

MAY/JUNE 2020 • VOL. 78 / NO. 3

PUBLIC POWER MAGAZINE

AMERICAN PUBLIC POWER ASSOCIATION

THEN & NOW

80 YEARS OF
POWERING STRONG
COMMUNITIES



Stay connected and informed with Virtual Education & Training

In this time of uncertainty, APPA is here for you with resources and programs to help you continue your work (and learning) with as little interruption as possible, ranging from webinars to online training and new virtual meetings that allow you to interact with other attendees for real networking opportunities.

Virtual Meetings

All the information and networking from an in-person meeting, from the comfort and safety of your home or office.

Business Intelligence & Data Analytics Workshop

May 19 – 20

Learn how utilities across the country are using data to improve reliability, revenue, customer satisfaction, and operations efficiency.

Public Power Connect: Virtual Summit & Business Meeting

June 8 – 9

While we can't bring you the National Conference this year, we are excited to offer this all-new event to help you connect with your national public power community. Join public power leaders online to share strategies and solutions and to celebrate the experience, innovation, and leadership of your national public power community at this virtual summit.

Wholesale Markets Summit

July 14

Join public power and other thought leaders to learn from each other, share perspectives and discuss where reforms are needed to RTO/ISO-operated wholesale markets and governance.

Webinars

A convenient and cost-effective way to get timely information on key industry topics. All webinars are recorded and available for playback in case you miss the live event. Check our web site for the latest offerings.

Online Courses

Instructor-led virtual versions of our most popular training classes let you learn through a series of in-depth, interactive weekly classes.

Advanced Public Utility Accounting

May 7 – 28

This practical course examines the more complicated aspects of accounting theory and practice to inform planning and decision-making, allowing you to work more efficiently and effectively. Earn up to 13 CPEs by attending this online course!

On Demand Training

Self-paced training combines videos, downloadable course materials, and progressive testing to bring you in-depth skills training with a flexible timeframe.

Key Accounts Certificate Program

Whether you plan to start a utility key accounts program or want to take your current program to the next level, this curriculum provides the skills, knowledge, and tools for success.

Learn more and register for all events
at www.PublicPower.org/Academy

LOOKING FOR MORE POWER?

OKOGUARD® EPR HV CABLES ARE THE ANSWER!

Okoguard HV cable is the best choice for your high voltage system, and it's the best option if you desire your cable to outperform the rest.

Okoguard's design, service history and the uncompromising standards of Okoguard HV Cables also ensure confidence in the lifetime performance of the power cable.

Every foot of Okoguard cable bears the imprint of its 142 year old company and its Employee owners. These employees are proud of its unwavering quality and trusted reliability and know that every cable has been and always will be...**Made In The USA.**

69kV 115kV 138kV



- Okoguard HV has the same important balance of properties as our MV, but is optimized for use in higher HV applications.
- Okoguard HV system uses the same "All EPR System" (strand screen, insulation and insulation screen) as our MV cables.

- Okoguard HV is qualified to the latest 138 kV requirements of the AEIC Cs9 and ICEA S-108-720 specifications.
- Okoguard HV exhibits the same long-term wet electrical characteristics as our medium voltage compound and therefore unlike XLPE, Okonite cables do not require a moisture barrier.
- Okoguard HV is significantly more flexible and easier to install than XLPE insulated cables.



**THE
OKONITE
COMPANY**

Okonite Cables...A higher Standard!

102 Hilltop Road, Ramsey, NJ 07446 201.825.0300 www.okonite.com





PUBLIC POWER MAGAZINE

MAY - JUNE 2020

THEN & NOW

4 Past Is Precedent

Joy Ditto describes how the connection established by the visionary founders of the American Public Power Association in 1940 enabled us to come through uncertainty with greater strength and resilience time and again – first with the war effort and continuing now in public power’s response to COVID-19.

8 Building on Our Strengths

Interviews with three former chairs of APPA’s Board of Directors show the common thread of what has made public power strong in the past and continues to support their success today.

16 Public Power Origin Stories

Celebrate the different reasons and processes through which public power utilities have come into existence across three eras: early electrification, after the development of the Tennessee Valley Authority, and in the 21st Century – and how each promotes staying community owned.

SPONSORED CONTENT

27 Convenience & Communication Are Key to Customer Satisfaction

As customers demand more technology-driven tools and apps to access account information and communication channels, utilities are searching for ways to meet these demands.

28 Timeline: 80 Years of Milestones

Review the history of the American Public Power Association – from legislative victories to the development of programs and services and events that have strengthened the public power community.

32 Recognizing Excellence through the Decades

Take a look back at the achievements of some of the earliest utilities to be honored with APPA's national awards, and the latest systems to earn these awards in 2020 to reflect on how much our industry has changed and how our core values remain the same.

42 Empowerment Via Electricity

Read about the founding of the Navajo Tribal Utility Authority and how its founding vision to have the utility serve the Navajo Nation continues today.

50 What's Changed and What's Maintained

Explore photos and other visuals from public power's past and present in this photo essay reflecting on how public power has connected with their communities and as a community over the past 80 years.

60 Keeping America Powered

Share this graphic to educate customers about how public power workers of different types continue to work to support critical services and daily life during the pandemic.

EDITORIAL TEAM

Delia Patterson
Senior VP, Advocacy
& Communications
& General Counsel

Paul Ciampoli
News Director

Susan Partain
Senior Editor
& Content Strategist

Robert Thomas
Creative Director

Sharon Winfield
Lead Designer, Digital & Print

Samuel Gonzales
Director, Digital & Social Media

David Blaylock
Senior Manager, Integrated
Media & Communications

Tobias Sellier
Director, Media Relations
& Communications

Taelor Bentley, Integrated
Media & Communications
Assistant

INQUIRIES

Editorial
News@PublicPower.org
202-467-2900

Subscriptions
Subscriptions@PublicPower.org
202-467-2900

Advertising
EHenson@Naylor.com
352-333-3443

Advertising is managed by
Naylor LLC.

Public Power Magazine (ISSN 0033-3654) is published six times a year by the American Public Power Association, 2451 Crystal Drive, Suite 1000, Arlington, VA 22202-4804. © 2020, American Public Power Association. Opinions expressed in articles are not policies of the Association. Periodical postage paid in Arlington, Va., and additional mailing offices.

For permission to reprint articles, contact News@PublicPower.org.



ABOUT THE AMERICAN PUBLIC POWER ASSOCIATION

The American Public Power Association is the voice of not-for-profit, community-owned utilities that power 2,000 towns and cities nationwide. We advocate before federal government to protect the interests of the more than 49 million customers that public power utilities serve, and the 93,000 people they employ. Our association offers expertise on electricity policy, technology, trends, training, and operations. We empower members to strengthen their communities by providing superior service, engaging citizens, and instilling pride in community-owned power.

Postmaster, send all address changes to:
American Public Power Association
2451 Crystal Drive, Suite 1000
Arlington, VA 22202

AMERICAN PUBLIC POWER ASSOCIATION BOARD OF DIRECTORS

OFFICERS 2019 – 2020

CHAIR: DECOSTA JENKINS, Nashville Electric Service, TN

CHAIR-ELECT: JOLENE THOMPSON, American Municipal Power and Ohio Municipal Electric Association, OH

VICE CHAIR: COLIN HANSEN, Kansas Municipal Utilities, McPherson, KS

TREASURER: LAYNE BURNINGHAM, Utah Municipal Power Agency, UT

IMMEDIATE PAST CHAIR: COLEMAN SMOAK, Piedmont Municipal Power Agency, SC

DIRECTORS

TROY ADAMS, Elk River Municipal Utilities, MN • **DAN BEANS**, Redding Electric Utility, CA • **JOHN BENAVENTE**, Guam Power Authority, GU • **TIMOTHY BURKE**, Omaha Public Power District, NE • **ELLEN BURT**, Stowe Electric Department, VT • **ANTHONY CANNON**, Greenville Utilities Commission, NC • **MARK CHESNEY**, Kansas Power Pool, KS • **FRED CLARK**, Alabama Municipal Electric Authority, AL • **JIM FERRELL**, Jackson Energy Authority, TN • **TODD GALE**, Columbus Light and Water, MS • **HUGH GRUNDEN**, Easton Utilities, MD • **JOHN HAARLOW**, Snohomish County PUD, WA • **LESLIE JAMES**, Colorado River Energy Distributors Association, AZ • **DAVID KOSTER**, Holland Board of Public Works, MI • **NICK LAWLER**, Littleton Electric Light & Water Department, MA • **JOEL LEDBETTER**, Easley Combined Utilities, SC • **Laurie Mangum**, City of St. George, UT • **ANDREW MCMAHON**, Town of Massena, NY • **ARLEN ORCHARD**, SMUD, CA • **DAVID OSBURN**, Oklahoma Municipal Power Authority, OK • **MICHAEL PETERS**, WPPI Energy, WI • **STEVE RENTFROW**, Crisp County Power Commission, GA • **JACKIE SARGENT**, Austin Energy, TX • **KIMBERLY SCHLICHTING**, Delaware Municipal Electric Corp., DE • **LEON SCHOCHENMAIER**, Pierre Municipal Utilities, SD • **DANIEL SULLIVAN**, Grand River Dam Authority, OK • **DARREL WENZEL**, Waverly Utilities, IA • **STEVE WRIGHT**, Chelan PUD, WA

EX OFFICIO

DAVE ALVEY, Chair, Policy Makers Council, Mayor, Wyandotte County/Kansas City, KS

DAN HODGES, Chair, Advisory Committee, Colorado Association of Municipal Utilities, CO



PAST IS PRECEDENT

BY JOY DITTO, PRESIDENT AND CEO,
AMERICAN PUBLIC POWER ASSOCIATION

As of this writing, on March 31, 2020, we are in the throes of the COVID-19 response. At this moment, there is uncertainty about when we will be able to stem the tide of serious infection and death from the virus and return to normalcy. Public power utilities are implementing plans to ensure essential personnel can keep the power flowing. We are working with federal, state and local governments to ensure electric utility employees are considered essential. From where we sit now, it is more apparent than ever that electricity is fundamental to modern society no matter where we work and live.

While public power utilities have long planned for “high-impact, low-frequency” events such as pandemics, we have not experienced a pervasive health crisis like this since the early years of electric utilities. The Spanish flu killed an estimated 675,000 Americans from 1918 to 1919, at the tail end of World War I, which itself killed another 117,000. At that point, electricity was not as integral to society as it is now. In addition, interconnection between utilities was not established until a few years later, with the inception of the Connecticut Valley Power Exchange in 1922.

The 18 years between this seminal event and the establishment of the American Public Power Association in 1940 — 80 years ago as of Oct. 3, 2020 — saw interconnection and the economies of scale enabled by “power pools” become more prevalent. Industries harnessed electricity to provide things like affordable cars, while newly invented machines like air conditioners made life more comfortable.

These years also saw a raging debate in the country about private power versus public power. In the 1920s, owners of private utilities, like the infamous Samuel Insull, had leveraged the monopoly power of state-regulated, vertically integrated utilities to create layers of unregulated holding companies that overcharged ratepayers and eventually collapsed under their Ponzi-scheme-like weight after the stock market crash of 1929.

In the 1930s, passage of laws like the Public Utility Holding Company Act and the Federal Power Act pushed by President Franklin Delano Roosevelt reined in these baser instincts — just as 30 years before the trust-busting laws advocated by his cousin, President Teddy Roosevelt, had reined in the steel and oil barons.

This era also birthed the federal utility known as the Tennessee Valley Authority, nonprofit rural electric cooperatives to serve the “last mile” of electric service to farmers and ranchers, and massive hydropower projects such as the Hoover Dam that instilled the concept of “preference” power — designating not-for-profit public power and rural electric cooperatives as preferred customers to purchase this federally generated hydropower at cost.

While many public power utilities had been created in the late 1800s to serve communities overlooked by private power, the 1930s were an inflexion point. They established themselves as uniquely suited to providing this now essential service — a “public enterprise” that married public works with excellence in engineering and performance.

The outcome of World War II was not predetermined, but I have no doubt that the tenacity, innovation, and engineering brilliance of our society — fiercely underpinned by cost-based, reliable and abundant electricity — had a lot to do with tipping the scales.

This era also highlighted the need for a unified public power presence in Washington, D.C., as well as the need for a community of public power utilities that would support each other and, ultimately, the communities they each served. The groundwork was laid for the creation of an association of public power utilities to “promote cooperation among, and the betterment of municipal corporations, state agencies, and political subdivisions ... and to educate and assist the public power sector of the electric utility industry with particular regard to management and operation; engineering, design, construction, operation and research; accounting and commercial practice; public policy; personnel training; and such other matters as may be common to ... Public Power Systems.”

