

Begin With The End in Mind

GIS Pilot Program Gives REA the Confidence to Take the Next Step



Ontonagon County Rural Electrification Association

Ontonagon County REA has been in existence since 1937. The Co-op's electrical utility spans over 110 miles and four counties of Michigan's beautiful Upper Peninsula. The 1500 miles of lines serve 4700 customers.



I could go on and on about mPower and their software system, "Integrator". The accuracy and accessibility of our maps and data, along with the flexibility and user-friendliness of the software, is just incredible. Having a secure, up to date system that we can easily query and report on is great. We're saving money and making our systems better and faster!

Bill Lundberg
Line Superintendant
Ontonagon County

The Challenge

Ontonagon County REA knew that they had a lot of catching up to do; like many other utilities, too much of their asset data was stored in the heads of their field crews, not recorded, mapped and stored in a secure system. In fact, in early 2008, the only maps they had, paper maps drawn in the 1950's, were humorously referred to as "The Dead Sea Scrolls". An up to date, map-based Asset and Outage Management System seemed like light years away. That daunting feeling was compounded when they received a quote from a software company for over a half-million dollars, just to get started on a GIS system. Bill Lundberg, Line Superintendent for the Co-op, began to seriously doubt an affordable solution existed that would meet their needs.

How do we get there from here?

The REA was looking for a cost-effective solution to get accurate, secure data, digitized asset maps and a way to track inventory that was accessible to engineers and field personnel. A key criteria was that the system would make it easy to effectively track and communicate asset and outage information across their team. They also wanted a reliable way to take the guess-work out of putting together Strategic Work Plans for the future.

Budget constraints, combined with questions about the certainty of success, created a strong desire to be sure this initiative was going to be done right the first time. Funds were limited and they knew they couldn't afford to miss the mark.

Laying the Foundation

In order to establish a solid base platform for their system, the Co-op first received training from mPower on their mapping software. *“The mPower guys really knew their stuff on the mapping software, so when it came to looking at the next step, we were confident in their abilities to help us out.”* stated Mr. Lundberg.

The next step was the Pilot Program. The 17-mile long Herman Sub-system was selected as a good representative sample of their assets and customers. Taking this portion of the utility from field locates to full GIS deployment would help confirm that the budget and timelines for the overall project were manageable. *“It was very important that we give Ontonagon REA a realistic estimate of what this process would take, in terms of both time and money. We didn’t want there to be any surprises.”* said Matt Winger, the lead Application Engineer on the project for mPower Innovations.

Seeing is Believing

On the first day of the Pilot Project, Lundberg and one of his senior lineman went into the field with mPower personnel to discuss best practices for taking locations and gathering data with the GPS

units. Using the latest GPS hardware and software, mPower personnel completed the remainder of the field work for the Herman system that same week. In the following two weeks, mPower updated the base maps

and deployed a browser-based Asset and Outage Management System. Early in Week 4, mPower was able to demonstrate the results and confirm with Bill that the project was being done correctly.

Pilot Program Schedule

Week 1 Field Data Collection

Week 2 Load Data Onto Maps

Week 3 Setup GIS & OMS

Week 4 Proof of Concept

Moving Forward

“mPower’s Pilot Program has greatly increased not only our knowledge, but our confidence in the success of the overall project.

Being able to see the end result up front made it easy for us to give them the green light to do the whole project”. The pilot began on April 28th, 2009 and the remainder of the project commenced roughly four weeks later. By the time the snow flies in Northern Michigan, the project will be nearly 75% complete, ensuring completion in Spring of 2010, even with a few months of Winter down-time.

“I am just so excited at how this whole process has gone. We thought this would cost us a fortune. mPower has given us an affordable solution that meets all of our needs—and in half the time we were originally anticipating.” States Mr. Lundberg.

The Pilot Program allowed them to lower their risk and have the confidence to make the larger investment in a full GIS System.