

Reducing 5G Energy Cost Case Study

Dynatek's affiliated company, Dynatek Energy Solutions, has for the past several years been focused on converting cellular ground towers to 5G. Data speeds on a 5G network travel up to 100 times faster than 4G data speeds and operate on a high – frequency band of the wireless spectrum. This faster network will require the addition of potentially hundreds of thousands of additional cellular towers (both mini and ground base) plus the full conversion of the approximate 125,000 existing cellular ground base tower sites in the Continental United States.

One drawback of the 5G technology is that it consumes up to five times the energy it takes to operate a 4G network. To help mitigate the additional cost associated with 5G, Dynatek Energy Solutions' ("DES") engineering team has been working with Basic Power, Inc. on the redesign of the Basic Power Unit specifically to meet the unique needs of the wireless industry as well as other commercial users of energy in North America.

Basic Power has for a number of years been successfully developing and marketing to large commercial consumers of energy the Basic Power Unit ("BPU") which has proven effective in reducing energy consumption of up to 20% and more. This collaborative effort with DES has resulted in the introduction of the Dyna Power Unit. Basic Power has granted to DES the exclusive right to market this enhanced version of the BPU to the telecommunication industry under the brand name Dyna Power Unit.

The Dyna Power Unit improves the electrical system on any telecommunication facility. It is an energy saving and power conditioning device that cuts electric usage and protects sensitive systems from dangerous disruptions on the electrical grid.

Our unit is solid state technology that saves energy by cleaning the electrical supply. This lets all equipment operate at peak efficiency. With clean power any machine runs easier and cooler. Many things can cause disruptions to the electric grid however the Dyna Power Unit is designed to correct for these disruptions. By doing so it allows all other equipment to run more smoothly which adds to the energy efficiency for the system.

Any electrical equipment struggles to run properly when the electrical supply is compromised. All machines expect to see clean power. When they do not, extra effort is expended to correct instead of just doing its job. With smooth electricity provided by the Dyna Power Unit, the electrical device can just do its intended job. This results in less wasted energy.

The Dyna Power device uses very little energy itself and during periods when the voltage is high, this unit stores the excess energy. Then when the voltage supply is low the Dyna Power Unit returns the unused energy to the system. This smooths out the utility grid and makes it easier for all the other products connected to the line.

Beyond just small perturbations on the electric line, large events are common. These come from many sources, such as, lightning strikes, trees contacting lines, equipment failure or large equipment turning off or on. These large faults are very dangerous to all electrical equipment. The Dyna Power Unit, an enhanced version of a patented Basic Power Unit, is designed to protect other machines connected to the electric grid. The Dyna Power Unit blocks these dangerous voltages and currents from getting to the rest of the equipment connected to the line. This helps prevent equipment failure resulting in less maintenance and interruptions of equipment availability.

For More Information Contact Steve Palac @ [330-448-8005](tel:330-448-8005)