The realization of this plan occurred in October 1940, when the world was in turmoil as a result of the aggression of Nazi Germany and Imperial Japan. Such aggression had been displayed a few months earlier, when Paris fell to the Germans on June 14. On that day, Roosevelt signed into law the Naval Expansion Act, which authorized an increase of the U.S. Navy by 11%. In the few days before that action, he had approved the sale of surplus war material to Great Britain and condemned Italy’s declaration of war against France and Great Britain.

The future was uncertain, and the U.S. was still rebuilding from the Great Depression. No one knew in 1940 if the Allies would win or, for the optimists, when they would win. Yet the need for public power utilities throughout the country to link arms and face events together was never more certain.



CHARTER MEMBERS OF THE AMERICAN PUBLIC POWER ASSOCIATION BOARD OF DIRECTORS, 1940

JAMES D. DONOVAN

Kansas City, Kansas

E.F. SCATTERGOOD

Los Angeles, California

FRANCIS KING

Burlington, Vermont

MAJOR THOMAS ALLEN

Memphis, Tennessee

MAX STARCKE

Austin, Texas

E.F. HOFFMAN

Seattle, Washington

FRANK PIERCE

Marshalltown, Iowa

JOHN BECKER

Hartford, Wisconsin

CLAYTON O. JOHNSON

Jamestown, New York

O. H. ADAMS

Fort Wayne, Indiana

WILLIS J. SPAULDING

Springfield, Illinois

ROBERT M. COOPER

Columbia, South Carolina

O.E. ECKERT

Lansing, Michigan

ROBERT BECK

Aberdeen, Washington

E.L. MOSELY

Colorado Springs, Colorado

PAST IS PRECEDENT

On Oct. 29, the three original staff members of the American Public Power Association, Boyd Fisher, Louis C. Stephens and Harold C. Ames Jr. — all residents of the greater Washington, D.C., area — signed the certificate of incorporation in Washington and listed the first 15 Board members who came from public power utilities across the country. Some of these men would serve in the war once the U.S. officially entered it on Dec. 7, 1941, but some would stay back to ensure that power flowed to the factories, aluminum smelters, mines, docks, and other infrastructure that enabled us to eventually win the war. It is no coincidence that public power utilities underpinned many crucial wartime industries and supply lines in places like Los Angeles, Washington state and the Tennessee Valley, among many others.

While the COVID-19 outbreak is not caused by malicious nation-states seeking world domination, nor is the death toll expected to approach even the tip of the iceberg of the 70 million to 85 million people killed from wartime actions and associated famine and disease during World War II, there is similarity in the uncertainty. When will we better understand the nature of COVID-19 and the best prevention and

treatment while being able to keep our society and economy going? What are the implications for critical infrastructure providers such as public power utilities in both the long and short term as they balance health and safety with keeping the power flowing to their communities? What are the implications for our country and freedoms?

The outcome of World War II was not predetermined, but I have no doubt that the tenacity, innovation, and engineering brilliance of our society — fiercely underpinned by cost-based, reliable and abundant electricity — had a lot to do with tipping the scales. The connection established by the visionary founders of APPA in 1940 also undoubtedly helped the war effort as public power utility leaders and staff relied on each other via APPA to inform best practices and to aid in removing bureaucratic red tape in Washington. This is the very same thing that is happening now in response to COVID-19, and it will enable us to come through this uncertainty with greater strength and resilience. That is the power of public power, and I am so grateful to the dedicated professionals across the country who have made significant sacrifices to keep the lights on — both then and now.

Solve targeted problems **now.**

Work and asset management software



Quick to implement
Cost effective
Integratable

varasset[®]

Software that **works**
www.varasset.com



BUILDING ON OUR STRENGTHS

**A LEGACY OF PUBLIC POWER LEADERSHIP
SHARES LESSONS FOR FUTURE SUCCESS**

BY SUSAN PARTAIN, SENIOR EDITOR AND CONTENT STRATEGIST,
AMERICAN PUBLIC POWER ASSOCIATION

As the energy landscape has changed dramatically over the last century, public power utilities have been through many challenges and have seized many opportunities to come together to reshape how electric utilities do business. Interviews with three former chairs of the American Public Power Association's Board of Directors show the common thread of what has made public power strong in the past and what continues to support their success today.



INTERVIEWS WITH:

ELDON COTTON, former general manager, Los Angeles Department of Water and Power, and APPA board chair in 1995-96

PHYLLIS CURRIE, consultant for Hometown Connections; chair, MISO board of directors; former general manager, Pasadena Water and Power in California; and APPA board chair in 2012-13

JOHN TWITTY, executive director of TAPS, former general manager of City Utilities of Springfield in Missouri, and APPA board chair in 2006-07

What was the biggest challenge the industry faced when you were board chair?

COTTON: The entire 1990s were a period of uncertainty in California, both before 1996, when the electric utility industry was deregulated, and after. Even though public power entities were largely exempted from most provisions of the deregulation, they were at risk from many of the unintended consequences. Every utility had to consider the potential impacts of disaggregation of generation, transmission, and distribution. Most of all, the potential loss of retail load made long-term planning, with confidence, impossible. The proposal to allow retail customers to choose their energy provider raised serious concerns about stranded costs of generation, especially for Los Angeles, because of significant investment in long-term generation resources, both coal and nuclear.

TWITTY: In 2006-07, [the industry was] just beginning to figure out how we were going to make electricity going forward. Really the beginning stages of renewables that we see now, as wind and solar were pretty new. We created the CEO Climate Change Task Force to explore how we were going to make sure we made electricity in a way that is acceptable to our customers, to our communities, and is competitive. I asked Bill Gallagher, my predecessor as APPA's board chair, to be chair of that committee. He only recently stepped down as

chair. It turned out to be a really big effort. The other big deal that year was that APPA's President & CEO, Alan Richardson, retired. We went through the search process for what was only the fourth CEO in the organization's history, which turned out to be Mark Crisson. I think our group did a really good job, because Mark did a really good job.

CURRIE: We were looking at how the Environmental Protection Agency was going to mandate changes by regulation. This was before the Clean Power Plan, but would have required a lot of scrubbers and the like on various units. We were struggling with how to come together so that we could articulate one collective position. There was concern about how the Association was going to bridge the divide that was occurring between members that supported traditional resources and members that had communities and members of Congress pushing clean energy policies. Climate change was being discussed but it wasn't totally accepted by a lot of people.

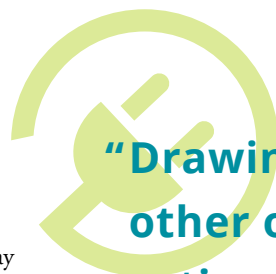


“New rules and regulations are continuing challenges for utilities of all sizes, but especially for small utilities. Evolution or creation of unfair market conditions is also a threat.”

ELDON COTTON

What do you see as the biggest challenge for public power now?

TWITTY: This whole paradigm shift of how we make electricity and how we harness the technology available to us today is the issue of our time. This has always been an industry where you have to move big machinery. Now, you still have to move big machinery because you have to be able to ramp up and down quickly with the growth of intermittent power supplies on the system. The footprint wind and solar have, and the battery technology being implemented — we're still just sticking our toe into the water of that particular phenomenon. In some ways, it's a continuation of what we started with the task force back then, but it's a bit more mature now.



“Drawing on the resources of other organizations and joint action agencies can give you support for what you can't do on your own — where you can get with your peers and think about what's out there, and what you need to be doing.”

PHYLLIS CURRIE

PARTNERSHIP 2.0

Proven Capabilities. New Opportunities.

New challenges require a new mindset. TEA has transformed to bring the analytical capabilities and market knowledge you've depended on for over 20 years to bear on the new challenges you're facing.

Whether you're integrating distributed energy resources, analyzing your “big data” for meaningful insights, or transitioning to become “Utility 2.0,” TEA's advanced analytical capabilities can help you thrive in the world to come.

www.teainc.org

TEA
THE Energy Authority



“I daresay that without a powerful national association and effective joint action agencies, a lot of smaller utilities would simply not be able to continue to do what their communities need them to because the system has gotten so complex.”

JOHN TWITTY

CURRIE: The big challenge is technology. Hometown Connections is working hard to provide resources to allow utilities to develop advanced metering infrastructure and meter data management systems and get the benefit of that technology, because it is going to be critical as more technology develops and more customers demand information for ease of service. Utilities coming together to jointly acquire a resource, such as AMI, or to understand how it is being deployed in another utility, that helps them make the right decisions as to how they are going to deploy the right technology.

COTTON: New rules and regulations are continuing challenges for utilities of all sizes, but especially for small utilities. Evolution or creation of unfair market conditions is also a threat.

California has permitted customer choice through the formation of community choice aggregation and several other states are considering creating similar programs. The growth in the number of customers and loads served by CCAs has been significant. Utilities such as Pacific Gas & Electric and Southern California Edison could lose the majority of their load, leaving them as wires and service providers. The Clean Power Alliance CCA in Southern California has the potential to serve more customers, eventually, than LADWP.

What success has come from public power utilities combining their efforts?

CURRIE: Public power utilities, if they do find ways to agree on key issues, can have a much bigger impact than they would as individuals. For example, I’m on the MISO board now, and an entity like AMP, which has activity in multiple regional transmission organizations, can have an impact along with some of the investor-owned utilities, by virtue of marshalling the collective influence of its many members.

Change is coming, and some aspects [of managing a utility] will only get more challenging. It is particularly tough if you are running a small utility and are already doing everything. Drawing on the resources of other organizations and joint action agencies can give you support for what you can’t do on your own — where you can get with your peers and think about what’s out there, and what you need to be doing.

COTTON: Utilities working together, in various forms, have been very successful and joint action continues to provide opportunity to achieve goals efficiently and cost effectively. The Southern California Public Power Authority has served large and small utilities for more than 40 years in the acquisition of new resources, both conventional and renewable. The success of SCPPA’s programs could not have been achieved by the members acting individually.

BUILDING ON OUR STRENGTHS

TWITTY: Most of the time, things are built from the ground up. But in this particular case, you have to have a strong organization. APPA for 80 years has been the glue that has kept a lot of this together.

I daresay that without a powerful national association and effective joint action agencies, a lot of smaller utilities would simply not be able to continue to do what their communities need them to because the system has gotten so complex. Take one example: environmental regulation. Success in Washington, D.C. or at state capitals has happened because people band together. If you didn't have joint action agencies looking out for you, you wouldn't be able to exist. You'd be looking to get bought out by the co-op or IOU around you, and that's not good; that's one step removed from the customer. Being able to hire qualified lineworkers is also a big deal. In Missouri, our smaller community-owned utilities can grow their own talent because the state agency created lineworker training programs.

Organizations like APPA are only as good as the people that are active in them. Make sure that you invest properly with your time and talent, but also with your dues dollars. If you have a rough budget year and have to cut somewhere, don't cut there.

Was there a particular APPA resource/benefit you encouraged your staff to take advantage of?

COTTON: I strongly encouraged LADWP legislative and regulatory staff to participate in APPA programs and to work with APPA staff as well as our state public power association. Personally, I found sharing of information and perspectives with public power colleagues to be invaluable. Large utilities can learn from small utilities, and vice versa. Participating in APPA activities provided an opportunity to become aware of evolving challenges throughout the nation and how they were being addressed. It was very beneficial to have trustworthy allies to share information with and to learn from.

CURRIE: Two things stood out. One was the legislative and regulatory support. I usually had maybe one or two people at most that could support [those functions]. If it wasn't for APPA or state associations, we would not have been able to engage in a lot of the policy that was going on. The other area that stood out was the education and training resources. Staff

need to be able to see what is going on beyond the boundaries that they serve. Programs such as RP3 and the conferences allow your staff to see what others are doing and get away from just a narrow view of your own activity.

TWITTY: One of the things that I encouraged was participation in the National Conference and other events. To put yourself into contact with people who are doing exactly what you are doing. There are good ideas everywhere, and they don't all come from your utility. Whenever you go to a conference, everyone always says the most valuable time is not the presentation being made — it is the hallway time or break time where you can talk out the problems.

What will be the hallmarks of the successful public power utility of the future?

CURRIE: Sometimes people see a movement coming, and they don't want to be the first to address it. That's common in the public sector. Some of that is prudent. [But] we all have to embrace the future and not get stuck in reliving the past. Nothing is ever going to go back to the good old days, no matter how you define them. You have to be able to pivot when you need to. You have to lean in to the uncertainty of the future. Managers in my generation have to be prepared to have staff members come on who have a whole different outlook. You need to be able to encourage what they can bring to the utility, and not hinder them so much that you can't get the benefit of their thinking.

