

Case study

Seabrook Brothers

Seabrook, New Jersey



Curtailment incentive helps frozen vegetable producer offset energy costs

Located in the town of Seabrook, New Jersey, Seabrook Brothers is a fourth-generation, family owned and operated company that grows, processes and freezes frozen vegetables for distribution throughout the Mid-Atlantic and New England states.

The opportunity

Peak electricity use between the months of April and November is 5.7 Megawatts (MW). Fifty percent of the load is used by the quick freeze, long-term storage freezers and associated compressors. By finding ways to temporarily curtail or shift the load to off-peak hours, Seabrook is able to earn significant incentive payments that help offset their overall energy expenditures.

The solution

Plant engineer, Wes Seabrook, works closely with EnergyConnect™ to make a portion of the facility's electricity load available for curtailment when prices are right. Utilizing up-to-the-minute market intelligence streamed to the facility via the GridConnect™ platform, Seabrook can decide when to participate in demand response based on how much money can be earned by making small adjustments to his production and freezing operations. The integrated platform allows him to pinpoint the hours when the electric grid is experiencing its highest demand, and thus when grid operators are willing to pay the most for demand response. In addition to participating in voluntary demand response, Seabrook is paid a premium to be on standby to automatically respond to short-term grid emergencies.

“EnergyConnect has proven to be a trusted and readily accessible partner who not only saves us money, but limits our exposure to the volatility in today’s electricity market. Their automated load shedding program allows me to focus on running green beans while EnergyConnect focuses on selling my unused electric power back into the marketplace. Whenever I want to override the program, I can take complete control.”

**WES SEABROOK
PLANT ENGINEER**

At a glance:

- Available load shed: Between 1 and 3 MW
- Power: Equivalent generating capacity to power 3,000 homes
- Earnings: 7 percent of annual \$3 million electricity bill with the earnings going directly to the bottom line

Today, Seabrook Brothers successfully reduces between 1 and 3 MW of electricity load by:

- Curbing or shifting vegetable processing activity on production lines.
- Reducing use of the Individually Quick Frozen freezer.
- By occasionally running a stand-by generator.
- For short-term emergencies, Seabrook’s generators are remotely started with a signal from EnergyConnect.

EnergyConnect sells this reduction back into the wholesale power market where Seabrook Brothers is paid a premium for the amount of power that can be reduced.

Using a simple, web-based application, Wes Seabrook can easily track his earnings and immediately evaluate the financial success that the program brings to the company. Seabrook Brothers is on track to earn back 7% of its annual electricity budget.

Getting EnergyConnected

Since its founding in 1893 by Charles Seabrook, a fresh market farmer who ventured into vegetable canning and processing, Seabrook Brothers has evolved to become a leading supplier to a variety of industries including commercial food production, food service, private label retail and Seabrook Farms branded items.

Today, Seabrook Brothers contracts with farmers throughout the mid-Atlantic to cultivate 18,000 acres of vegetables. In early April, as the harvest gets underway in the most southern portion of the region, the 214,000 square foot processing facility swings into high gear; preparing and

freezing more than ½ million pounds of produce each day. Multiple state-of-the-art production lines cut, clean, wash and blanch the produce before it is sent to the Individually Quick Frozen (IQF) freezers where it takes five minutes to blast freeze the individual vegetables prior to their being weighed and measured into totes for long-term storage in additional on-site freezers.

Getting rewarded

The ease with which the EnergyConnect platform helps automate load shedding decisions enables Wes Seabrook to spend more time working with the many family farmers with whom he partners and the clients he serves, and less time managing his energy usage.

Participating in EnergyConnect’s demand response offerings complements the company’s larger energy and environmental conservation efforts. In addition to an existing comprehensive wastewater recycling program and aggressive composting efforts which provide irrigation and fertilizer for their local agriculture fields, Seabrook Brothers is carefully evaluating the construction of an on-site solar project capable of generating 10% of the facility’s electricity usage. The chief criteria for introducing a new environmental program is that it successfully carry its own weight, without adding unnecessary risk to the overall enterprise—partnering with EnergyConnect has proven to be a good bet.

For more information,
call 866-488-7642 or visit
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