2025 ELECTRIC & WATER DISTRIBUTION YEAR END REPORT

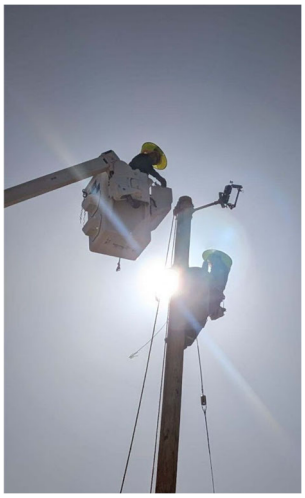
ELECTRIC

COMPLETED A TOTAL OF 376 WORK ORDERS

These consisted of multiple things from pole replacements, new services, general maintenance and many other projects.

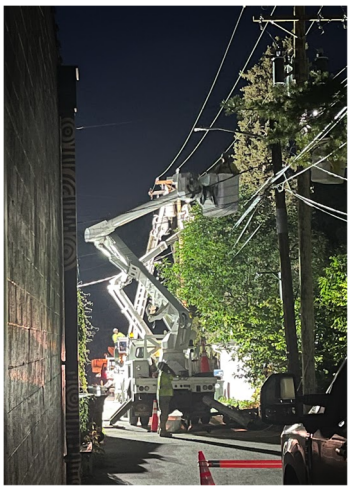
LIGHT UP NAVAJO

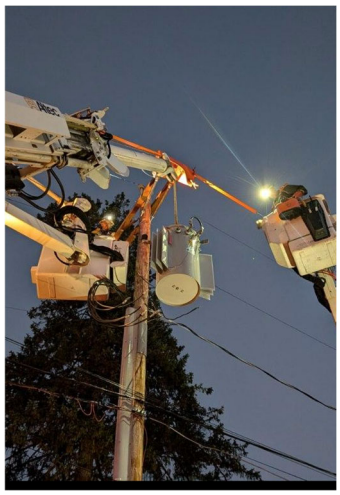
A crew of 5 people went to Kayenta, Arizona and assisted the Navajo Nation to provide power to four homes that have never had power. The team consisted of Ben Sparks, Tanner Bussey, Lane Dykman, Alex Kraus, and Lucas Valley. We spent seven days there from 6-14 to 6-21-2024.



POLE CHANGEOUTS

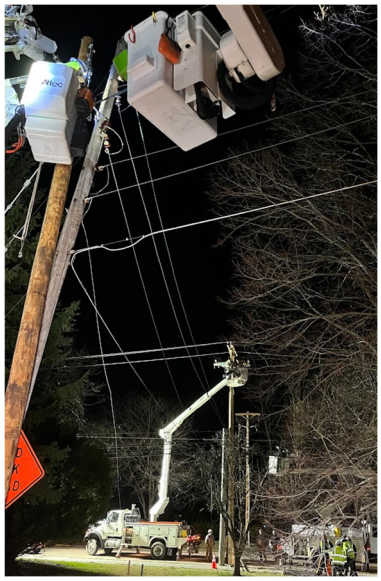
This consisted of adding new poles as customers' needs arose, as well as the pole replacement packet. The Village completed a total of 37 poles.





STRAIGHT LINE WINDS 2-28-2025

The Village experienced straight line winds that took down a total of 5 poles on Dayton St. This resulted in us needing to use mutual aid. Crews from Tipp City, Piqua, and Wapakoneta.



SERVICE RELEASES

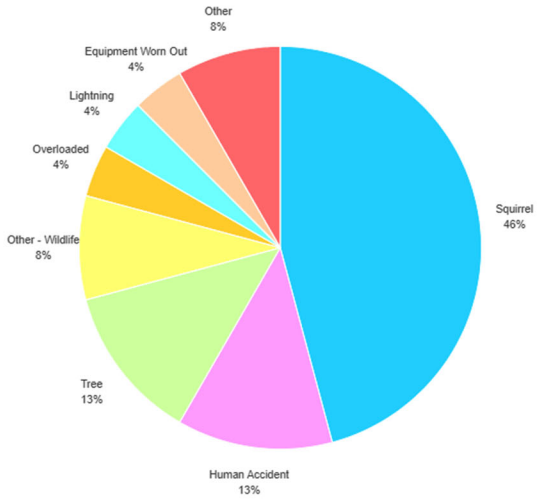
There was a total of 59 service releases. Many of these were from the new subdivision.

