

Citizens' Electric Company  
Summer Readiness Overview  
Prepared by John A. Kelchner, PE  
Vice President of Engineering & Operations  
07/1/2013

**1. Keys to Success**

**a. Reliability Enhancement Programs**

The Company is continuing its initiatives to maintain a high level of reliability and customer satisfaction. To promote reliability and service quality, several capital improvement projects were completed during 2012. These projects included the continuation of the Company's URD cable replacement program. This is an ongoing initiative to identify and replace older underground distribution cable prior to degradation of reliability. Additional replacements are budgeted for 2013 and beyond. Other projects completed include the continued upgrade of select overhead feeder conductors to ensure continued service quality in areas of historically high growth.

To further enhance reliability, outage cause data is routinely analyzed. The Company responds quickly to remedy any emerging trends identified. As a specific example, work was recently completed to harden identified areas against animal-related outages.

**b. Preventive Maintenance Programs**

The Company is continuing its PUC-approved comprehensive inspection and maintenance program. Throughout 2013, employees will be inspecting substation equipment as well as line transformers, regulators, reclosers, switches, capacitors, hardware, and vegetation. In addition, contractors will be performing pole inspections and vegetation clearing where needed. To adjust for the effects of a prolific growing season last year, and to prevent an associated increase in tree-related outages, the Company has nearly doubled its vegetation management budget in 2013.

Citizens' Electric was recognized for the eleventh consecutive year as a "Tree Line USA" utility. This award from the National Arbor Day Foundation recognizes the Company for using nationally approved trimming techniques and procedures in its vegetation management program. This program includes a goal to aggressively identify and negotiate removal of off right-of-way "hazard" trees, in an effort to reduce outages from this cause.

**c. Capacity Planning**

System and feeder loading trends and circuit voltage profiles are analyzed to ensure adequate capacity at all points on the Company's distribution system. The Company provides load forecasts and works closely with its transmission provider to ensure continued transmission capacity availability.

**2. 2012 Storms and Lessons Learned**

The remnants of Hurricane Sandy passed through the Company's service area beginning on 10/29 and lasting into the afternoon of 10/30. High winds and heavy rain

impacted the area for the duration of the storm causing scattered outages. Most outages were caused by off right-of-way trees falling onto overhead lines. Damage included broken overhead primary conductors, downed service conductors and broken poles. In total, the storm affected 799 customers. Service was restored to 98% of the affected customers within 18 hours. The final customers were restored in just over 45 hours.

Although it affected only 12% of the Company's customers, this storm served as a good exercise and benchmark of the Company's overall outage management and restoration plan. Citizens' participated in pre-storm planning with other Pennsylvania Rural Electric Association (PREA) affiliates. Since the forecast called for significant impacts, the Company requested mutual assistance crews from unaffected utilities. As a result, crews from utilities to the south were en route to Citizens' before the storm arrived. Due to the limited effects ultimately felt by Citizens', these crews were re-routed to assist other utilities in the Mid-Atlantic region.

The storm also provided a valuable verification of the Company's integrated outage management, IVR, AMI and mapping systems. During the storm, these systems performed very well and helped storm managers to efficiently assess outage magnitude, dispatch crews and communicate with customers.

To help provide customers with important information, the Company turned to its web site and social media outlets. The first messages were released before the storm arrived, advising customers to prepare for outages and to make plans to address any special needs they might have. Once the storm passed, regular updates were posted to inform customers of outage status and estimated restoration time.

Sandy was the only significant storm to affect the Company during the year. The lessons learned will be valuable for future events.

### **3. 2013 Summer Readiness**

#### **a. Capacity Additions**

There are no capacity additions planned during 2013. The Company is not aware of any capacity shortages on its distribution system.

#### **b. Transmission Preparedness**

The Company does not own any transmission facilities. However, it provides load forecasts and works closely with its transmission provider to ensure continued transmission capacity availability.

#### **c. Event Preparedness**

Lessons learned during 2012 have been incorporated into the Company's storm process. Access to resources from utilities in the PREA group and across the region will continue to play a significant role in any major event response.

In addition, the Company recently verified the contents of its storm response and business continuity plans to ensure accuracy and employee awareness. Training has been provided to all office personnel involved in outage activities to ensure competency with outage management system functions. Emergency material stock levels are adequate, the construction fleet is in good operating condition and staffing is at expected levels.

#### **4. Storm Response**

##### **a. Outage Restoration Strategy**

Citizens' Electric employs a restoration strategy which aims to restore customers in the most efficient way possible. Ensuring the safety of the public and the Company's employees is the first priority. Crews are first dispatched to trouble locations that will restore service to the largest number of customers in the shortest amount of time, with priority given to incidents that will restore service to critical public infrastructure. Next, outages affecting individuals or small groups of customers are restored.

##### **b. Communications and Outreach**

In addition to providing timely information through traditional methods such as newsletters, newspaper articles, and direct employee contact, the Company has expanded its use of social media sites including Facebook and Twitter, as discussed above. Although the number of customers currently reached by these methods is low, these tools are expected to continue growing in popularity.

During 2012, the Company introduced an enhanced version of its online customer service portal called SmartHub. This tool allows customers to download a free customized application to their smartphone or tablet which provides secure access to a rich set of features. For example, customers can view and pay bills, report outages, check on outage status, analyze hourly usage, and request additional services. All functionality is also available to customers via SmartHub online, accessed from the Company's web site.

To increase public safety awareness, the Company conducted electrical safety training with various groups during the year. Demonstrations were provided for local emergency responders, members of the local university community and the general public.

The Company maintains effective information exchange with county EMA officials and coordinates response to local emergencies as needed.

Together, these initiatives will help Citizens' Electric maintain its high level of safety, reliability and customer satisfaction throughout 2013.