



The energy behind public power



2020 *ANNUAL REPORT*



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THE VALUE OF PUBLIC POWER

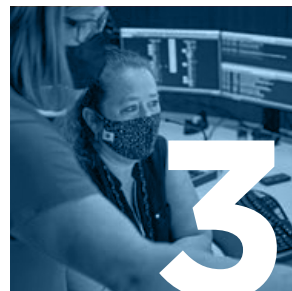
Highlighting communities that communicate the value of electric system ownership to key stakeholders.



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WORKFORCE DEVELOPMENT

Honoring communities that promote a workforce plan to attract, develop, and retain the necessary human talent to provide safe, reliable power and lead public power forward.



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CONTINUOUS IMPROVEMENT

Recognizing cities and towns that constantly review and enhance all aspects of public power while focusing on increased customer satisfaction, cost reduction, and increased efficiencies in current and future operations.



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GRID MODERNIZATION

Focusing on promoting investment in public power communities' electric distribution system and in technology to ensure safety and reliability and to provide exceptional customer service.



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WHOLESALE POWER COST

Recognizing communities that provide competitive and stable wholesale electric rates that meet the power supply needs of Power Agency Members.

On the cover: Fred Locklear of Apex Electric Utilities prepares to take a closer look at a streetlight on Salem Street in downtown Apex, NC.

Asia Magness, owner of Mae's in Maiden, NC, enjoys an iced coffee. Mae's is a café and bakery offering sweets such as cakes, pies, brownies, cookies, ooey gooey bars, ice cream, coffee, and more.

MESSAGE FROM THE CHAIRS AND CEO



JOHN P. CRAFT
Chair (partial year)



STEPHEN H. PEELER
Chair (partial year)



ROY L. JONES
Chief Executive Officer

Looking back on 2020, it was undoubtedly an extremely challenging year for our country and our local communities. Throughout it all, though, ElectriCities and our members were able to demonstrate the value of public power as a source of strength and resilience for our communities.

We've been planning for situations like this for years. We coordinated with the Electricity Subsector Coordinating Council (ESCC), the American Public Power Association (APPA), and countless others to ensure that our industry and the public have the resources they need to keep the lights on.

As a 2020 PricewaterhouseCoopers article¹ states, "Power and utility companies have a strong track record when it comes to preparing for emergencies. As a provider of critical infrastructure, the industry should plan for – and be prepared to respond to – many foreseeable hazards, including health emergencies."

In fact, we are proud to report that

ElectriCities of North Carolina and its members were not only prepared for the crisis but were able to continue to improve the level and quality of service to our communities and customers.

As it does every year, the Annual Report shines a light on the value of public power and how public power utilities' efforts align with our five strategic priorities.

We'll show you how New River Light & Power is modernizing the grid in Boone and the High Country; how Apex is doing groundbreaking work in workforce development; how Statesville is innovatively reducing wholesale power cost; how Greenville Utilities Commission is using technology to continuously improve its community; and how Maiden is using the power of social media to inform residents.

We're excited to celebrate the successes of these and all public power communities who, in the face of adversity, continue to improve the cities, towns, and lives of the residents through the value of public power.



Mr. John P. Craft
Chair (partial year)
La Grange



Mr. Stephen H. Peeler
Chair (partial year)
Vice Chair (partial year)
Lincolnton



Mr. Anthony C. (Tony) Cannon
Vice Chair (partial year)
Secretary (partial year)
Greenville Utilities Commission



Mr. Randy E. McCaslin
Secretary (partial year)
High Point



Mr. Joseph P. Albright
Gastonia



Mr. Dan R. Brown
Morganton



Mayor Newell Clark
Lexington



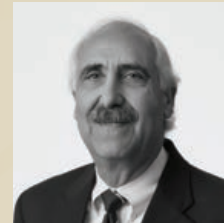
Mr. Donald I. Evans
Wilson



Mr. Jonathan Franklin
Louisburg



Mr. Nick L. Hendricks, Jr.
Kings Mountain



Mayor Constantine H. (Costi) Kutteh
Statesville



Mr. Charles D. Nichols, III
Laurinburg



Mr. Jonathan Rynne
Fayetteville PWC



Mr. Tony W. Sears
Kinston



Mr. E. Todd Clark
NCMPA1 Chair, Newton



Mr. Troy R. Lewis
NCEMPA Chair, Tarboro

MEMBER COMMUNITIES

LEADERSHIP TEAM

Roy L. Jones
Chief Executive Officer


F. Timothy Tunis
Chief Financial Officer

Matthew E. Schull
Chief Operating Officer

Vacant¹
Chief Legal Officer

¹ The vacant Chief Legal Officer position was filled on January 5, 2021 by Jay Morrison.