POWER OUTAGES

There was a total of 24 power outages, which marks the lowest of all time since recording with the APPA reliability tracker in 2014.

IEEE Results	
ASAI (percent)	99.998%
CAIDI (minutes)	74.003
SAIDI (minutes)	10.392
SAIFI (number of interruptions)	0.14

Range Results	
Event Count	24



Outage Cause	Count	View
Squirrel	11	
Human Accident	3	
Tree	3	
Other - Wildlife	2	
Overloaded	1	
Lightning	1	
Equipment Worn Out	1	
Wind	1	
Unknown	1	
Total	**24**	

ADDITIONAL FEED TO SPRINGWAY BLVD

The Village of Yellow Springs acquired a Conservation Innovation Grant (CIG) for this job. It allowed us to install a 4/0 7200/12470 circuit to feed the front portion of the CBE property for any businesses wanting to build.

TOUCH A TRUCK

The electric crew participated in two Touch A Truck events. We also worked with the police department on Safety Village where we taught the kids about electric safety and showed them the trucks that we use daily.

WORKED WITH ATT TO GET 10 POLES CHANGED OUT ON DAYTON ST

This has been an ongoing issue for a few years, we were able to get AT&T on board to have them change their poles out with the help of the village. This issue was discovered when the straight line winds hit on February 28, and five of their poles broke from being rotten.



START AND COMPLETION OF 221 XENIA AVE AND KEITHS ALLEY UNDERGROUND

The Village assisted in providing electricity to 221 Xenia Ave. This consisted of moving the electric of four businesses underground for both safety and aesthetics. This work took the team one full week to put the conduits underground and to install a 167 KVA overhead that can provide for the needs of the customers.



STORM IN SEPTEMBER 27 MAJOR POWER OUTAGE

The Village received hurricane force winds on September 27 that left many in the village in the dark. Crews worked for 28 straight hours to get the lights back on. The village received assistance from the AMP circuit rider. After we got our lights on, we responded to the Village of South Vienna, where they had a major outage.

PURCHASE OF NEW RECLOSERS FOR SWTICH STATION

This purchase will allow us to start the building of the new center circuit, and also will provide us with a safe and reliable east and west circuit.

PURCHASE OF NEW RECLOSERS FOR GRID

These will work with the reclosers from the switch station and allow more communication for a safer and more reliable grid.

GIS ELECTRICAL ASSETS

In downtime, the electrical department works on GIS mapping with all the electrical assets. This helps with any new builds and assists when doing locates to assure all utilities are located properly.

314 DAYTON ST URD BUILD

The crew constructed a new three phase feed to accommodate the load of 314 Dayton St. This now serves three different services.

SPRING MEADOWS BACKUP FEED

This consisted of the Village crew running a new feed from Dayton St. to get power to new plat so houses could come online as they were being built. The original feed was coming from the solar field and was not forecasted to be done, so we had to come up with an alternate plan.

TREE TRIMMING SECTIONS 1 AND 2

The Village was able to get sections 1 and 2 completed in 2024. Getting the trimming services done within our yearly budget was a difficult task this year due to inflation. We were able to get creative by breaking the village up into five sections instead of four as in previous years. This allowed us to bring the number in under budget.

POLE INSPECTIONS

Best pole inspections came in and completed section 4 of 5. We have seen the number of bad poles reduced since we started a pole replacement plan. We ended up with a 7% fail rate for 2024.

WATER

CHANGED OUT FIRE HYDRANTS

This consisted of changing out two older hydrants on Brannum Ln. These hydrants were very hard to turn.

REPAIRED FIRE HYDRANTS

This consisted of repairing multiple hydrants in the village that were hard to turn and needed lubed up. There was a total of six.

WATER MAIN BREAKS X5

These were mainly from cold temperatures. This happened to be one of the better years. We average 10 breaks per year. These temperatures were much warmer than normal.