The energy portfolio is changing. Distributed energy resources — solar versus storage versus wind — are coming on relatively fast. Depending on the part of the country you're in, you'll have to deal with that sooner rather than later. You also have to look at what the community wants. [Public power utilities] have to stay engaged with the community sentiment, and a lot of communities are going for clean resources because of concern over climate change. As managers, you have to know where your community is, know where your state is going, know where your region is going, and know what the implications are in managing a transition in resources.

SINCE 1940,
the American Public Power
Association has had

75

INDIVIDUALS
serve as chair of its
board of directors.



**ONLY TWO PEOPLE
HELD THE POSITION
FOR MORE THAN ONE YEAR –**



JAMES D. DONOVAN from Kansas
City Board of Public Utilities (1940-1944)
and **O.E. ECKERT** from
Lansing Board of Water & Light
(1945-1946).



When
JOLENE THOMPSON

becomes board chair
in June 2020,
she will be the

6th

WOMAN

to hold the position.



**CHAIRS HAVE REPRESENTED
UTILITIES IN
23
DIFFERENT STATES.**

The states where the most board chairs
have hailed from are:

WASHINGTON



10

CALIFORNIA



9

TENNESSEE



8

NEBRASKA



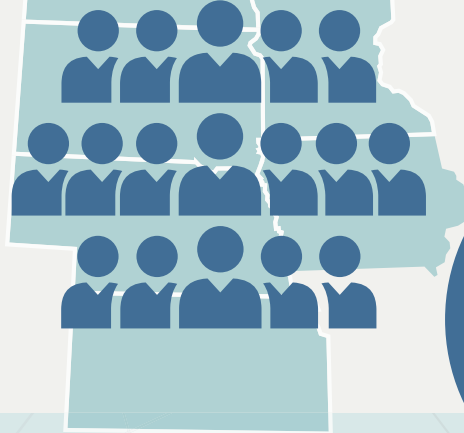
6

KANSAS



6

**CHAIRS HAVE MOST OFTEN REPRESENTED
REGION 3**



REGION 1

has had the **fewest**
individuals who have
served as chair.



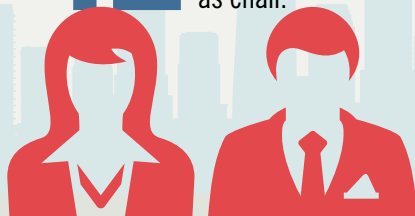
CHAIRS HAVE REPRESENTED

58

different utilities or systems.

12 members have
had more than
one person serve
as chair.

The Los Angeles Department of Water and Power has had
the most people elected to the position, with five:
E.F. SCATTERGOOD (1947), **SAMUEL B. MORRIS**
(1949), **WILLIAM S. PETERSON** (1956), **IVAN L.
BATEMAN** (1961), and **ELDON COTTON** (1995)



BUILDING ON OUR STRENGTHS

TWITTY: When you are in a monopoly business, you have to do business with your customers in such a way that they want to do business with you, not just because they have to. The great beauty of public power is that there is only one master — the customer. You take care of customers for the right reasons to make sure you're doing what they need for you to do. It's a pretty easy equation.

Reliability is only important when the lights are out. Most of the time, the system is on. If we go messing around with the reliability of the system with intermittent power supplies, that would get people's attention really quickly. What's always important is price. You have really significant differences in the prices that people pay for electricity. In Springfield, residential electricity is probably 9 or 10 cents. I have friends in California whose first block is about 40 cents. What makes financial sense to do in California is a whole different deal than what makes financial sense in the middle of the country. How municipally owned utilities manage and communicate that is critical, since

most of the cost of the monthly electricity bill is the cost of generating electricity.

Because of changes in the industry, prices are going to change, and you have to make sure folks know. So, communicate what's changing in the industry, and make sure that your customers (to the fullest extent possible) aren't surprised with a rate change.

COTTON: Being able to do the right thing for customers — at the right time and in the right way — is the definition of quality performance. Public power utilities have proven to be quite nimble and, in many instances, have been able to move more quickly than IOUs. An important element of past success has been the ability to make decisions locally that best serve the local needs of customers. Preserving local decision-making, and implementing decisions in the most cost-effective manner, will ensure future success.



Being available for your customers round-the-clock has never been easier. For nearly 30 years, utilities have partnered with CRC to turn call handling and crew dispatch challenges into seamless solutions.



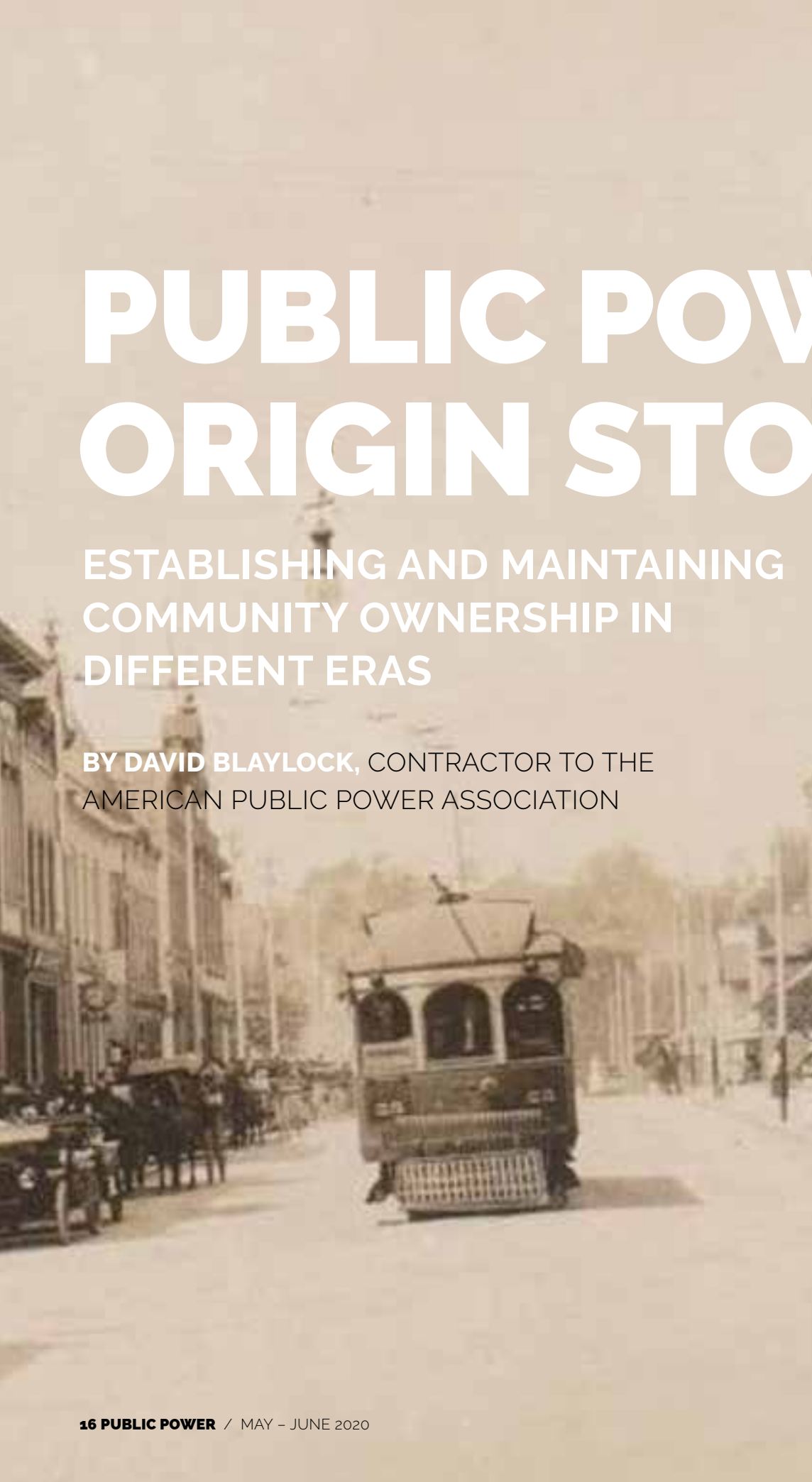
contact-dispatch center | alarm monitoring
www.crc.coop | 800-892-1578 | info@crc.coop



PUBLIC POWER ORIGIN STORIES:

ESTABLISHING AND MAINTAINING
COMMUNITY OWNERSHIP IN
DIFFERENT ERAS

BY DAVID BLAYLOCK, CONTRACTOR TO THE
AMERICAN PUBLIC POWER ASSOCIATION



RURAL ELECTRIFICATION
S. DEPARTMENT



Here It Comes



TION ADMINISTRAT
OF AGRICULT



THE AMERICAN PUBLIC POWER ASSOCIATION WAS ESTABLISHED 80 YEARS AGO, BUT THE HISTORY OF PUBLIC POWER STRETCHES BACK ANOTHER 60 YEARS TO WHEN THE ELECTRIC UTILITY IN THE CITY OF BUTLER, MISSOURI, WAS ESTABLISHED IN 1881. MORE THAN 2,000 PUBLIC POWER UTILITIES HAVE SINCE BEEN ESTABLISHED. MOST WERE CREATED IN THOSE FIRST 50 YEARS OF ELECTRIFICATION, MANY MORE FORMED CONCURRENTLY WITH APPA'S FOUNDING FOLLOWING THE FORMATION OF THE TENNESSEE VALLEY AUTHORITY AND OTHER NEW DEAL INITIATIVES, AND A PROUD FEW HAVE NAVIGATED THROUGH MUNICIPALIZATION IN RECENT YEARS AFTER DECADES OF COOPERATIVE AND INVESTOR-OWNED UTILITY SERVICE.

TO CELEBRATE ALL THE DIFFERENT REASONS, ERAS, AND PROCESSES THROUGH WHICH PUBLIC POWER UTILITIES HAVE COME INTO EXISTENCE, PUBLIC POWER HEARD FROM A UTILITY ESTABLISHED FROM EACH TIME PERIOD — PLYMOUTH UTILITIES, WISCONSIN (EST. 1900), GREENEVILLE LIGHT & POWER SYSTEM, TENNESSEE (EST. 1945), AND JEFFERSON COUNTY PUBLIC UTILITY DISTRICT, WASHINGTON (EST. 2013) — TO FIND OUT HOW EACH NAVIGATED THROUGH THE PROCESS OF BECOMING — AND STAYING — COMMUNITY OWNED.

A sepia-toned historical photograph of a street in Plymouth, Wisconsin, around 1900. The street is lined with multi-story buildings on the left and a horse-drawn streetcar on the right. People are visible on the sidewalks. The image serves as the background for the text on the left side of the page.

SETTING THE SPARK FOR MUNICIPALIZATION AND KEEPING IT LIT:

**PLYMOUTH UTILITIES,
WISCONSIN**

1900

On Sept. 12, 1890, Christopher Kassebaum and Henry Bubb spent their first night as the official street lighters for the community of Plymouth, Wisconsin. As the two men went through the motions of cleaning and filling the 17 kerosene streetlamps that lighted the community that evening, they likely had no idea that they were setting the spark for a decade of movement through the community to control its own lighting and electricity.

At the time, Plymouth, a city along the Mullet River near Sheboygan that now has nearly 9,000 residents, was a center in the bygone art of wheelwrighting, or the craft of building wooden wheels. The activity was so central to the city's development that its nickname remains "Hub City."

The path to Plymouth Utilities' existence started in 1895 with the attempt at an electric franchise agreement in the town by entrepreneur H.E. Dow. The community rallied together at a citizens meeting to head off the creation of an investor-owned utility, and the council voted down Dow's franchise proposal. However, his company, the Plymouth Refrigerator, Water, Light and Power Company, was allowed to construct electric lines in the city that could be used by anyone who wanted to take advantage of his offer of service.

Five years later, the city council started a fact-finding mission about how it could manage a utility to serve the community and visited the newly formed public power utilities around the state, including Beaver Dam, Watertown, Columbus, and Waupun.

What had been started by the council as a process to possibly sell the utility led it to instead want to codify its existence and herald its value.

On Oct. 9, 1900, the council approved a franchise agreement with a Wisconsin industrialist to construct a waterworks and lighting system with the requirement that, upon completion, the city would have the option to purchase the system for around \$70,000. The city made that purchase and paid another \$70,000 for the infrastructure, machinery, and equipment of the existing Plymouth Water, Light, and Power Company.

By the fall of 1901, the municipality owned both a water and an electric system and had established a mission statement that promised “modernly lighted homes and business places” and “moderate electric rates.” That mission statement continues to drive Plymouth Utilities 119 years later.

Though the early years saw setbacks, including a 1911 power house explosion that led to momentary public discord over the need to issue a \$35,000 bond to reinvest in the electric plant, these obstructions often provoked the utility to modernize and improve its business practices and facilities in a way that kept it as an example of excellent not-for-profit service.