A photograph of two men walking on a sidewalk outside a hardware store. The man on the left is wearing a blue polo shirt and khaki pants, looking at a smartphone. The man on the right is wearing a white polo shirt and khaki pants, looking towards the left. In the background, there are wooden ladders leaning against a brick wall and a blue sign that says 'WELCOME Maiden'.

Town of Maiden Public Works Director Bryan Duckworth (left) and Key Account Specialist Kevin Sanders (right) discuss messages from residents on the sidewalk outside of Piedmont Hardware store in Maiden, NC.

A photograph of a hardware store window display. The display features a red and white striped awning with the text 'PIEDMONT HARDWARE' and a phone number '428-8161'. Inside the window, there are various tools, a red and white striped sign, and a red and white striped sign with the text 'FLYER'. The window reflects the street outside.

MAIDEN, NORTH CAROLINA

1 THE VALUE OF PUBLIC POWER

There are a lot of advantages to living in a NC Public Power community, but not everyone recognizes them. In fact, some customers may not even realize their power is provided locally. How do we change that? By telling our story and sharing the value of public power.

Harnessing the Power of Social Media

Times are changing, even in some of the more rural areas of North Carolina. In Maiden, a small community set in the picturesque foothills, Town Manager Todd Herms is using social media to keep residents regularly informed about power outages, weather updates, road closings, town events, and much more.

“We’re using social media a lot more than in the past. We have a large following that continues to grow, and we’ve gotten a lot of positive feedback from the town council and the general public,” he says.

One of the best examples of using social media to inform customers was on October 29, 2020 when the remnants of a hurricane knocked out

power. Trees were down everywhere, but people still got updates via Facebook and Instagram.

Todd says, “Recently, a truck hit a power pole, and someone instant messaged the town’s Facebook page and sent a photo, so I knew before the police, fire, or anybody else did.”

The Town of Maiden sees social media as a powerful way to reach out and serve their community – keeping everyone informed constantly. Todd says, “When you don’t have the resources larger cities have, you have to get creative in ways to communicate with your citizens. Social media helps us deliver the best service and response.”


❖ OUR SUPPORT

ElectriCities provides communications support and resources to help members spread the word about the value of public power, including materials to celebrate Public Power Week, social media campaigns, and a variety of promotional materials. It also consults with members on how they develop their own events and campaigns to highlight the benefits of public power.



“ When you don’t have the resources larger cities have, you have to get creative in ways to communicate with your citizens. Social media helps us deliver the best service and response. ”



A full-page background image showing a utility worker in a white uniform and yellow hard hat, standing in a white bucket. The worker is using a long wooden hot stick to work on a high-voltage power line. The scene is set against a clear blue sky with some clouds. In the background, there are trees and a brick building. The overall tone is professional and industrial.

Norwood Truelove of Apex Electric Utilities
uses a hot stick to protect himself from electric
shock while live-line working on Saunders
Street in downtown Apex, NC.

APEX, NORTH CAROLINA

2 WORKFORCE DEVELOPMENT

Our workforce is changing. Employees with decades of public power experience are retiring in record numbers and a new, diverse generation of utility workers must be recruited and trained. Competitive compensation and a clear career path are critical to attracting, developing, and retaining outstanding employees.

Focusing on Diversity and Inclusion in Lineworker Recruitment

Eric Neumann, electric utilities director for Apex Electric Utilities, has a challenge ahead. “It’s not hard to get people interested in this career, but it’s hard to get minority college or high school graduates to consider positions here – especially lineman jobs.”

But Apex Electric Utilities isn’t waiting around. They’ve formed a partnership with nearby Durham Tech – which has recently started up a lineman program – to provide material and equipment support to the school in hopes of priming the pipeline for minority students to apply and ultimately accept jobs in Apex.

“ElectriCities provided a lot of the background materials on pay inequities and comparison data that was used to support increases within the career field. We also looked at some of their efforts to help foster interest in the profession and that inspired us,” Eric says.

According to Eric, the pitch from Apex is, “you come in here out of

school and within five years you will be making a great wage in a high-demand career field. It’s a recession-proof career.” He adds, “I don’t know of any unemployed linemen out there.”

