



World leader in remote power solutions.



Power where you need it.

Customer Success Story: JRTWave



"In Global Thermolectric we have found a partner whose product gives us the ability to function perfectly in these tough conditions."

Brock Lounsbury

General Manager

JRTWave

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The Situation

JRTWave (JRT) is a leader in wireless Internet connections for rural communities and industry located in rugged parts of Alberta and British Columbia, Canada. To deliver service, the company developed an elegant repeater network that wound through, and sometimes over, the Rocky Mountains. By providing Internet and voice-over IP services to small towns, farms and coal mines, JRT connected people and fostered new opportunities for its customers.

JRT was the first company to offer these services and had a definitive advantage over its competition. Their quick to market strategy helped them capture the largest share of customers as individual and corporate subscribers.

The Challenge

JRT recognized the reliability of their network would be a big part of their continued success. In the initial stages they relied on skilled radio placement, signal power and their ability to predict and respond quickly to their growing subscriber base. They quickly found that a given service area could double in traffic as word of their Internet connection services spread.

Initially, JRT believed solar power would be sufficient to operate their network but harsh winter conditions proved otherwise. The solar-powered network endured challenges related to the high mountain passes and the extreme weather conditions associated with the Rocky, Kootenay and Purcell ranges. Several nodes of the system went down just before the holidays in 2005. As JRT's future depended on its reputation of providing reliable Internet service, a solution had to be found fast!

Global Thermolectric was asked to design a reliable remote power solution for the network — one that would withstand harsh mountainous environment.

Global's Solution

JRT had experience with Global's Thermolectric Generators (TEGs) on larger telecom sites and contacted the company as soon as solar charging problems began. Although the small repeaters didn't require a lot of power, the traffic levels were increasing and could grow exponentially. Global chose a larger TEG (model 5060) to support the anticipated capacity and because it had the fastest lead-time.

"Ice fog, dense cloud and heavy snow are the enemy of high elevation solar panels. The addition of a dependable parallel power generation system was paramount," says Brock Lounsbury, General Manager of JRTWave. "In Global Thermolectric we have found a partner whose product gives us the ability to function perfectly in these tough conditions."

Timing

Global's relationships with suppliers allowed it to redirect five 5060 units to JRT and replace them a week later with new units. So, less than a week after JRT arrived at Global's Calgary headquarters with a request, TEGs were sent to support its system. The TEGs and propane tanks were snow-catted up the mountains and within days JRT's customers were back online. JRT was extremely grateful for the quick turn around.

Results

Since the installation of the TEGs, the network has been operating problem-free. JRT's continued success and expansion will ensure that small and remote communities can continue to have a presence and a connection to the world around them.