Today, Plymouth has a second title that makes it first among its peers in the state: It’s considered the Cheese Capital of the World. Among the many cheese companies that call Plymouth home are Sargento, Sartori, Masters Gallery Foods, and Great Lakes Cheeses. A few miles outside of the city — but still within the city utility’s service territory — is the headquarters of Johnsonville Sausage. These industries employ much of the county population and rely heavily on the electrical power made possible by Plymouth Utilities.

Despite its strong history of serving the community, Plymouth Utilities faced a new challenge to its continued existence beginning in 2010, just as City Administrator Brian Yerges took over management of the utility (Yerges left Plymouth in May 2020 to become general manager of Electrical District No. 3 of Pinal County, Arizona).

For much of its existence, Plymouth Utilities reported to an independent commission. This changed in 1997, when reporting shifted over to the city council. This change meant that the utility immediately needed to build relationships that hadn’t existed before.

“There was some conflict between board members at the time,” Yerges said. “Part of the issue was a contested mayor race a few years before I started. That natural division resulted in some local officials taking a position in direct opposition to that of the mayor, who had always been supportive of owning and operating a municipal utility.”

Yerges also cites general confusion among some people at the time about the utility’s role and management, in part because of what he recognized as insufficient communication between the utility and the council. This manifested itself, in particular, over the question of why Plymouth Utilities should remain involved in the American Transmission Company, a transmission-only utility owned by Wisconsin IOUs, cooperatives, and public power utilities.

“It was difficult for some local officials to understand how and why the city owned a small portion of ATC and why we continued to make investments into ATC on an annual basis,” Yerges said. “Elected officials at the time did not realize that transmission capacity and access was a problem. We had to explain the who, what, where, when, how, and why of ATC.”

PUBLIC POWER ORIGIN STORIES

As these issues developed, the council hired Baker Tilly, the utility's longtime auditor, to conduct an independent study analyzing the feasibility of a sell-off. To Yerges' relief, the Baker Tilly report made the case that it was not in the best interest of Plymouth to sell its utility.

"That meant we needed to then start the process of communicating the outcome of the report to the community," Yerges said. "The immediate reaction was to spend some in-depth time studying the report and communicating it to the board, employees, and the community. Thankfully, the local newspaper also did a nice job reporting on the results and presenting the facts of the economic evaluation."

Then came the twist: What had been started by the council as a process to possibly sell the utility led it to instead want to codify its existence and herald its value.

Later that year, the council adopted Common Council Resolution 18 of 2010, "reaffirming the city of Plymouth's support of continuing to own and operate a municipal electric utility."

"Since then, there have been no efforts to raise the prospect of selling," Yerges said. "Instead, staff and electric officials have increased their activities in promoting the value of public power."

Notably, they didn't rest on their laurels for too long. The utility came away from the experience and the reaffirmation of its existence with the determination to identify issues and opportunities to better improve council-utility relations and generally create a better utility. This major modernization effort included investment in a new operations center, upgrades to substations, investment in advanced metering infrastructure technology and LED streetlight-

ing, and taking on a 10-year capital improvement plan to continue investing in infrastructure and distribution system improvements.

With all that has happened, Yerges recognizes the importance of keeping a perspective on how the utility had to navigate through everything to get to this place, from its founding to its sell-off rejection to today.

"It was about relationship building, increased communication and transparency, and education," he added. "Where there is conflict with a board or council, it is easy to get caught up in an 'us versus them' mentality. The main thing you need to do is keep a long-term perspective while focusing on your mission of providing safe, reliable, and responsible utility services."



CLOSURES

ADSS HARDWARE

STORAGE SOLUTIONS

The Quality You Trust. The Innovation You Need.

High-quality FTTX solutions with trusted COYOTE® and FIBERLIGN® products

 **PREFORMED** LINE PRODUCTS

preformed.com



PROTECTING THE PROMISE OF LOCAL CONTROL:

**GREENEVILLE LIGHT
& POWER, TENNESSEE**

1945

Here It Com



**AL ELECTRIFICATION ADMINISTE
DEPARTMENT OF AGRICULTURE**

The year before the American Public Power Association was established, 1939, saw a large increase in the formation of public power utilities, with 69 of today's utilities establishing service that year. This was in large part due to the absorption of some private utilities into the Tennessee Valley Authority. The creation of public power utilities slowed down during World War II, then resurged in 1945 as TVA expanded into East Tennessee.

One such utility is Greeneville Light & Power. Privately owned electric service first appeared in Greeneville in 1886, when a local businessperson built a coal-fired generating station downtown. In the early 1900s, that service provider was bought out by the Tennessee Eastern Electric Company, which took over most of the region's small utilities during that period. To cover the needs of its many towns, the first hydroelectric dam in the region was built a few miles outside Greeneville.

TVA formed in 1933, but its expansion into Northeast Tennessee was delayed due to logistics, the actions of the private power companies, and priority recalibration due to the impending war effort.

After TVA purchased the East Tennessee Light and Power Company in December 1944, Greeneville, along with Bristol (both Tennessee and Virginia), Elizabethton, Erwin, and Johnson City, started the new year negotiating the purchase of their utility from TVA. On June 16, 1945, the Greeneville Light & Power System was created, taking over all the former IOU service territory in Greene County.

In the 75 years since the public power utility was established, only four general managers have run GLPS, with current General Manager Bill Carroll spearheading the utility for almost half of that time.

"So much of what we have today is because of the foresight of those who were creating this utility then," said Carroll, who is retiring later this year. "Those first two board meetings spanned two days each and set us up to get through the next 75 years as a countywide utility."

PUBLIC POWER ORIGIN STORIES

In the last few years, though, Carroll became concerned that the state of operations had changed enough to merit a rethinking of some of the ways GLPS had been doing business. This coincided with the passage of the Tennessee Municipal Energy Authority Act in 2016. This legislation greatly reduced the procedural overhead involved in converting a traditional public power utility to an energy authority, something that had been achieved by a few Tennessee utilities previously but hadn't been feasible for Greeneville due to the high legal fees and increased regulatory hoops required for the conversion, Carroll said.

"The politics of a community can change pretty fast, and a utility that looks to be supported and appreciated by its board can suddenly see that change through no fault of its own if the politics of the town changes," he said.

"SO MUCH OF WHAT WE HAVE TODAY IS BECAUSE OF THE FORESIGHT OF THOSE WHO WERE CREATING THIS UTILITY THEN."

BILL CARROLL

GENERAL MANAGER
GREENEVILLE LIGHT & POWER

"Our longtime mayor and board chairman shared my belief that, if you don't do this when everything looks good in your local politics, you might find yourself, two elections later, regretting it," he added.

After presenting the case for becoming an energy authority to the town council in November 2018 and getting its quick approval for the plan, the existing GLPS board was abolished as of midnight June 30, 2019, and

replaced immediately with the Greeneville Energy Authority Board.

The central change that came with the creation of the energy authority was the shift of board composition and elections to be completely independent of town elections. Instead of having a traditional utility board, Greeneville Energy Authority board member candidates are chosen by the energy authority itself and then must be approved by the town council. The



At the end of the day, what matters most to us, is who we helped get the job done right and get back home.

Trust TALLMAN

TALLMAN
EQUIPMENT CO., INC.
EMPLOYEE OWNED

www.tallmanequipment.com

Call Toll Free: 877-860-5666

International: 630-860-5666



PUBLIC POWER ORIGIN STORIES

council can reject a nominee but cannot propose another option, meaning board members will always be selected by the energy authority first.

“It was important to me to create a transition that would ensure the future viability of serving the community with its power needs, create circumstances where we could be more insulated from politics, while [ensuring that] none of the customers would ever feel any difference in how they are served by us,” he said.

Carroll said the benefits of the shift extend beyond political insulation.

One big benefit is that the days of worrying about an unexpected sell-off threat are thought to be a thing of the past. “As an energy authority, any attempt to buy the utility would have to be OK’d by the energy authority board, approved by the town’s mayor and aldermen, and then would have to be voted on by the town in

a public referendum,” said Carroll. “If the people trying to buy it can get through those hoops and the townspeople would still want to sell us, then maybe we should be sold.”

“We now have more flexibility to go into joint agreements and cooperative efforts with private and other governmental entities,” he said. “This is particularly important as we go into the process of looking at broadband. We’re still very early in the process and we don’t know yet if we’re even interested in competing with the cable company, but we wanted to at least have that option while we built out a broadband backbone for the city and county uses.”

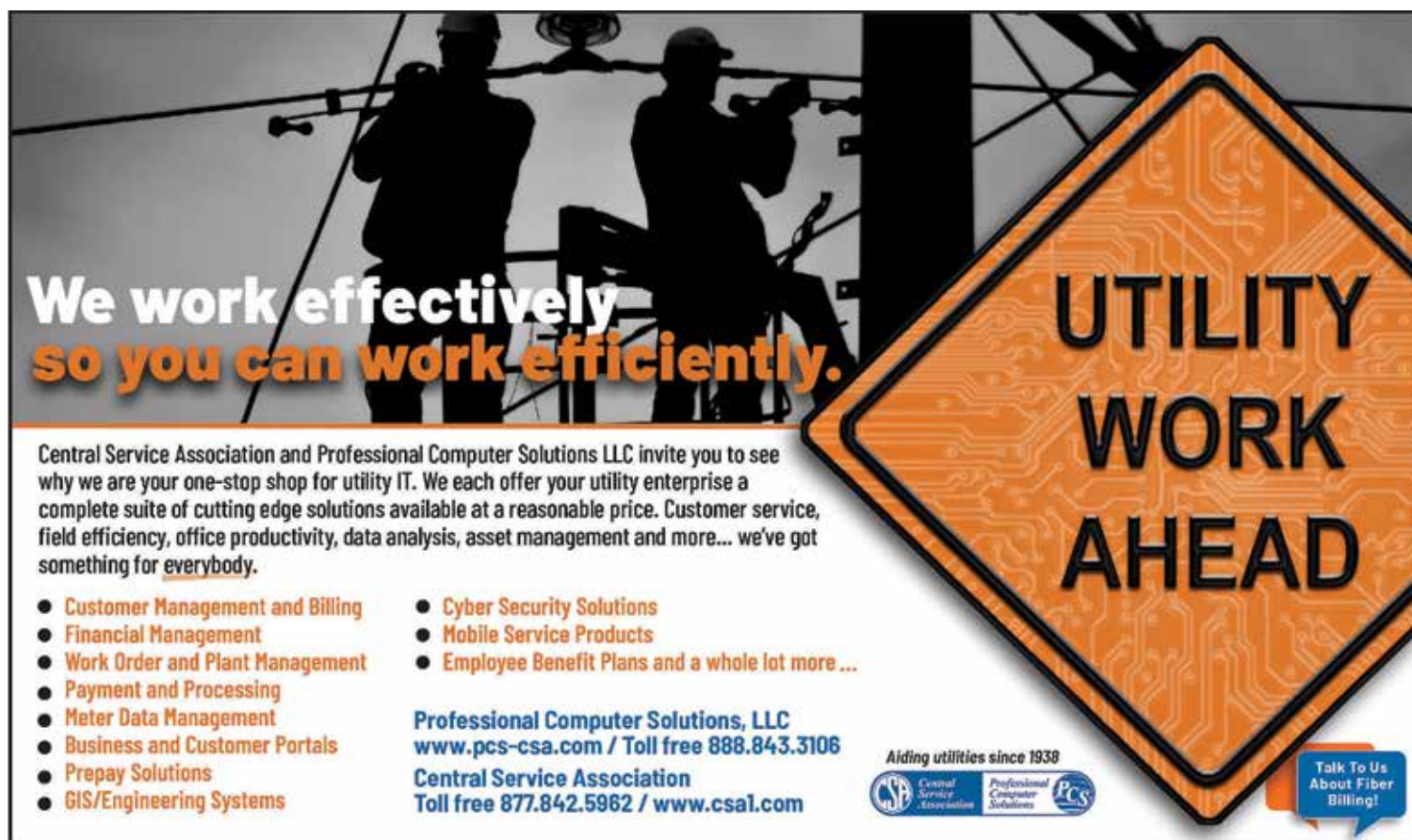
Since making the move to an energy authority, Carroll has been in talks with other Tennessee communities that are interested in taking advantage of the new state legislation and following in GLPS’ footsteps. At this point, two communities he spoke with — Erwin and

Jellico — have joined many others in the state in following through on the conversion.

But through all the changes, Carroll thinks a big part of Greeneville’s success has been the way things haven’t changed.

“People still get the same great service, work with the same great employees, come to the same building they’ve always come to, see the same logo everywhere, and write the check to the same name,” he said.