Getting students interested and priming the pipeline of talent is a long-term process. It begins with strengthening partnerships with local colleges and exposing students to the practical realities of a career in electricity. To that end, Apex is exploring an internship program that would embed students in line crews for a week, giving Eric and his team a chance to observe work ethic and chemistry.

Apex is in the discussion stage on a program that would help young people who show drive and “fit” move up faster to higher pay grades. “We want the best and the brightest candidates who reflect the diverse population we have. That goal is extremely important to us.”

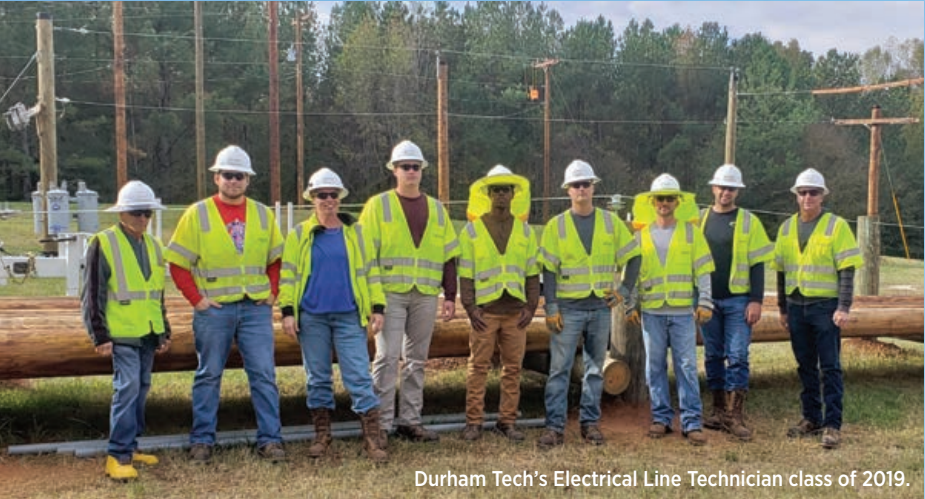


Students at Durham Tech are learning how to terminate high voltage cables by making up cable ends and outfitting with elbow connections.

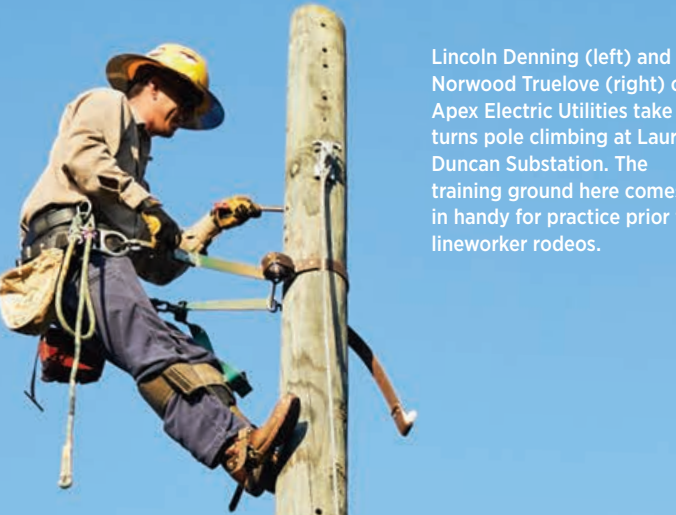
❖ OUR SUPPORT

ElectriCities works with NC Public Power communities to establish career development programs and assist with compensation studies. A host of training programs are available through ElectriCities, including safety training, leadership training, and lineworker training programs. In addition, ElectriCities is actively promoting energy careers to students and working in partnership with other utilities to address workforce challenges.

“ We want the best and the brightest candidates who reflect the diverse population we have. That goal is extremely important to us. ”



Durham Tech's Electrical Line Technician class of 2019.



Lincoln Denning (left) and Norwood Truelove (right) of Apex Electric Utilities take turns pole climbing at Laura Duncan Substation. The training ground here comes in handy for practice prior to lineworker rodeos.

Sharon Camacho (left) and Kathy McGowan (right)
monitor meters remotely at GUC's new Operations Center.

Greenville Utilities Commission
GREENVILLE, NORTH CAROLINA

3

CONTINUOUS IMPROVEMENT

Being successful means always looking for ways to improve. For NC Public Power communities, this means embracing new technologies and adopting new processes to meet changing customer expectations.

The Quest for Efficiency Never Ends at Greenville Utilities Commission

For John Worrell, Director of Electric Systems at Greenville Utilities Commission (GUC), continuous improvement means always looking for ways to increase efficiencies, streamline processes, and ultimately save money for the utility – and their customers.

