

Pendleton: Power and Light Prepared for May Tornado

Pendleton is a beautiful place. Some would say its among the best small-town Indiana has to offer. Main street has something for everyone with a historic downtown lined with mature trees welcoming visitors and residents. Town staff works behind the scenes to maintain these facilities and encourage good growth. Its been a privilege to work for the town on the water treatment plant, water mains, mapping, roads, and construction services.

In early 2018, Banning approached the Town's electrical department with an opportunity to map the power grid. The proposal was a team effort with the electrical experts at the Service Corp., a subsidiary of the town's wholesale power supplier, the Indiana Municipal Power Agency. The scope was to locate and collect data on each power pole across the grid. Over the next several months, Banning and IMPA Service Corp. worked together to map over 2,500 poles, and miles of overhead lines. Each pole was inspected for equipment, wire sizes, phase, and contacts, and was photographed. The map is an interactive database, a virtual treasure chest of electric distribution information. Now, the town can view all the system data on a tablet or phone using a simple app. The map is a handy tool for planning and development, too.



Figure 2. Funnel Cloud Approaches Pendleton



Figure 1. Pendleton Power Grid Map with Tornado Damage Area in Red

Early evening on Monday, May 27th, 2019, the unimaginable happened. The National Weather Service confirmed an EF-2 tornado with up to 135 mph winds ripped through the north portion of Pendleton, taking down hundreds of giant trees and miles of powerlines in its wake. Damage was extensive, streets were impassable, and thousands were without power. Amazingly, no serious injuries were reported. Emergency crews with county and town officials were quick to organize and respond. With a simple setting change, Banning made the electric map mobile app available for electric crews coming to help restore power. Crews coming were unfamiliar with the Town's system, which could have made outages longer. However, crews saw the system map on their tablets with enough data to repair the system quickly. When pole

damage was exceptionally bad, crews could see the "before" picture by clicking on the interactive map. With a heroic effort, power was restored within a few days thanks to the many helpers.

The community bonded together to clean up in time for the annual Town festival, June Jamboree. In a flurry, hundreds of volunteers came to give their support. I was blessed to be part of a small group from Banning to help homeowner's clear debris. It was amazing to hear their stories and see firsthand how the residents were helping each other out in the true spirit of community.

Our hearts go out to the Pendleton community as they continue the healing process. There is no way of knowing when disaster will strike. The only defense is to be as prepared as possible. If you're interested in learning how to help your city, town, department or utility to be prepared, we would be happy to help. Please get in touch with me, Mark Butler at mbutler@banning-eng.com or 317-707-3735.

~ Mark Butler, PE

Image Credits:

Figure 1: Banning Engineering, PC

Figure 2: https://www.heraldbulletin.com/news/homes-damaged-after-tornado-hits-pendleton/article_ed7ef8ec-80e2-11e9-a9f1-abbbb4949f05.html

Figure 3: Banning Engineering, PC

Figure 4:

<https://www.facebook.com/townpendleton/photos/a.720956737953942/2168033073246294/?type=3&theater>



Figure 4. Community Support Sign