LEAK DETECTION X4

Fluid loss prevention was able to locate four non-surfacing leaks and the Village was able to get them repaired.

EPA LSL INVENTORY

This was a joint effort with the water department and the metering department. This was a program that came from the EPA. It mandated us to take inventory and have it to customers by October 18 of 2024. We now must keep it updated and the plan is to have it housed on our GPS website as well as have a portal for customers to view what kind of service line they have going to their house. The great news is we did not find any lead on any service during this search.

GALVANIZED WATERLINE REPLACEMENT

This job occupied the water distribution team most of the year. The Village removed 5500 feet of 2" galvanized and replaced it with 6" c900 plastic pipe. We were also able to loop many of the water lines in town to make for a more reliable water system. The team was able to map with GPS all of the assets while it was being installed so we can see exactly where the lines are in the future.



SERVICE TO WATER AND ELECTRIC FLEET

The water distribution team takes care of the water and electric fleet on getting their yearly services. This consists of orchestrating all the oil changes on the bigger trucks and doing all the oil changes on the smaller vehicles in house. We always utilize the month of April to do this.

OUPS LOCATES

One of the ongoing tasks each year is addressing the numerous locates that come in. We have 48 hours to respond to every one of these. We go out and locate the water and electric lines that are buried where someone may be digging. We completed a total of 839 locates in 2024.

INSTALLATION OF WATER LINE ON UNION ST

The Village did not install this but was able to map it with GIS. This was installed for the service to feed 314 Dayton St.

NEW 6” LINE BEHIND KEITHS ALLEY

This was installed for the water service to 221 Xenia Ave. The village was able to capitalize on the ditch to also run some of the electric and water to the customers on Xenia Ave.

NEW 8” IN CASCADES PROJECT

This was installed to accommodate the new units in The Cascades. This also tied the line from Herman St. to the line on Marshall for a more reliable system.

PHASE 2 SPRING MEADOWS 8”

This was installed to accommodate the Spring Meadows development. There are a total of 90 new homes being put in. The crew was able to go out and GIS all the assets.

COMPLETION OF 147 WORK ORDERS

These consisted of various jobs ranging from fire hydrant repairs to pressure checks in customers’ homes.

MOW SOLAR FIELD

This two-person team maintains the solar field by keeping the grass cut and the gravel cleaned to maintain a means of access to the solar field.

MAINTAIN FARM

Downtime may consist of cleaning out vehicles, cleaning the shop floors, to washing the walls. Our goal is to keep everything the village owns in the best condition.

METERING

STARTED AND COMPLETED 75% OF WATER METER CHANGEOUT

This consisted of working with the EPA and NECO. We now have 150 meters left to replace.

PURCHASED AND STARTED WITH TANTILUS METER CHANGEOUT (VILLAGE WIDE) 60% DONE

These meters have helped in many ways. The village crew has done all this in house. The polyphase and demand are done by the electric crew while the residential are done by metering crew. Our goal is to be 100% done by August.

SENT LETTERS VILLAGE WIDE PER EPA REQUIREMENTS

The EPA mandated all public water systems to do a service line inventory. This consisted of letters being sent out and leg work in the field. Multiple departments worked together to get the data put in our GIS system. We still have more work to do but in compliance with the EPA.

TRAINING TRAVIS ON TANTILUS

We set up another workstation for Travis to have access to consumption data. He is also set up to contact customers. With the help of the new remote-read meters, there are fewer meters to read in the field. This does not mean less work, but more preventive measures can be taken to find leaks faster, as well as spikes and low voltage alerts. We also plan to work on weekly and monthly checklists to catch leaks even faster, as well as updating maps and GIS work.

AVERAGING 1200 WATER METER READS A MONTH

This number will be going down due to new meters, but we still have approximately 150 manual reads in service.

AVERAGE OF 20 DISCONNECTS PER MONTH

With the placement of the new electric meters has helped out tremendously. We no longer have to physically shut meters off. We can deactivate them remotely.