To that end, Greenville Utilities Commission has several exciting programs going on. Their Advanced Metering Infrastructure (AMI) pilot program puts in place a system of continuous meter monitoring across a mesh network that eliminates the need for trucks to drive through neighborhoods to read meters.

Another innovative program is the Battery Energy Storage System (BESS) pilot that allows GUC to store the power they buy at off-peak prices and store it in batteries. They can then discharge it during peak hours to help reduce the load on the grid, helping reduce customer energy bills.

Like other utilities in the state, GUC is looking at LED streetlights as major cost reducers. So far, they’ve converted 5,850 streetlights out of 8,317 to LED. In addition to extending the bulb lifespan

to 15-20 years and saving money, the Greenville Police much prefer the “true light” provided by LED, which helps security cameras better pick up imagery (and identify suspicious people).

GUC is also implementing enhancements to its mobile work and asset management (WAM) and customer care and billing (CC&B) systems. The WAM improvements will create a paperless way for technicians to get work orders in the field, view location map updates, and mark projects complete. The WAM system integrates fully with the CC&B system to streamline the billing process for customers. Other improvements include GIS mobile trackers for pole changeout and tree trimming, a volt/var optimization program, and solar metering options for residential and commercial customers.

Overall, John says their quest for continuous improvement is driven by the goal of reducing their costs. “If we can shave even more of our load through generation, solar, and battery programs for that one peak hour each month, we could reduce our power costs substantially. That’s what we’re striving for.”



Top: Sharon Camacho at GUC’s new Operations Center with its AMI pilot program displayed in the background. **Middle:** David Bunch stops to check for any new work orders through GUC’s WAM system. **Bottom:** GUC’s Battery Energy Storage System allows it to store power they buy at off-peak prices.

“ ElectriCities is a great resource when we consider new cutting-edge technologies for the benefit of our customers. They also provided regulatory, legal, and power contract support and guidance for our Battery Energy Storage Project. Without their help, it would have been much more difficult to move our projects forward. ”

David Bunch, a First Class Lineworker, pulls up work orders through the WAM system on his work device. In the background, Justin McLawhorn and Caleb Brickhouse prepare to move on to the next location.

❖ OUR SUPPORT

ElectriCities works with members to identify and implement impactful improvements to their electric utilities. Members can participate in the annual Retail Customer Survey to identify changing customer needs, and members can also participate in the Utility Assessment to benchmark their utility operations. With this upfront information, members know where to make investments. Members can participate in a number of forums to share best practices and learn about emerging technologies and issues.



New River Light & Power
BOONE, NORTH CAROLINA

4 GRID MODERNIZATION

Our nation's electric grid is one of the largest and most complex in the world. More than 600,000 miles of transmission lines safely deliver energy to millions of homes and businesses. Developing grid edge technologies promise to provide utilities with a path forward to improve service, improve their connection to their customers, and to meet customers' growing sustainability requirements while maintaining the highest levels of reliability at affordable rates.

Logan Story (left) and Traver Wilson (right) of New River Light & Power arrive to provide routine maintenance to the campus substation at Appalachian State University.

Putting The Pieces in Place for a Scalable, Renewable, Secure Future

What many people may not know is that New River Light & Power (NRLP) in Boone, North Carolina is actually part of Appalachian State University, and was created in 1915 to serve the university when it was a small teachers' college. Now, of course, it's grown to serve the entire Boone community and nearby portions of Watauga County as well.

With the growth of the community has come ongoing demand for grid modernization. NRLP responded in part by moving forward with replacing campus substation equipment for an upgrade from a 44kV feed to a 100kV feed. It is also in the process of modernizing their Supervisory Control and Data Acquisition (SCADA) system that will enable NRLP not only to serve the increasing future load, but to do so more reliably and efficiently.

According to Matt Makdad, engineering supervisor at NRLP, "App State's campus is big on sustainability, so we again participated with ElectriCities in a customer survey recently in which the results indicated customers want a strong push toward renewable energy. We're trying to address that."

