cases, utility incentives are only available to customers using OpenADR-certified products. Having achieved OpenADR 2.0a certification, REGEN is able to ensure that its distribution partners and customers are compliant with any OpenADR utility program.

“Our customers receive complete demand response automation from start to finish. With automated OpenADR notification and REGEN’s automated swarm demand response techniques, they are comfortable in knowing that events are being processed optimally without impact on occupant comfort or business processes.”
What are some industry challenges your OpenADR-based products helped solve for your customer?

The Swarm Energy Management system is built to serve small to mid-size facilities, which in the aggregate represent a significant portion of demand but are typically challenging for utilities to reach. This leaves individual members of this segment with little or no insight into their energy usage and spend, and no control over their electrical loads.

One of the biggest challenges our customers face is a limited energy budget. Customers are eligible for tremendous utility incentives if they participate in demand response via OpenADR. Previously, the only way that commercial and industrial customers could convert OpenADR signals into action was if they installed and customized an EMS. This presents an obstacle for the majority of building operators, given the cost and complexity involved in installing and managing an EMS — let alone the costs to customize load-limiting strategies for each building. REGEN’s Swarm Energy Management is an affordable solution that enables our customers to participate in automated demand response, qualifying them for lucrative incentives.

Why did you choose to use OpenADR as your solution?

Many utilities, including Pacific Gas & Electric, Southern California Edison, and San Diego Gas & Electric, have mandated the use of OpenADR 2.0-certified products to implement hands-free demand response starting in 2013. While REGEN has been deploying OpenADR 1.0 solutions for a number of years, it achieved OpenADR 2.0a certification to ensure that newer customers continue to qualify for utility automated demand response programs.

Members of our target market like the flexibility that OpenADR offers. Using an OpenADR certified product allows them to sign up for different “flavors” of programs simultaneously through their utility or load aggregator. Combine OpenADR with REGEN’s smart, automated swarm logic-based solution and the result is incredibly easy demand response participation.

Furthermore, our OpenADR 2.0a certification provides our partners, customers and utilities the assurance that their investment in our technology is future-proof. The added features of 2.0 that we have embedded into our Swarm technology will help the entire ecosystem of utilities and building operators expand into new and more sophisticated load management programs, including fast response services such as renewables integration and frequency regulation services.

What is unique about how you employed OpenADR?

Our OpenADR solution utilizes its own IP backbone, so that we don’t have to interfere with customer networks or involve customer IT departments. There is no software installation required, as our portal is cloud-based.

Most importantly, our customers receive complete demand response automation from start to finish. With automated OpenADR notification and REGEN’s automated swarm demand response techniques, they are comfortable in knowing that events are being processed optimally without impact on occupant comfort or business processes.

Why should other organizations like yours join the Alliance?

The more solutions providers, utilities and load management firms that join the alliance, the more we’ll be able to further the cause of plug-and-play demand response. With a growing number of contributors, we can continue to evolve the standard to meet changing grid requirements.