“We’ve humbly served our friends and neighbors for 75 years as the Greeneville Light & Power System,” Carroll added. “Even though an organizational change was a good idea, we kept that name as a reminder of why we were created, what our focus must be, and of the quality of service that our customers deserve. Our original name proudly declared that we were public power, that hasn’t changed.”



**We work effectively
so you can work efficiently.**


Central Service Association and Professional Computer Solutions LLC invite you to see why we are your one-stop shop for utility IT. We each offer your utility enterprise a complete suite of cutting edge solutions available at a reasonable price. Customer service, field efficiency, office productivity, data analysis, asset management and more... we've got something for everybody.

- Customer Management and Billing
- Financial Management
- Work Order and Plant Management
- Payment and Processing
- Meter Data Management
- Business and Customer Portals
- Prepay Solutions
- GIS/Engineering Systems
- Cyber Security Solutions
- Mobile Service Products
- Employee Benefit Plans and a whole lot more...

Professional Computer Solutions, LLC
www.pcs-csa.com / Toll free 888.843.3106

Central Service Association
Toll free 877.842.5962 / www.csa1.com

Aiding utilities since 1938



Talk To Us About Fiber Billing!



FROM GROWING PAINS TO PROMISES DELIVERED: JEFFERSON COUNTY PUD, WASHINGTON 2012

BY WILL O'DONNELL, COMMUNICATIONS
MANAGER, JEFFERSON COUNTY
PUBLIC UTILITY DISTRICT #1

One of our former commissioners was fond of saying that we started the electric utility (Jefferson County PUD in northwest Washington) with next to nothing, not even a screwdriver nor a single spool of wire. Sure, we had wires and poles and substations, but the operations yard was empty when we took over: no bucket trucks, spare transformers, tools, gear, or electrical employees.

We hired our first electrical employee in November 2012 — five months before we took over operation of the power system in April 2013. From that November to April, we had to hire and outfit an electrical division from scratch. Not an easy task, but we did it. That first electrical hire, Kevin Streett, is now our general manager. And quite a few members of the original crew he put together are still with us today, running the electric utility they all helped to build.

One of the most immediate and obvious improvements Kevin and his crew brought to our customers came in the form of outage response times. A decade prior to our purchase of the system, the IOU had eliminated all of its local service staff and outsourced the line work to private contractors located almost two hours away — contractors who, when a storm hit, were also busy working in other parts of the IOU's territory and who needed to cross one of the world's longest floating bridges to reach our community. A bridge famous nationally for sinking during a storm in the late 1970s and infamous locally for closing when the winds pick up. Needless to say, our local crews, living in the community they serve, are able to respond much faster to local outage events than contractors from far away.

BY BECOMING COMMUNITY OWNED, WE ARE ABLE TO PROVIDE OUR COMMUNITY WITH SOME OF THE CLEANEST, MOST AFFORDABLE ELECTRICITY PRODUCED ON THE PLANET.



Improving reliability took a bit longer, but we have done that, too — expanding substations, adding reclosers, replacing regulators and transformers, building our own SCADA system, and undergrounding dozens of miles of overhead lines every year. We’ve invested millions in equipment repairs and infrastructure upgrades that the IOU had neglected to do for decades.

By becoming community owned, we are able to provide our community with some of the cleanest, most affordable electricity produced on the planet. The majority of the power our previous electric utility provided came from coal and natural gas generation. As a public power utility, we are able to purchase all of our power from the Bonneville Power Administration, which delivers 97% carbon-free electricity — the bulk of it generated by hydroelectric dams on the Columbia River.

Was it easy? No. Our first couple of years operating the electric utility could often be chaotic, and by year five we still struggled. Our challenges were well documented in the local press and even became the subject of an anti-municipalization white paper by a regional think tank. In fact, that white paper, which was published in 2016 and unsubtly titled, *The Failed Promises and Politics of Jefferson Public Power: How Creation of a Public Electric Utility Led to Higher Rates and Lower Customer Service*, continues to be circulated by anti-public power IOUs.

In late 2019, it was being used to discourage a city in Kansas from municipalizing. A city staffer even called our utility to see if some of what was being alleged about us was true. As I explained, depending on how you looked at it, some of it was, and some of it wasn’t, but a lot of it was merely taken out of context.

We did have trouble with customer service and billing coming out of the gate. We had trouble with staff turnover early on. And our rates haven’t always been lower than the former IOU. Were we a failure? Not at all. Did we break any of the promises made? No, some just took a bit longer to deliver than initially planned. But now, in 2020, seven years in, we are strong and financially stable and we feel like an unqualified success. We are fully staffed, well equipped, and we are paying cash to expand and remodel our very outdated customer service and operations center.

Municipalization is hard, but the benefits are huge. Though we acknowledge the struggles, and even some foibles, the staff and commission at Jefferson County PUD are extremely proud of what we have built. We hope we can help the next batch of communities that want some honest advice about a difficult journey do the same.

CONVENIENCE & COMMUNICATION ARE KEY TO CUSTOMER SATISFACTION

As customers demand more technology-driven tools and apps to access account information and communication channels, utilities are searching for ways to meet these demands. National Information Solutions Cooperative (NISC) develops and supports solutions that are agile and intuitive, not only to meet the needs of an ever-changing market driven by those technology-savvy customers, but also to empower the software users to provide outstanding customer service.

NISC's iVUE Enterprise System is fully integrated across all functional areas, including Customer Information, Accounting & Business, Engineering & Operations and Meter Data Management. These customer-centric solutions are designed to leverage data across the enterprise to increase efficiency and boost productivity. But what about providing a truly integrated and enhanced customer experience?

Their Convenience... Your Efficiency

Imagine offering a tool that engages your customers and allows them full account management anywhere, anytime. Explore the opportunities **NISC's SmartHub®**, an online customer portal and iOS and Android compatible app for account and trouble management, can bring to increase customer satisfaction through convenience and connectivity. Empower your customers with the ability to not only manage their account but pay their bills, make pay arrangements, enroll in programs, create alerts and track their usage anytime, anywhere. Convenience is key, and today's on-the-go customer no longer sees apps as a tech option...they are essential to management of their lives.

Allowing customers to pay bills online and set up autopay will help reduce

delinquents, increase on-time payments and eliminate paper and mailing costs. Operational cost reduction is not the only benefit SmartHub can bring to your company. This enhanced customer experience doesn't only increase customer satisfaction — it also directly affects your customer service team. The reduction of calls into your organization will free up your customer service representatives' time to focus on critical operational tasks. And placing the power to request new service electronically can streamline and simplify new business processes...all with SmartHub and a simple cell or internet connection.

Empowering Through Engagement

The SmartHub app not only allows end users to pay their bills with ease, but also enables communication features that encourage more engagement with their provider. SmartHub's Messenger is an integral part of the NISC Enterprise System, acting as the central hub for communications between both the utility and its customers, as well as internally with all utility employees, to share critical messages. Messenger empowers each end user to select their preferred communication channel(s) — i.e., email, text messages, letters or mobile push notifications. Best of all, text messages sent via Messenger are at no additional charge to your utility.

Power in Numbers

SmartHub's Messenger functionality is currently implemented in almost 600 of NISC's utility customers, and more than 70 percent of the top electric cooperatives listed on J.D. Power's 2019 Electric Utility Residential Customer Satisfaction Study are using Messenger. The customer engage-

ment numbers are powerful: In January 2020, a large utility located in the eastern U.S. leveraged Messenger to send more than 200,000 emails, 18,000 letters, 7,700 text messages and more than 146,000 push notifications. Those notifications allowed the utility to provide its customers with billing notifications, outage updates, cutoff notices, payment confirmation, prepay balance alerts and credit card expirations. All streamlined, managed and deployed through the powerful Messenger communication functionality.

Interested in Getting Started?

There is no denying it: customer engagement strengthens relationships. The best engagement strategy involves focusing on customer satisfaction and how quickly and conveniently they can interact and do business with your utility. An engaged and empowered customer is a happy customer. Place the power in your customers' hands with an easy-to-use, intuitive app and online experience.

NISC has a suite of products available to help you with everything from accounting to billing to operations — and everything in between. Visit www.NISC.coop to learn more about NISC and the powerful customer engagement solutions available today that will help increase customer satisfaction tomorrow!

About NISC

More than 20 million consumers in all 50 states receive utility or telecommunications services from the 840 companies utilizing NISC advanced solutions. NISC is a leading provider of software solutions and services, offering advanced and fully integrated billing and customer service, accounting, engineering and operations, meter data management, payment channels and mobile app solutions.





SEPTEMBER 11, 1940:
Representatives from 41
public power utilities meet
in Washington to discuss
formation of new national
Association



FEBRUARY 25, 1942:
First public power
newsletter published

1948: "Public Power Pays!"
report published, the first study
showing economic advantages
of public power

1953: First Business &
Financial Conference held

OCTOBER 28–29, 1940:
First board of directors
meeting held in Kansas City



DECEMBER 10, 1942:
First issue of *Public Power*
magazine published



1946: First National
Conference held in
Memphis

1953: APPA's Atomic Power
Policy Committee lobbies for
public power to participate in
development of nuclear plants,
amending the Atomic Energy
Act of 1946

OCTOBER 3, 1940:
American Public Power
Association formally
established

1953: First Distinguished
Service Awards given to
individuals in public power



1957: First Engineering & Operations Workshop held

1955: First Safety Manual published

1959: First System Achievement Awards given to public power organizations

1968: First Customer Connections Conference held

May 1971: A high court decision allows Gainesville Regional Utilities to interconnect with Florida Power Corp. setting a significant precedent for public power interconnections

1970s: "Golden decade" for joint action - 29 agencies formed

February 1973: Supreme Court upholds lower court ruling in a suit against Otter Tail Power Co., which found that it violated antitrust laws by monopolizing the distribution of electric power

1960s

1970s

October 1980:
DEED established



1982: PowerPAC, the only federal political action committee dedicated to protecting the interests of the people that public power utilities serve, formed

1984: Scholarship program initiated as part of DEED

August 1983: Member task force calls on federal government to control emissions related to acid rain, becoming the first national electric utility association to support acid rain controls

1985: Association membership includes just over 1,000 utilities and state and regional associations

October 1987: Public Power Week first observed

October 1992: Energy Policy Act of 1992 enacted and reflects APPA's support of renewable energy and energy efficiency measures

1995: Association membership exceeds 1,300 utilities and state and regional associations; surpasses 1,500 overall members including associates

1995: President Clinton's FY 1996 budget proposed privatization of the PMAs; APPA worked with others to beat back this proposal and similar measures proposed in each ensuing Administration

1997: First APPA website launched



2001: First Public Power Lineworkers Rodeo held in South Carolina; Santee Cooper hosts and wins journeyman team competition; Knoxville Utilities Board wins apprentice competition

2003: First certificate program launched — Key Accounts Certificate Program

THE ACADEMY

AMERICAN PUBLIC POWER ASSOCIATION

2020: First on demand training, online courses, and virtual events held

2020: Total APPA membership at its all-time high (to date), joining 1,025 utilities, state and regional associations, corporations, and other entities

2018: Community choice aggregator membership category added

March 2018: APPA successfully lobbied for provisions to enable vegetation management along rights-of-way on federal lands

eReliabilityTracker

2012: eReliability Tracker launched

2012: Association membership surpasses 1,700 organizations

2006: Electric Market Reform Initiative established and funded through 2013 by member contributions

2006: CEO Climate Change Task Force created

December 2008: First webinar held, on Arc Flash



2019: Smart Energy Provider program launched, 62 utilities designated



2013: Mutual Aid working group formed; formalizes National Public Power Mutual Aid Network

March 2009: APPA joins Twitter

2009: Reliable Public Power Provider program established, 94 utilities first to be designated in 2010



December 2017: APPA successfully preserved tax-exempt status of municipal bonds in the Tax Cuts and Jobs Act of 2017

December 2015: APPA successfully lobbied to protect critical electric infrastructure information and enable information sharing between the electric sector and federal government in the Fixing America's Surface Transportation Act

August 2005: Congress creates Clean Renewable Energy Bonds as incentives for public power and cooperatives to develop renewable resources thanks to APPA's lobbying on the EPAct05





RECOGNIZING EXCELLENCE THROUGH THE DECADES

A

key component of our shared community is recognizing and amplifying what makes public power utilities exemplary — in serving their communities well and in delivering superior service.

For more than 60 years, the American Public Power Association has recognized individuals and utilities for demonstrating different aspects of excellence through national awards.

Here's a look back at the achievements of some of the earliest utility awardees and a look at the latest systems to earn these awards. This comparison shows both how much our industry has changed and how our core values remain the same.