For example, NRLP has partnered

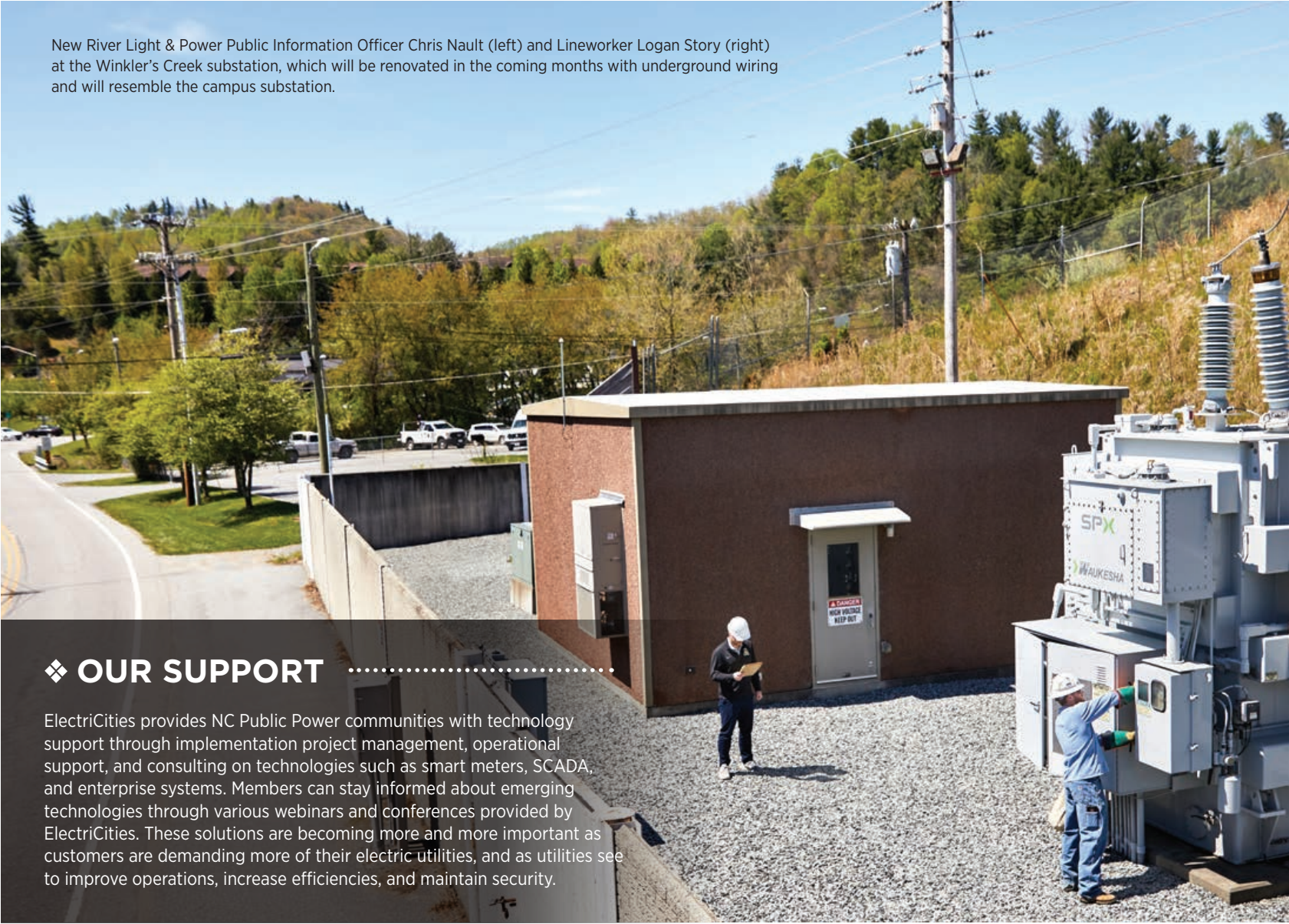
with App State researchers and Oak Ridge Laboratories to pursue a grant from the Department of Energy that, if accepted, would allow an investment in battery storage, solar generation, and energy conservation measures.

Grid modernization also involves upgrades that protect customers and the utility from cyber attacks and physical crimes such as breaking and entering and theft of property. NRLP recently installed cameras at an off-site storage facility and requires all employees with access to the customer information and payment system to complete manager-level and cyber security training to help them spot and prevent attacks on the system.

NRLP General Manager Ed Miller shared that other grid modernization efforts include a new billing and collections system. This new system will allow NRLP to offer additional rates that address emerging demands from customers such as residential time-of-use and EV rates. NRLP is also working on plans to offer a renewable energy program as an option for residential and commercial customers who choose to participate.



The campus substation at Appalachian State University will be entirely replaced, upgrading to a 100kV feed. Inset photo: Security cameras have been installed to surveil certain locations and prevent criminal activity.