AVERAGE OF 20 HIGH READ WATER PER MONTH

These are either found by us or by customers reporting them. We go out and now data log with our new system. This has hourly reads for the last 90 days. This allows us to really see when the leaks are taking place.

MISCELLANEOUS

PLANNING THE CENTER CIRCUIT

This has been on the horizon for about 2 years. As we have seen growth, we need to plan to separate our east and west circuit so we do not overload either one. With the new high school coming online, we needed to move more quickly, so we created a plan with the help of Encompass electrical engineers. We are moving quickly and have most of the materials to get the job done.

DESIGNING SCHOOLS ELECTRIC

Johnnie and I worked closely with the school's staff and engineers to accommodate their needs. We were able to create a plan alongside Beacon Electric to get the wire and transformers purchased. We are working with them on the new high school and the remodel of Mills Lawn.

GRADUATING NLC

I was able to get my state-approved journeyman lineman card by going through Northwest Lineman College and completing all my OJT hours through the state of Ohio.

ALEX IN SECOND YEAR NLC

Alex is exceling in the apprenticeship classes and will have year two completed by June and will be starting third year. He will be attending AMP lineman courses for two weeks this year to improve his skill even more.

LANE SECOND YEAR NLC

Lane is also doing well in his apprenticeship. He will be going into his third year in June and finishing up his second year in May. He also will be attending 2 weeks of AMP training.

ELECTRIC DESIGN OF 221 XENIA AVE

The Village was able to engineer the plans to accommodate the new load that was coming into play due to new businesses. We took advantage of the open ditches and made the aesthetics better in the alley by taking many of the overhead wires underground.

ELECTRIC DESIGN OF CASCADES

The Village worked with Encompass on layout plans to accommodate the new construction of The Cascades. This consists of 4 phases with phase one in process now. We had to figure out how to take multiple wires and get them underground so the construction can take place. The Village has already begun this and will continue the work as the phases are completed.

ELECTRIC DESIGN OF SPRING MEADOWS

The Village partnered with Encompass on this project as well. We had to come up with a plan to accommodate the building of 90 new homes. We were able to raise the main feed down Kenneth Hamilton Way to add our center circuit in the future. We are on schedule to have this done by the end of 2025.

UPCOMING

COMPLETION OF CENTER CIRCUIT TO DAYTON ST.

This will start from the switch station on Fairfield Pike and go to Dayton St. This will allow load shedding from both east and west circuits.

SCADA CONTROL ON ALL ELECTRICAL

We met with Tantilus rep and discussed how to implement SCADA (supervisory control and data acquisition). This will allow us to see voltage sags and spikes, and amperage draw at all times. This can prevent outages and help to see where any issues are. It also will help us determine the right feeds as the community grows and shed loads to different circuits as needed.

FINISHING UP ON ALL SMART METERS (TANTILUS)

We are now up to 75% electric meters changed out. We are also changing out our polyphase and demand meters. This allows real time reads and to disconnect and reconnect from the computer. Another feature is the ability for us to pick up voltage sags and spikes. This helps us to prevent outages.

FINISH UP ON WATER METER CHANGE OUT

Our plan is to have this done by no later than August. We are winding down on the last few. These have taken longer due to bad valves.

INSTALLATION OF FENCE AROUND SWITCH STATION

We will be starting this by June of 2025. This will accommodate us as we start on the center circuit. It will allow us more of a barrier to build our switches and offer more safety. We are going to partner with Tree Committee on this to provide a more pleasing look and also hardscape to show the collaboration of electric and landscaping.

START BACK UP VALVE EXERCISING PROGRAM

This is a goal for the water distribution team to get back on. This takes much patience and funds. We are turning valves that have never been turned. The benefits of this is to help throttle lines down when mains break and to isolate when lines are added or removes.

LOOK INTO MORE 2” GALVANIZED REPLACEMENT

I have been actively working on this and now have found approximately 5500’ more 2” galvanized pipes that need to be replaced. This will help with getting loops in all the lines and setting us up for better pressure and flow.

TRY TO GET WATER GRANTS

I have been working with Elyse and Johnnie on some grant opportunities. Hopefully these will work out and get the 2” galvanized done

LOOK INTO MORE RENEWABLE POWER