INVESTING IN INFRASTRUCTURE

Since 1959, the System Achievement Award (now named the E.F. Scatergood System Achievement Award after the former leader of the Los Angeles Department of Water and Power and charter member of APPA's Board of Directors) has recognized public power utilities with a track record of sustained achievement and outstanding service to their customer-owners.

Three utilities were honored with the award in 1959: the Chelan County Public Utility District in Washington; Memphis Power and Light in Tennessee; and the Puerto Rico Power Authority.

A Public Power Weekly newsletter sharing news about the 1959 awardees noted that Puerto Rico was honored for its efforts "in the electrification and industrial development of the island," while Chelan and Memphis were both recognized for major generating projects, among other accomplishments.

"The Chelan district, which is building the huge Rocky Reach project on the Columbia River, was honored for its aggressive industrial development program, for promoting the high-use, low-cost concept of power use, and for its many contributions to the area it serves," noted the newsletter.

The project began in 1956 and opened commercial operations in 1961, with seven generators with a total nameplate capacity of 815,000 kilowatts. Later in the decade, after negotiating an amended project license with the Federal Power Commission, Chelan started construction to expand the plant's capacity to more than 1,250 megawatts — adding four more generating units.

Chelan's webpage on the project notes that no tax dollars were used to fund the project. A 1957 Public Power Weekly newsletter noted that Chelan sold a \$250 million revenue bond issued at a dollar price of \$96.50. The bond was to mature in 2013.

Reacting to the bond sale, Chelan's general manager at the time, Kirby Billingsley, said in the article that "the delays in negotiations, extending over many months, had resulted in a better price."

The Rocky Reach Dam continues to serve the community well, providing some of the lowest-cost power in the country, and offers recreational facilities and a Discovery Center (which is currently undergoing a major renovation) for the community to learn about the area's history and natural resources.

The PUD was recognized with the Scatergood System Achievement Award again in 2004, when it was close to completing a major upgrade and rehabilitation to the Rocky Reach project. The upgrade increased the capacity to 1,300 MW, improved the efficiency and reliability of the generators and turbines, enhanced security measures, and made the turbines more "fish-friendly."

In announcing the awards in 2004, APPA noted that Chelan "garnered national attention for its environmental initiatives, including a juvenile fish bypass system and habitat conservation plans for two hydroelectric projects on the Columbia River," adding that "President George W. Bush spoke highly of the conservation plans in a regional speech."

KEEPING POWER PUBLIC

Memphis' division of Light, Gas and Water was also recognized with a system achievement award in 1959, for "undertaking and completing construction of the Thomas H. Allen steam generating station as an alternative to the now-defunct Dixon-Yates scheme to bring private power into the Tennessee Valley Authority system."

An article marking APPA's 50th anniversary in the September-October 1990 issue of Public Power magazine described how Edgar Dixon of Middle South Utilities and Eugene Yates of Southern Company teamed up in 1954 on a contract to build a steam generating plant in West Memphis, Arkansas. The agreement would have allowed the two private companies to build the plant with public financing and then sell any power produced to TVA. Public power entities strongly opposed the contract.

APPA's general manager at the time, Alex Radin, said it "smacked of the same kind of abuse that Congress outlawed in 1935 when it passed the Public Utility Holding Company Act."

Gordon Clapp, then the chairman of TVA, said the contract would "squeeze the TVA into submission to private utilities."

After the city of Memphis announced it was building the Allen plant, the federal government canceled the contract with Dixon and Yates. The pair sought damages for the canceled contract, an action which ultimately concluded with a 1961 Supreme Court ruling that the government did not need to pay due to a conflict of interest when the contract was awarded.

Memphis began construction of the Allen plant in 1956, and it began operations in October 1959.

The city eventually sold the plant to the federal entity in 1984, according to TVA, where it stayed in operation until 2018. TVA replaced the Allen plant with a combined-cycle plant and solar array that continues to serve the greater Memphis area.

INFRASTRUCTURE FOR A NEW ERA

Much like the first recipients in 1959, the two 2020 recipients — Pasadena Water and Power and the Navajo Tribal Utility Authority — are being recognized for how investments in infrastructure are helping their communities thrive (see page 42 for NTUA's story).

In California, PWP has propelled transportation electrification in the city through its Power Up Pasadena program. Kicked off in August 2018, the initiative began with the utility offering robust rebates and incentives

for both residential and commercial customers to purchase electric vehicles and charging infrastructure. PWP expanded the incentives so that Pasadena residents with lower incomes can qualify for larger rebates on new or used EVs, and organizations that install public EV chargers in disadvantaged areas of the community can get more robust support.

The utility teamed up with other city departments to electrify part of its fleet and install EV charging stations at city-owned facilities. In June 2019, the city leased 38 Chevy Bolts that are used by employees of various city departments,



**Power System
Engineering**

Forward-Thinking Solutions for Business, Infrastructure and Technology

- **Economics, Rates & Load Forecasting**
- **Renewable Energy Services**
- **Distribution & Transmission Planning**
- **Custom Control Panels**
- **Substation Design & Line Design**
- **Communication, Technology & Automation**

**FULL SERVICE CONSULTANTS
866-825-8895**

Visit our website and find an expert today!

www.powersystem.org



Photos (clockwise, from top left): Knoxville Utilities Board job training program, Easton Utilities raises community awareness on substance abuse, Crawfordsville Electric Light and Power employees give a demonstration, Glendale Water and Power employees volunteering.

including public works, fire, code enforcement, and planning.

Pasadena's initiative moved into the national spotlight when it opened the Marengo Charging Plaza in February 2020 in partnership with Tesla. With 44 fast chargers, the station is the largest public fast EV charging station in the U.S. PWP expects that the increased EV infrastructure will encourage further transportation electrification and provide more than \$1 million in annual revenue.

The city has doubled its charging infrastructure since the initiative began, and PWP now has the distinction of having the highest percentage of customers who drive EVs among all southern California electric utilities.

"PWP is proud to help advance the utility as a partner, by seeking solutions that are valued by the community," said Margie Otto, PR and marketing manager for PWP. "While Pasadena customers 50 years ago may not have considered their local utility a champion for green initiatives, they do now."

GOOD NEIGHBORS

Public power utilities take pride in quality of service and quality of life for their communities. Since 1990, the Community Service Award has honored utilities that demonstrate commitment to the latter. The award was renamed in 2019 in honor of outgoing APPA CEO Sue Kelly.

In its inaugural year, four utilities were honored for the “good neighbor activities” they and their employees provided: Albany Water, Gas & Light Commission in Georgia; Clark Public Utilities in Washington; Memphis Light, Gas and Water in Tennessee; and Paragould City Light & Water in Arkansas.

Clark Public Utilities and Memphis Light, Gas and Water were recognized for substantial employee volunteer efforts. An article announcing the awards in 1990 noted that more than 500 Memphis employees collectively spent more than 20,000 hours volunteering for a variety of city projects.

The article noted that Albany was honored for its Operation KIDS program, which taught children to seek help from utility employees when in danger, and that Paragould won the award for a weeklong utility education program for eighth graders offered during the summer.

The five utilities honored with the award in 2020 exemplify how commitment to community is delivered in many forms. The 2020 recipients are CPS Energy in Texas; Crawfordsville Electric Light and Power in Indiana; Easton Utilities in Maryland; Glendale Water & Power

in California; and Knoxville Utilities Board in Tennessee.

Continuing along the same lines as Albany and Paragould in 1990, Knoxville Utilities Board leads a variety of educational activities for students and other community members. For 25 years, KUB has partnered with a local high school in offering a 16-week program that helps students learn job skills and prepare for future careers. Students participate in sessions such as employer expectations, money management, and interviewing techniques. At the end of the program, students can interview for summer jobs at KUB and get connected with a mentor at the utility for career guidance. As of 2019, 433 students had completed the program, and 10 graduates of the program work at KUB full time.


ENERGY

More Expertise. More Peace Of Mind.

Finley Engineering specializes in end-to-end engineering consulting for electric power transmission and distribution networks, as well as project management, right-of-way and land services.

After more than 67 years and hundreds of implementations, we've seen just about everything – and crafted the right solutions for even the toughest challenges. We bring this extensive experience to every engagement, giving you more peace of mind every step of the way.

800-225-9716 | FinleyUSA.com



“GWP employees believe the power of human connection can help foster a more productive, innovative, and inclusive society.”

ATINEH HAROUTUNIAN

MARKETING AND PUBLIC BENEFITS MANAGER
GLENDALE WATER AND POWER

The utility’s educational outreach efforts go beyond the high school program to include demonstrations on safety and conservation. Employees built a high-voltage trailer that shows what happens when branches, balloons, or other items touch live electric lines as a fun, interactive way to teach safety around electricity. In 2019, KUB made more than 85 educational appearances, including attending local environmental events and hosting a safe digging breakfast with contractors and excavators. In partnership with TVA, KUB also offers energy and water saving workshops that feature interactive displays to show how small changes can impact monthly bills. In the last year, KUB has presented the workshop about 30 times, from locations including senior centers, places of worship, and charitable and municipal agencies that reach low- and fixed-income audiences.

In Indiana, Crawfordville Electric makes a point to note that it does more than just provide service to the community — it is part of the community. Utility employees bring a demonstration kit to local schools to educate kids about safety and host events such as “touch a truck” or facility tours to invite community members in to experience different aspects of the utility’s operations and history. The utility participates in community events and a local job fair each year to provide information about electric safety and energy efficiency and to raise awareness about career possibilities in public power.

To mark the utility’s 130th anniversary in 2020, the public power utility planned to host a variety of events to show its dedication to and appreciation for the people in the community. Planned events include a food drive, tree giveaways, movies in the park, open houses, solar park tours, community clean-up day and a school supply drive.

Employees of Glendale Water and Power in California act as ambassadors for the utility in the community, both on and off the clock. In addition to participating in community events on behalf of GWP, employees volunteer through its Dedicated Employees Volunteering Our Time & Energy, or DEVOTE, program. Volunteer efforts include preparing and serving meals at a homeless shelter, cleaning and organizing a local food pantry, and welcoming kids to the first day of school. In 2019, utility employees also donated to organizations and the school district to provide a variety of items, including school supplies, youth sports jerseys, food, and necessities for families transitioning out of shelter housing.

“GWP employees believe the power of human connection can help foster a more productive, innovative, and inclusive society, and by harnessing our collective power we help achieve lasting social impact for the greater good,” Atineh Haroutunian, marketing and public benefits manager at GWP, said in the nomination form. “As an organization, it is important that we find ways to give back and contribute to our community that we serve.”

SHINING A LIGHT ON A CAUSE

In addition to ongoing community service projects, employees of Easton Utilities in Talbot County, Maryland, took on a big role in 2019 to help raise awareness of the opioid epidemic facing many communities across the U.S., including their own.

The utility joined a local coalition called Talbot Goes Purple to raise awareness about addiction throughout National Recovery Month in September. The coalition consisted of the sheriff’s office, local public schools, and other community entities.

The electric department was instrumental in lighting the town purple. Crews wrapped 152 poles with purple lights and added flood lighting to key landmarks, such as the courthouse. County Sheriff Joe Gamble praised the utility’s involvement, noting that “We wanted to start a conversation, and those lights really got people talking.” He added that once the lights went up, the group got “swamped with invitations to speak and people who wanted to know more.”

Employees participated in other ways, too. Town and utility fleet vehicles displayed magnets highlighting the cause, and employees could add the magnets to their personal vehicles if they desired. All employees received a purple shirt, which they were encouraged to wear every Friday in September for a \$2 donation to Talbot Goes Purple, and Easton Utilities matched all employee donations. Employees also attended brown bag lunch seminars to understand the epidemic and how it affects the community.

A HOLISTIC APPROACH

According to the U.S. Census Bureau, the city of San Antonio has one of the highest poverty rates in the country. For nearly two decades, CPS Energy has partnered with local government entities on the Residential Energy Assistance Partnership to assist families. The program provides financial support for energy services more than 700 families each year, with a focus on elderly, medically dependent and low-income families with young children. Since 2002, CPS Energy has given over \$1 million to the fund annually. Customers can donate to the program via their monthly bill. To raise additional funds, CPS Energy started hosting a

competitive barbecue cook-off, called Grills-Giving, which allows the community to come together for a fun event and boosts awareness and support for the program. The fifth annual event, in November 2019, raised more than \$73,000 for REAP.

Beyond offering financial support to customers through REAP, CPS Energy also has a unique way to make its customer service more accessible and convenient.

The mobile Customer Response Unit, launched in 2013, uses a case management approach to advocate for and resolve customer issues beyond their electric and gas needs to include “water utility assistance, food security,

pet care, housing support and any other needs that are preventing the customer from being sufficient and successful,” CPS Energy noted in its nomination form. The CRU team partners with other service organizations in the city to determine how to seamlessly provide assistance to those most in need.