New River Light & Power Public Information Officer Chris Nault (left) and Lineworker Logan Story (right) at the Winkler's Creek substation, which will be renovated in the coming months with underground wiring and will resemble the campus substation.

❖ OUR SUPPORT

ElectriCities provides NC Public Power communities with technology support through implementation project management, operational support, and consulting on technologies such as smart meters, SCADA, and enterprise systems. Members can stay informed about emerging technologies through various webinars and conferences provided by ElectriCities. These solutions are becoming more and more important as customers are demanding more of their electric utilities, and as utilities see to improve operations, increase efficiencies, and maintain security.



Zane Harrington of Statesville Electric Utilities upgrades a streetlight to LED on a newly developed street in Statesville, NC.

STATESVILLE, NORTH CAROLINA

5 WHOLESALE POWER COST

Securing safe, reliable, and affordable power supply is the foundation of everything we do. It enables NC Public Power providers to effectively serve our customers, attract new businesses, and power our communities.

Bringing a New Glow to the City of Statesville

Not too long ago, Jared Wiles, business development specialist for Statesville, drove outside the city limits and found a good vantage point to view the glow from the city. Instead of the orange glow from old bulbs, he saw something completely different – and inspiring. Bright, white lighting from the 7,500+ LED bulbs that Statesville Electric Utilities installed across the city.

Statesville Electric Utilities’ LED replacement project started in January of 2019 and all but wrapped up early in 2021. Crews have been working diligently to replace the old lights with energy-efficient LED bulbs. They are now within 200 lights from completion.

The power cost savings are phenomenal. The replacement program cut the wattage on the city’s street-lights from 100 to 50 watts. Larger bulbs were cut from 250 to 135 watts, nearly halving power use. While a firm estimate on savings is still in process, other public power communities have reported saving up to 50% on power costs due to similar switchovers to LED.

Jared reports that customers are very happy with the changes. Not only is the light brighter and sharper, but also much more affordable for customers. For example, customers

can expect to see monthly costs on security lights decrease, with the most common light being reduced from \$11 per month to \$7 per month.

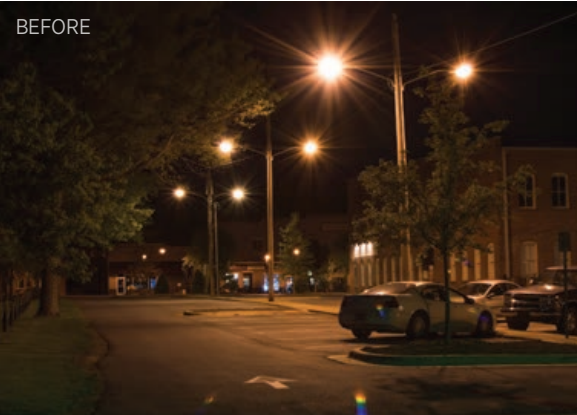
“ElectriCities provided us with the System Betterment Grant, which can be used for anything we choose, but for the past couple of years we’ve used it on our LED project. The ElectriCities marketing staff also designed graphics for us to print, hand out, and use on our website to help spread the word of LED benefits among customers,” Jared says.

Statesville Electric Utilities is also focused on load management. By encouraging industrial and commercial customers to either decrease usage or cut production during high-demand periods, they significantly reduce their power costs. Jared mentioned that a local restaurant has implemented a time-of-use plan based on recommendations from the utility, saving them and the whole system money.

“It’s a beautiful sight to see LED lights glowing over Statesville,” Jared says. “I hope this is the beginning of transforming our city to a greener, more affordable and sustainable place to live.” We hope so, too!

“ It’s a beautiful sight to see LED lights glowing over Statesville. I hope this is the beginning of transforming our city to a greener, more affordable and sustainable place to live. ”

BEFORE



AFTER



A before and after view of LEDs installed in a Walnut Street parking lot beside Payne Chiropractic in Statesville, NC.

Statesville Electric Utility lineworkers Zane Harrington (left) and Jamie Bishop (right) work together to ensure the LED installation is complete.



❖ OUR SUPPORT

ElectriCities is committed to providing reliable, affordable wholesale power to NC Public Power communities through the North Carolina Eastern Municipal Power Agency and North Carolina Municipal Power Agency Number 1. ElectriCities supports members by consulting on rate issues, conducting energy audits in public power communities across the state, and educating customers about ways to improve energy efficiency.

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ELECTRICITIES
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