



Tues, January 27<sup>th</sup> was the start of a rough week. An estimated 525,000 Kentuckians were without power Wednesday night. This was the second largest power outage in the State's history. Berea was hit hard as approximately 85% of the City was without power. The main transmission line from Kentucky Utilities to Berea Municipal Utilities (BMU) failed around noon leaving 100% of BMU customers in the dark. BMU was down essentially 31 hours with absolutely no power. Portions of St. Joseph Hospital were operated off a generator including the critical care unit. A 400 KVA Generator was rented for the water plant and installed at 4:00 am Wednesday morning. Water levels were down leaving less than 750,000 gallons of water left in the system prior to starting the generator (approximately 6 hours of water). Normal use is approximately 3,000,000 gallons per day during the winter season.

The Berea Municipal Utilities operates with 33 employees. This number makes up the water and sewer plants, eleven office personnel and eight employees in the electrical department (only five of them being linemen). BMU serves approximately 5,060 electrical customers. The City's main electrical feed comes from Kentucky Utilities. This power is generated in Ford, KY. The city's electrical service consists of two substations –the Rash Road Substation and the Lewis Street Substation.

To put this in perspective, BMU was 100% down with an electrical staff of eight personnel. Crews came in to help from Hudson, OH; Tipp City, OH & Mt. Sterling, KY. The total outside help was approximately 21 workers. Crews worked twenty four hours straight Tuesday and were working from 7:30am until 11:00pm until Saturday to service residents. City Hall doors remained open 24 hours until Thursday assisting residents in finding shelter. The Berea Bus Service transported people to the Church on the Rock and other local shelters. The Berea Food Bank provided food and services to City Hall and local shelters. West Side Baptist Church and many other church groups and individuals provided help in this time of need.

By Wednesday at approximately 7:15pm the main transmission line from KU was restored. That night crews worked to get the first priorities up and running. The "first priorities" were all health care providers. Approximately 40% of BMU's power was restored on Wednesday by midnight. Thursday this percentage moved to approximately 70%, 90% on Friday and 98% on Saturday. When operations ceased at 1:30 pm on Sunday there were only four residences without power (these all required attention from an electrical contractor before BMU could restore service).

BMU was prepared and a plan was followed. You may be wondering why your area was the last to be serviced. BMU operates from one main transmission line and two substations. These two substations operate 8 circuits in the city; the Rash Road Substation being the larger with 5 circuits. The lines were worked from the substation out in increments. Workers must carefully repair lines in small sections to avoid overloading and blowing the circuit again. Overloading can occur if too much line is repaired at the same time. When power is restored there is much more amperage pulled than normal because everyone's electricity is kicking on at the same time. To give an example - all heat pumps and heaters are kicking on as well as the appliances that may have been on when the power went out. To avoid blowing a circuit, crews must repair a small section of line and then move to another circuit and repair a section; all the time working out from the substation. Thus causing the process to go slowly and consequently, the further from the substation you are the longer it takes to get service. The Dixie Park area is relatively close to the Rash Road Substation; however, this area is the heaviest loaded and service problems existed before the storm making it a much more complicated area to repair.

In closing, as this has been an experience for all, we have pulled together and tackled this treacherous adventure.



## Kevin Howard Electric Foreman



About Kevin.....

Kevin has been employed with Berea Municipal Utilities (Formerly Berea College) since April 2002. He started as a lineman and became foreman in March 2007. Prior to working for Berea College, Kevin worked as an electrical contractor for twelve years. He is married to wife Tonya and has two children Shawn (15) and Hannah (8). Kevin's love for the outdoors prompted his career path. Kevin was quoted as saying "I love my job.... until an ice storm."

Kevin and his crew worked excruciating long hours resting on the cement floor of the utilities building also without electricity. Not only must it had been a challenge to adapt to the long hours in the cold, climb ice covered poles in areas where a bucket truck couldn't go, locate materials (in crisis situations unusual amounts of materials such as line and breakers are needed to restore power) and receive them quickly and being away from family for days. Kevin said that was the toughest part of this storm – "to be away from my family; they had to manage this outage without me." Along with all of these challenges Kevin was responsible for making the tough decisions to ensure the safety of everyone and to restore power as quickly as possible.

Here are some things we can do to make these guys job a little easier and ensure our own safety.....

### **When the power goes out**

**TURN OFF** all appliances such as your heat pump, stove, space heater, lights, etc.. If all these appliances are on when power is restored it can cause "Cold Load Pick-Up" which causes an imbalance in breakers consequently causing the circuit to blow again.

**CONTACT** the Utility Co. of all down wires. **STAY AWAY** from all down wires. Service wires are just as dangerous as high voltage wires on the ground.

**CHECK** your residence to see where service comes into the house. If the meter base appears to be damaged contact the Berea Electrical Inspector. Repairing a damaged meter base before power is restored could prevent a fire.