“We don’t just go into a home and look at it from an electric and natural gas perspective. We follow a compassionate customer care model, look at the whole family, and focus on individual circumstances to determine how we can better serve them,” said KJ Feder, CPS Energy’s interim vice president of community engagement.



Weatherproof + High Security

The new **All Weather Padlock (AWP)** lives up to its name: exceeding expectations every time, withstanding extreme weather conditions and resisting physical attacks. Cylinder options include mechanical cylinders for patented key control or intelligent key cylinders for sophisticated audit and access control features. So go ahead, let it rain. The AWP has you protected.

Visit www.medeco.com/awp-appa2020 or contact your Medeco representative at 1-877-633-3261 to learn more.

medeco[®]
ASSA ABLOY

Experience a safer
and more open world

“As a public power utility, we are guided by the community's desire, because they have a voice at city council and at our boards and commissions. ...We're not going to stop reaching forward.”

CATHERINE ELVERT

UTILITIES COMMUNICATIONS MANAGER
CITY OF PALO ALTO

EMBRACING INNOVATION

For nearly 40 years, the Energy Innovator Award has been bestowed on creative utility programs that focus on improving energy efficiency, customer service, or efficiency of utility operations and resources.

Managed by APPA's Demonstration of Energy & Efficiency Developments program, nominations are reviewed by a distinguished panel of judges that have included members of Congress, commissioners from the Federal Energy Regulatory Commission, leadership from the Department of Energy and the national laboratories, and prominent researchers from universities and industry institutes.

The City of Palo Alto Utilities in California has earned the award nine times, first as one of the inaugural recipients in 1981 and most recently in 2019.

Its first award was for a program designed to spark interest in solar energy. The utility hoped that by educating customers, offering financing options, and connecting with operators of solar systems, it could increase solar generation to 10% of the city's mix by the end of the 1980s.

Today, the city, which has about 25,000 residential and 4,000 commercial electric customers, relies on a variety of zero-emitting resources and purchases carbon offsets so that the city's

electricity and natural gas use are both carbon neutral, said Catherine Elvert, utilities communications manager for the city of Palo Alto.

Subsequent awards recognized the public power utility's efforts to engage customers in energy efficiency and demand response programs, a voluntary renewable energy program, and financing for solar installations in low-income households. In 2019, Palo Alto was recognized for its Genie House Call program, which bills itself as a resource for “all of a homeowner's efficiency needs.”

“The City of Palo Alto Utilities strives to be the trusted energy provider and adviser for our community,” said utilities director Dean Batchelor. “It is a priority for us to collaborate with our ratepayers, academics, other energy agencies, and the tech community here in Silicon Valley.”

Elvert said that public-private partnerships have been critical in determining what technology will work best in the utility, and that the “incredible brain trust” in the area opens the door for the utility to explore innovative technologies and approaches to energy management. As an example, the utility is working with software company VMware on a microgrid project to test options for community resilience in the wake of a natural disaster.

“This collaborative approach has helped advance our innovation as a utility and, through these partnerships, furthered technological innovations that allow us to better serve our customers,” added Batchelor.

The industry shift to being energy advisers goes beyond understanding or implementing new technologies, said Elvert, and is about how the utility shares information so that customers can “make informed decisions about energy choices.” She stressed that the utility's approach to innovation has stayed true to its core as a public power utility to begin by thinking about what customers actually want.

Elvert said that innovation is important because the industry is constantly changing and customer values continue to evolve.

“As a public power utility, we are guided by the community's desire, because they have a voice at city council and at our boards and commissions,” said Elvert. “We're not going to stop reaching forward — we're continuing to explore ... [and] do what we can to meet our customers' needs on climate action and sustainability.”

She pointed to advanced metering infrastructure as an example of a developing technology that can facilitate two-way communication between a utility and its customers.

“In everything we do, we remain true to our core mission of delivering safe and reliable energy at the best value for our customers' dollar,” said Batchelor.

Elvert credits the utility's approach to innovation and finding efficiencies for helping keep costs down for customers in Palo Alto. The utility's rates are about 10% lower than those of utilities that serve surrounding communities, she said.

“The entirety of our programs, policies, investments, and incentives are being conducted under the umbrella of our commitment to operating a carbon-neutral energy portfolio,” said Batchelor. “I am proud that we are able to pursue such a comprehensive approach to innovative utility programs and services despite being a relatively small utility.”

Congratulations to the recipients of the American Public Power Association's 2020 awards for their outstanding leadership in public power

ALEX RADIN DISTINGUISHED SERVICE AWARD



WALTER W. HAASE, General Manager, Navajo Tribal Utility Authority, Fort Defiance, Arizona



ARLEN ORCHARD, CEO & General Manager, SMUD, Sacramento, California

JAMES D. DONOVAN INDIVIDUAL ACHIEVEMENT AWARD

GEORGE CAAN, Executive Director, Washington Public Utility Districts Association, Olympia, Washington

BRYAN COPE, Program Development Manager, Southern California Public Power Authority, Glendora, California

BRIAN D. TAYLOR, General Manager, CDE Lightband, Clarksville, Tennessee

ALAN RICHARDSON STATESMANSHIP AWARD

STEVE WRIGHT, General Manager, Chelan County Public Utility District, Wenatchee, Washington

LARRY HOBART SEVEN HATS AWARD

MIKE DEFINIS, Borough Manager, Borough of Hatfield, Pennsylvania

BOB LOCKMON, Village Superintendent, Stuart Municipal Power, Stuart, Nebraska

JASON MCPHERSON, City Administrator, Marlow Electric, Marlow, Oklahoma

JEFF PETERSON, Superintendent, Brodhead Water & Light, Brodhead, Wisconsin

STUART T. SMITH, Superintendent, Spring Valley Public Utilities, Spring Valley, Minnesota

BRAD ZELLERS, Town Manager, Town of Winamac, Indiana

HAROLD KRAMER-JOHN PRESTON PERSONAL SERVICE AWARD

JULIO TORRADO, Director of Human Resources and Communications, Keys Energy Services, Key West, Florida

SPENCE VANDERLINDEN PUBLIC OFFICIAL AWARD

RONALD W. BOLES, Chairman of Electric Board, Huntsville Utilities, Huntsville, Alabama

REBECCA CASPER, Mayor, City of Idaho Falls, Idaho

KATHLEEN THACKER, Chair of the Board of Directors, Kissimmee Utility Authority, Kissimmee, Florida

ROBERT E. ROUNDTREE RISING STAR AWARD


JAMES R. LOGAN, Executive Director of Infrastructure, City of Hamilton, Ohio

MARK CRISSON LEADERSHIP AND MANAGERIAL EXCELLENCE AWARD

THOMAS J. HELLER, President & CEO, Missouri River Energy Services, Sioux Falls, South Dakota

DAVID LEATHERS, General Manager, Jamestown Board of Public Utilities, Jamestown, New York





EMPOWERMENT AND ELECTRICITY

BY BETSY LOEFF, CONTRIBUTING WRITER

B

y the 1920s, most people who lived in America's towns and cities had electricity, but as late as 1932, only 10% of rural house-

holds had electric power, according to Smithsonian researchers. That began to change with the Rural Electrification Act of 1936.

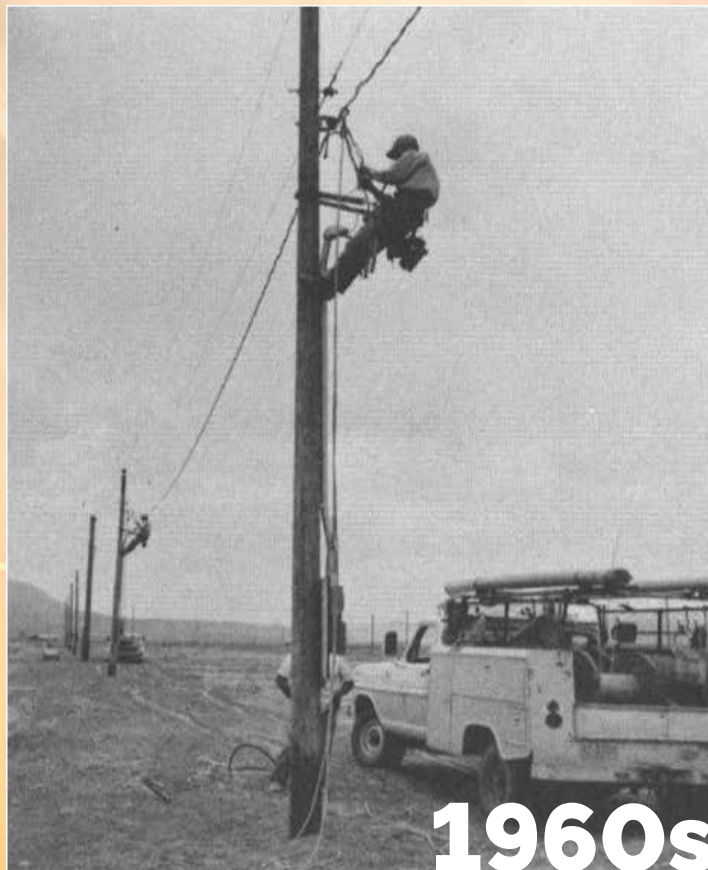
However, while much of rural America became electrified in the '30s and '40s, the Navajo Nation was forgotten, said Walter W. Haase, general manager of the Navajo Tribal Utility Authority. To this day, the Nation has the majority of homes that do not have electricity within the United States.

Still largely in the dark at the end of the 1950s, the task of creating NTUA was given to Walter Wolf Jr., who served as legal counsel to the Navajo Nation leadership and, once

established, to NTUA for about 60 years.

NTUA formally launched in 1959 as a water utility and quickly expanded to include electricity. This was shortly before the Glen Canyon Dam was built, before massive electric transmission lines were placed within Navajo land, when utility development in the Southwest was in growth mode. In a news release reflecting on Wolf's legacy following his death in January this year, NTUA shared that he recalled about this beginning that, "Once we got started in the distribution business, we knew our work would be difficult and chal-

lenging. But we knew it had to be done." In 1965, NTUA took over its first distribution line from the U.S. Bureau of Indian Affairs, and over the years, the utility gradually added distribution infrastructure where none had existed before.



BRINGING IN THE LIGHT

Since 1959, NTUA has been hard at work electrifying homes and businesses across its service territory. On top of the challenges of starting a utility from scratch, NTUA also had the challenge of access.

The Navajo Nation is a vast territory, comprising 27,000 square miles — about the size of West Virginia — and spans parts of three states (Arizona, Utah, and New Mexico). Many Navajo homes are in isolated areas, miles from any paved road and difficult to reach. Within the Nation, 38% of people live below the U.S. poverty line, 32% of the Nation's 55,000 homes

lack electricity, 86% of homes do not have natural gas, and 38% lack a water source on the premises.

It's a tough place to be a utility. In the Nation, there can be 100 miles between one substation and the next, so system operators rely on capacitors to keep voltage up. NTUA serves its customers with 10,000 miles of conductor and 4.3 houses per line-mile.

Between 2008 and 2018, the first 10 years in which Haase led NTUA, the utility connected 5,213 homes to the electric grid, and NTUA contributed nearly \$8 million of its own funds to achieve this. Still, the utility wanted to move faster and reduce the expense of each connection. In 2019, NTUA initiated Light Up Navajo, a pilot project organized by NTUA and the American Public Power Association, built off of the idea of mutual aid without a storm.

Through the initiative, 138 lineworkers from utilities coast to coast pitched in to help NTUA lay more than 50 miles of line and bring power to homes that often were not funded through grants or scheduled for service connection any time soon. Last year, Light Up Navajo connected 230 homes, 175 of which would not have been connected through NTUA's usual process, and these residents might have waited at the very least 10 years to get electricity in their homes. After setting poles and connecting homes, the teams of NTUA lineworkers and visiting lineworkers stood inside humble residences, many of which belonged to elderly men or women — some of whom had waited a lifetime for power.

Light Up Navajo cuts the daunting cost of bringing power to remote homes in NTUA's

POWER
to the
people

www.spiegelmc.com
202.879.4000

SPIEGEL &
McDIARMID
LLP



“Once we got started in the distribution business, we knew our work would be difficult and challenging. **But we knew it had to be done.**”

WALTER WOLF JR.
FORMER LEGAL COUNSEL TO NTUA

1970s



territory. The average cost to connect one family reaches \$40,000, but this program pared that down to \$8,000.

