ECT.COOP
Published by the National Rural Electric Cooperative Association

New Technology That Actually Meets Co-op Needs

Take a consumer-centric startup firm, add input from electric cooperatives, and-voila!-you come up with a device that truly meets co-op needs.

That's what happened when GridBridge approached NRECA's Business and Technology Strategies unit with an idea for a device that would simultaneously manage voltage and power factor, right at a transformer.

Talk about a win-win.

"A lot of times we see companies make products for the IOUs because that's who they talk to and that's who they think the industry is. Our needs are sometimes a little different," said Brian Sloboda, BTS program manager.

"For co-ops to have an 'in' with a company at the very beginning of the design stage of a product, it helps that company develop a solution that will actually work for electric cooperatives."

BTS put together a focus group of co-op engineers that met with GridBridge at their North Carolina offices starting in 2012.

"Over the last four years they would pick the brains of these co-op engineers to figure out what features and functions co-ops would want," said Sloboda. The result is the Grid Energy Router.

"You tell the device where you want voltage, where you want your power factor set at, and the device does it," Sloboda explained. "It does it without asking you how to do it, and it does it in as close to real time as any device we have seen without someone from the co-op having to manage it."

A GER was installed at North Carolina's Brunswick EMC, where tests were conducted on the voltage optimization and the power quality functions.

"From our field demonstration, it worked beyond what we expected it to do," said Sloboda—so much so that a BTS advisory committee initially thought the results were incorrect.

While it's not perfect, Sloboda said a GER will fill a niche for co-ops having voltage or power quality issues that they cannot address through traditional methods. There are other features BTS would like to test—particularly one that allows a co-op to connect a member's solar system directly into a GER.

"It can take DC power and add it to the distribution system at the transformer level, and be able to manage the system and manage the voltage," Sloboda said.

"The reason that it works so well is that GridBridge has done a very good job of listening to the customers," Sloboda said. "It is really a great example of how industry can work in partnership with America's electric cooperatives."

GRIDBRIDGE