

Citizens' Electric Company
2023 Summer Readiness Overview
5/25/2023

Summary

Citizens' Electric Company's approved 2023 inspection and maintenance plan is well underway. This plan was designed to help ensure that system facilities remain in good condition and ready for the storm season.

A. Reliability Enhancement Program

a. Enhanced Vegetation Management

Since 2012, Citizens' Electric has been investing increasing resources to identify and remove off right-of-way hazard trees. Vegetation management personnel—both internal and contracted—as well as field staff have been trained to identify trees of concern and report them for consideration as hazard tree removals.

Citizens' Electric was recently recognized for the twenty-first 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.

b. Storm Hardening

The Company is entering the 2023 storm season with its annual tree trimming completed and two of its four major system improvement projects already complete.

The Company has further continued its efforts to replace porcelain hardware—namely cutouts—system wide. As these components continue to age, the likelihood of outages increases. Sufficient inventory of new cutouts has been maintained in spite of increasing lead times and crews will continue to replace porcelain both proactively and incidentally until the overhaul is complete.

c. Fuses/Reclosers/Automatic Switches

Scheduled maintenance on reclosers has been discontinued in favor of a newly implemented replacement program and all scheduled recloser inspections for 2023 have been completed. Reclosers with the highest number of operations or other known maintenance needs will be prioritized for earliest replacement.

d. Smart Grid

All smart grid systems, including AMR infrastructure, Outage Management System, GIS Mapping and associated online and telephone customer service systems are fully operational and ready for processing outage transactions.

e. Conservation Voltage Reduction (CVR) Activity

Citizens' Electric does not utilize substation voltage regulation equipment. As a result, the Company does not currently have a Conservation Voltage Reduction (CVR) program.

B. Preventative Maintenance Programs

a. Capacitor Inspections

The Company currently has 22 capacitor locations in service. In accordance with its approved inspection and maintenance plan, all locations have been inspected this year and are available as needed.

b. Vegetation Management

Nearly all of the Company's routine vegetation work is completed by contractors. Typically, this work is conducted during the early spring and summer months. This allows the Company to better respond to any unexpected "hot spots" that may require attention during the growing season. This schedule also helps ensure that contract crews will be present during the bulk of the summer storm season so they can be quickly deployed for restoration work if needed. The Company continued its aggressive program of maintenance and danger tree removals again, as well as expanding clearances.

The Company's inspector closely monitors work performed to ensure it is done in accordance with contract specifications and to verify that all work included in the contract is completed. Daily work reports are received from the contractor. These reports include a listing of work performed by each crew on a particular day. Reports are reviewed by the Company's inspector to verify overall contract completion.

As an additional performance measure, the Company's Vegetation Management Coordinator monitors all tree-related outages to help identify and respond to emerging trends as quickly as possible, and to assess the Company's overall vegetation program effectiveness.

c. Substation Inspections

All monthly substation inspections have been completed on schedule. Any issues requiring attention have been addressed.

d. Aerial Patrols

The Company does not own any transmission facilities and does not conduct any aerial patrols of its distribution facilities. A pilot of aerial drone patrols is currently under consideration.

e. Infrared Inspections

Infrared inspections are performed on all three-phase primary overhead line sections each year and all single-phase line sections on a three-year cycle. To date, approximately 75% of this year's inspections have been completed. The Company tracks progress electronically and expects to complete 100% of these inspections by year-end. Any issues found have been addressed.

C. Capacity Planning

The Company provides load forecasts and works closely with its transmission provider and System Operator to ensure continued transmission capacity availability. The Company's transmission provider is currently in the midst of a line reconductor and reconfiguration project that will provide increased capacity and additional supply sources for reliability purposes. System and feeder loading patterns and circuit voltage profiles are analyzed to ensure adequate capacity at all points on the Company's distribution system.

D. 2022/2023 Storm Update and Lessons Learned

Overall, the 2022/2023 storm season was relatively mild in Citizens' service area. Nearly 25% of all customers affected and minutes interrupted for the year were the result of a single outage event in December. This highlights the volatile nature of reliability measurements for small EDC's, but also the substantial impact even a single outage can have on our customer base. This event demonstrates the critical nature of each outage response in maintaining a positive experience and strong reliability for our customers.

E. 2023 Summer Readiness

a. Capacity Additions

The majority of planned capital work for 2023 focused on reliability improvements. One system improvement project which increases switching and load transfer capabilities between two of the Company's most populous circuits is planned for completion later in 2023.

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 from the 2022 events have been discussed with staff—office and field—and storm preparedness and response topics are frequently covered in morning briefings as well as safety and staff meetings. All potential severe weather forecasts are communicated to the line staff to encourage quick and complete responses to callouts.

d. Training

Line personnel are continually trained on updates to the mobile application—which has exceeded expectations for its use and effectiveness during major events. A briefing and training for office staff on storm response and training will be delivered in June. All line personnel training is up to date in accordance with Company training plans and OSHA requirements.

e. Personnel

As with many electric utilities, Citizens’ must address the pressures of an aging workforce. It is expected that within the next 10 years, 6 of Citizens’ current 17 employees will retire. Five will be in the operations area.

Citizens’ Electric’s management team has been entrusted by the shareholders, customers and the Public Utility Commission to provide safe and reliable service at a fair cost. To address this core responsibility and the potentially negative impact from failure to plan, management has adopted a long-term and methodical transition strategy that will prevent a lapse in experience and job knowledge that is so necessary to effectively operate the Company. In 2021, two linemen were added to the staff, one being a planned hire to accommodate a future retirement and the other filling an unexpected vacancy. The next operations hire is planned for 2023.

It typically takes up to seven years to fully develop a journeyman lineman. While no retirement announcements are currently pending 60% of the line crew is considered as “approaching” retirement age. Incorporating additional apprentices in a timely manner will ensure there is an adequate supply of knowledge and skills available to provide a safe and proficient workforce.

F. 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 utilizes social media by the means of Facebook.

The Company continues to encourage its customers to utilize the online and mobile portal called ‘SmartHub.’ Customers frequently report outages and communicate concerns via SmartHub, and much of the feedback received following events is the result of direct replies to SmartHub notifications, an encouraging sign that many customers are looking to it as their primary source of information regarding outage restoration.

Customers can also monitor restorations via the Company’s online outage map, which is updated real time from OMS.

The Company plans to host an electric safety trailer demonstration as part of a community outreach event scheduled in August. The Company will use this event as well as other opportunities to educate on electric safety, storm response and preparedness.

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

c. Outage Restoration and Storm Response Best Practice Implemented and/or Identified for Future Implementation

The Company participates in various statewide and national industry organizations, including the PA Best Practices Team. It will continue monitoring the findings and recommendations of these groups and will implement them where appropriate.

G. Supply Chain Issues

a. Procurement concerns for equipment/materials

The Company continues to maintain exceptional service to customers despite ongoing procurement issues with small equipment such as cutouts and arresters. Several manufacturers simply cannot commit to the turnarounds on material orders they had in years past which has increased our administrative efforts to ensure adequate stocking levels. Despite the industry struggles for long-lead time equipment, the Company has adapted and will still provide the same quality service customers have come to expect.

Conclusion

The Company believes it is ready and well-positioned for the coming summer storm season. Through the application of the above initiatives, safety, reliability, and customer satisfaction will be maintained throughout 2023.