



Scale Microgrid Solutions: Energizing Clients Through Uncertainty



Scale Microgrid Solutions understands the importance of

having a reliable energy source to run a successful operation. Their solution: they are a vertically integrated turn-key provider of microgrid systems. They design, plan, install, finance, operate and maintain these high-tech energy systems.

Their roots date back to the late 1940s. CEO Ryan Goodman's family-owned and operated energy company ENER-G Rudox Inc. in northeast New Jersey. While their focus was on generators and combined heat and power systems, in 2000, they branched out to microgrids. Rudox was acquired in 2013, and, in 2016, Goodman and his father rebranded to focus on distributed energy as Scale Microgrid Solutions. Today, they have offices on the East Coast and in California, with primary focus on the Golden State.

Guillermo Gomez is the microgrid architect for Scale Microgrid Solutions, and he recently set his focus on the San Joaquin Valley due to the large agricultural community and their need for uninterrupted operations.

Their clients range from agricultural packing houses and cold storage facilities, food processors and producers, school districts, biotech manufacturers, hotels, tribal lands and more.

Scale uses a performance and savings guarantee service model approach, where there are no up-front costs for the customer. They are also not obligated to promote any one brand or equipment. They choose energy equipment specific to each customer's operational schedules, seasonal requirements, and energy savings goals.

Microgrids are systems that allow businesses to generate, store and distribute power from their own facilities, as well as being fully energy independent in the instance that the grid stops working. Their purpose is to provide savings and isolate facilities and businesses from a grid outage event.

Scale's microgrids are engineered to provide uninterrupted power for both short and long duration power outages. This is especially important beginning June 2022 since utilities are implementing a new wildfire mitigation program known as Enhanced Powerline Safety Settings, which will immediately shut down portions of the grid when a branch or object comes in contact with a power line. These shutdowns will be unplanned and likely to occur between June and November. This timeframe interferes with peak packing and production seasons for several food industry businesses. Even short-term outage incidents can have a major impact on supply chains and business operations. Short-term outages will typically require a recalibration of sophisticated cooling, compression, packing, heating and assembly systems. Scale's customers can opt-out of these incidents and opt into interruptible power with a potential 20-40 percent reduction in electricity costs. Options for the microgrids include any combination of batteries, solar systems, generators, and combined heat and power systems, with smart autonomous management systems professionally tailored to each company's needs.

With a microgrid, businesses can continue to benefit from the savings of a traditional net-metered solar system in addition to combining it with other sources of power generation and energy storage. The advantage of doing this is to bolster on-site energy production and substantially offset the reliance on utility-provided

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power. This allows businesses to minimize or eliminate their utility bill. The energy storage component, typically in the form of batteries, is a fully controllable resource that can be strategically charged and discharged to manage the business's electricity demand for each electricity billing period.

A single Scale microgrid consisting of a generator, solar system and a battery would provide your business with a complete energy savings and backup solution. The microgrid has two operation modes which are "savings mode" and "island mode".

When in savings mode: During the daytime, the on-site generated solar power can cover the energy needs or store some for later use. As the sun goes down in the evening, the battery can be utilized that was charged earlier from the sun. You can also use the generator in the evening time to assist the battery in avoiding "peak-time" utility charges. This late afternoon and evening time is typically associated with peak utility electricity pricing. The microgrid eliminates this period from your utility bill and circumvents high peak-time utility charges. The system can return to using utility power at nighttime and into the early morning since it is cheapest at this "off-peak" period.

When there is a sudden power outage, the microgrid instantly switches into "island mode": In island mode, the microgrid becomes a backup power system, and the facility becomes its own power island isolated from issues on the utility grid. The advantage of utilizing a microgrid as a backup system is that the battery component can instantly back up the facility, making the transition into island mode seamless or unnoticeable. Unlike using the traditional sole diesel generator to back up "critical loads", the microgrid with its combined equipment configuration is designed to back up all of the electrical loads and allow business to continue operations as usual. This means no pause in shipments and no loss of food inventory.

"With a typical solar system, you save money by providing power to the utility grid, but when the grid is out, so is your solar system and it no longer provides any value. If you have a sole backup generator, it does not save money and becomes a sitting asset unless there is in an emergency outage. A microgrid transforms that solar system and generator into a revenue stream and backup power solution," said Gomez.

According to Gomez, their systems have high reliability and can last multiple days on a grid outage, if needed.

"It took more than 80 years for our company to be where we are today to provide the services that we provide," said Gomez. "We are about solutions that make sense for our customers."

Scale Microgrid Solutions is a Fresno County Farm Bureau Friends of the Family Farm Premium Member.

"Being a family-owned business, our business values align very well with the values of Fresno County businesses," said Gomez. "Much like with the food industry, the energy industry is also being targeted with constant policy changes, so we understand what farmers are going through."

At the end of the day, they want what's best for their clients and potential ones.

"We want our customers to be energy independent at a reasonable cost," said Gomez. "Customers in the food industry already have enough to worry about; their energy service shouldn't be one of them."

To learn more, visit scalemicrogridsolutions.com.