Electricity that most people in the U.S. take for granted brought grateful tears of joy to those fortunate enough to be part of the Light Up Navajo pilot project. Deenise Becenti, public affairs manager at NTUA, said it means families no longer need to travel many miles to get fresh food multiple times per week because now they can plug in a refrigerator. It also gives people a way to charge cell phones or read after dark.

One elder, a grandmother, was thrilled because electricity would allow her to make toast in her home for the very first time. Another young mother told Becenti that she joined her husband to work in Texas so she could

help build their savings so that they could pay for a power line extension. She told Becenti, “We would come home one weekend out of the month. It was always hard to leave to head back to Texas. Now I can be with my kids. My husband still works in Texas, but I don’t have to leave them.”

Haase hopes the lineworkers from other utilities who volunteered for Light Up Navajo spread the word so the program can grow in coming years. After all, it’s not just water, power, gas and communications NTUA delivers. It’s what Becenti called “a life-changing difference.”

This year, the Light Up Navajo II project is targeting 300 families. Although the initiative was postponed due to COVID-19, Haase hopes to pull teams together and run the program again later in 2020.

AFFORDABILITY MATTERS

Electrifying homes fulfills one part of NTUA's mission. Another is ensuring that how it operates supports a thriving community. In the Navajo Nation, annual per capita income averages \$10,700 — nearly one-fifth of the mean per capita income in the U.S, which the Census Bureau estimates at \$50,413.

“Our rates are less than what surrounding utilities charge,” Haase said. “They have to be because our people just can't afford more. We don't want them making difficult choices: Pay the utility or buy food.”

One way to keep rates down is to drive revenue, and the first initiative Haase launched to do this was deploying wireless communications. “We've been able to create products and services that the community desperately needed and that helped us keep our costs low,” he said.

Haase said one of his first priorities when he started 12 years ago was putting the utility's financial house in order. He led the team to pay down bills, finish five years' worth of financial audits, and bring the utility's financial ratings up enough to qualify for loans from the U.S. Department of Agriculture's Rural Utilities Service. With RUS funds, he was able to expand the utility's services, revenue, and workforce.

Haase leveraged NTUA's newly raised credit rating to apply for grants associated with the American Recovery and Reinvestment Act of 2009. In 2010, the utility earned \$32 million in stimulus funding to build out a high-speed internet highway that would deliver broadband and cell phone service throughout the Nation.

In three years, NTUA laid 550 miles of fiber optic cable and installed or upgraded 59 communications towers. That initial phase of the project gave enhanced internet access and cell phone service to more than 30,000 households as well as approximately 1,000 businesses and 1,100 community institutions within the Navajo Nation.

“Our rates are less than what surrounding utilities charge. They have to be because our people just can't afford more. We don't want them making difficult choices: Pay the utility or buy food.”

WALTER W. HAASE
GENERAL MANAGER
NAVAJO TRIBAL UTILITY AUTHORITY

In this effort, NTUA partnered with Commnet, a leading provider of communications services in rural areas, and created NTUA Choice Wireless, a retail cell phone service provider. NTUA holds the majority share of ownership of this entity, making it the largest Native American-owned wireless communications company.

To date, NTUA has built and tested more than 800 miles of fiber optic backbone, erected 173 microwave links, 110 towers and 43 sites with 4G LTE technology. The wireless entity employs 84 people, and 98% of them are of Navajo descent. Some 20,000 people now enjoy affordable cell phone service through this endeavor.

The broadband infrastructure also allowed the utility to build a fully certified Tier 3 data center, the only such facility in the region. The data center hosts data belonging to NTUA, the Navajo Nation and corporate clients, giving the utility yet another way to add revenue and employees.

Critical Infrastructure for Large Utilities



CUBE™ Battery Backup Cabinets
Pad mount NEMA 3R and Zone 4 rated cabinets support 5-10 strings of VRLA or Ni-CD batteries



Mounting Platforms for quick and easy greenfield installations without heavy lifting equipment



Pole Top Concealment Shrouds
Cylindrical and multi-facing 4G/5G Small Cell Concealment Shrouds offer aesthetic housing and rapid deployment of multiple remote radio heads (RRH). Many color options are available to match all types of wooden and metallic poles.

Charles

An Amphenol Company

INNOVATIVE ENCLOSED SOLUTIONS™
www.charlesindustries.com



A BRIGHT FUTURE

Another venture that supports economic development within the Navajo Nation and keeps NTUA moving forward is solar power generation.

Today, renewables make up about 40% of the utility's generating resource mix. In 2017, the utility went live with a 27.3-megawatt solar farm called the Kayenta Solar Project. It generates enough power for 18,000 homes.

"The Navajo people prefer power sources that are in better harmony with the earth," said Haase.

In addition to community preference, the solar projects provide dollars for and development into the community. NTUA gains revenue from selling the energy from the project and the carbon-emission offsets to Salt River Project, a public power utility that serves more than 2 million people in central Arizona.

Construction of the project also brought money into the Nation. Kayenta produced 278 jobs, 85% of which were held by people of Navajo descent. That workforce earned \$5.2 million over the course of the project and

received more than 4,700 hours of specialized training related to solar plant construction.

NTUA leveraged that experience and broke ground on a second 27.3-MW project, called Kayenta II, a year later.

Construction taxes on the two projects generated \$25.1 million for the Navajo Nation. Payroll equalled \$9.5 million. Over the next 30 years, the two plants are expected to generate approximately \$12.6 million in tax revenue to help the Nation prosper.

These projects also help Navajo people earn money on and off tribal lands. "We are trying to create a transitional path where we build a project every year or so and keep the workforce working," Haase said. "When people get hired to work on their first solar plant, they're unskilled and work on the lowest-level jobs. When they come back the next year to build another project, they get a higher-level job."

Haase added: "Once you learn how to do the wiring and you're part of the electrical team building the power plant, you're a step

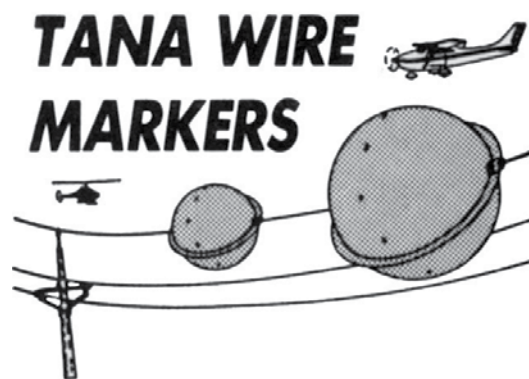
away from becoming an electrician. Our workforce is construction-oriented to begin with. They travel all over the United States building things. This fits right in."

Currently, NTUA is working on a 66-MW solar facility that will sell almost all of its capacity to other power providers. Returns from this project will generate revenues to help keep NTUA's rates low and pay to electrify more homes across the Navajo Nation.

"It brings personal satisfaction to see what we started has grown into what it is today. ... Every power line that we build is an achievement, and every family that we connect is a success story," Wolf said in 2016. "There are still so many families without electricity. What we started in 1959 hasn't changed today — our important work is far from over."



Kayenta Solar Project



- Meets FAA Specifications! Color – Size – Shape! – International Orange
- Tested and approved by major power companies!
- Thousands still in service after 40 years
- Universal attaching! Fits any wire .1" to 1"
- Installs in 5 minutes!
- Withstands hail!
- No maintenance! Does not slip, oscillate, chafe, cause electrolysis or harmonic vibration.
- Ships in halves nested. 9, 12, 20, 24, 30, and 36" balls

Call now 573-796-3812 | Fax 573-796-3770

www.tanawiremarker.com

TANA WIRE MARKERS

P.O. Box 370, California, MO 65018

THE MORE
THINGS
CHANGE,
**THE MORE
THEY STAY
THE SAME**

A

lthough public power utilities have experienced



a lot of change through the decades — from advances in technology that change the way they generate and manage power to how they communicate with customers — a visual journey through photos from this history show that their values

and how they interact with the communities they serve continue along a common thread.



THE MORE THINGS CHANGE...

WORKING FOR THE COMMUNITY

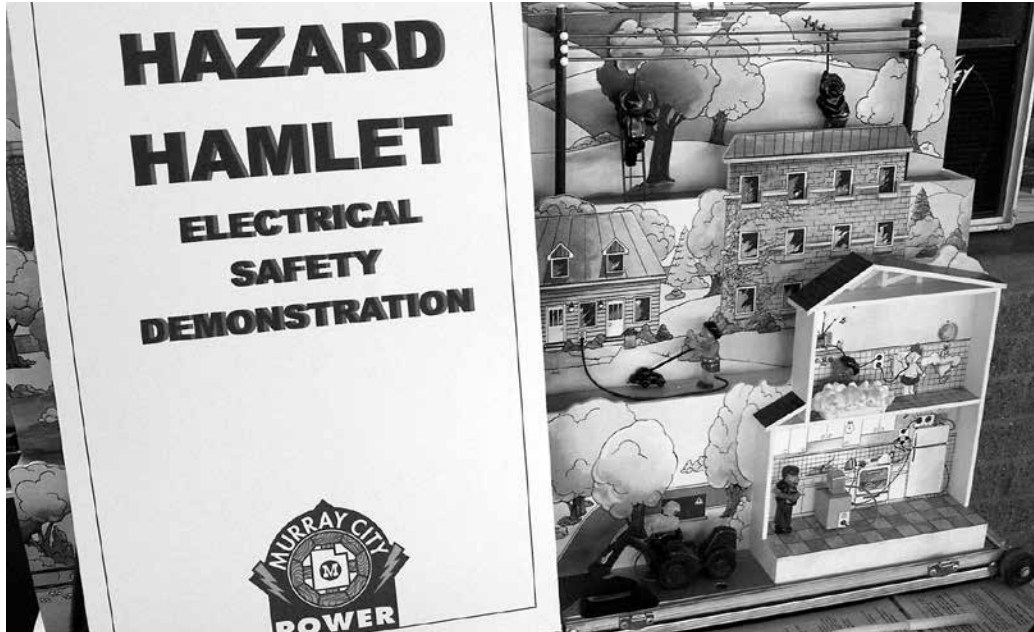


An employee of Taunton Municipal Lighting Plant in Massachusetts poses with a street lamp in 1939



A lineworker with Clatskanie People's Utility District in Oregon hangs a banner about community ownership, c 2008

...THE MORE THEY STAY THE SAME



PROMOTING SAFETY

Murray City Power used this Hazard Hamlet to educate kids (and other community members) about electrical safety.

Employees from the electric utility in Denison, Iowa give a safety demonstration to a local classroom, c 2008



An advertisement for Tech Products, Inc. The top section has a blue background with the company name "TECH PRODUCTS, INC." in large yellow letters. Below it, a yellow banner reads "SIGNS, TAGS & MARKERS". Underneath, a blue banner lists "Everlast Pole Tags | Tech-3D Distribution Signs | Phase Markers". The main image shows a wooden utility pole with various signs and markers, including a vertical yellow tag with "VM 1-16", a horizontal tag with "20/140", and a vertical tag with "33330". A small inset image shows a person in a blue uniform holding a football. At the bottom, the phone number "1-800-221-1311" and website "www.TechProducts.com" are listed, along with "MADE IN USA SINCE 1948" and "A VETERAN-OWNED BUSINESS".

THE MORE THINGS CHANGE...

ADVOCATING FOR PUBLIC POWER IN WASHINGTON



APPA Director Alex Radin and officers of the Electric Consumers Information Committee meet with President Harry Truman.



Utility leaders, plus APPA Director Alex Radin (far right), meet with President John F. Kennedy.

...THE MORE THEY STAY THE SAME



Alex Radin and Larry Hobart on the steps of the U.S. Capitol.



Utility leaders from South Dakota meet with Representative Kristi Noem (R-SD) at the 2018 Legislative Rally. Photo courtesy Heartland Consumers Power District.



Public Utility District leaders from Washington state meet with Senator Maria Cantwell (D-WA) at the 2018 Legislative Rally. Photo courtesy Washington Public Utility District Association.

Dentons: Named “Energy Firm of the Year” in peer-driven surveys.

Clinton A. Vince
Chair, US Energy practice
Co-Chair, Global Energy sector
+1 202-408-8004
clinton.vince@dentons.com

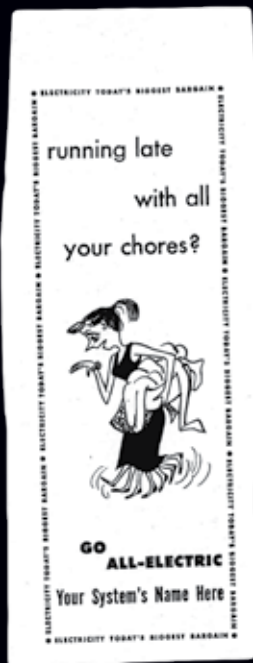
大成 DENTONS

dentons.com

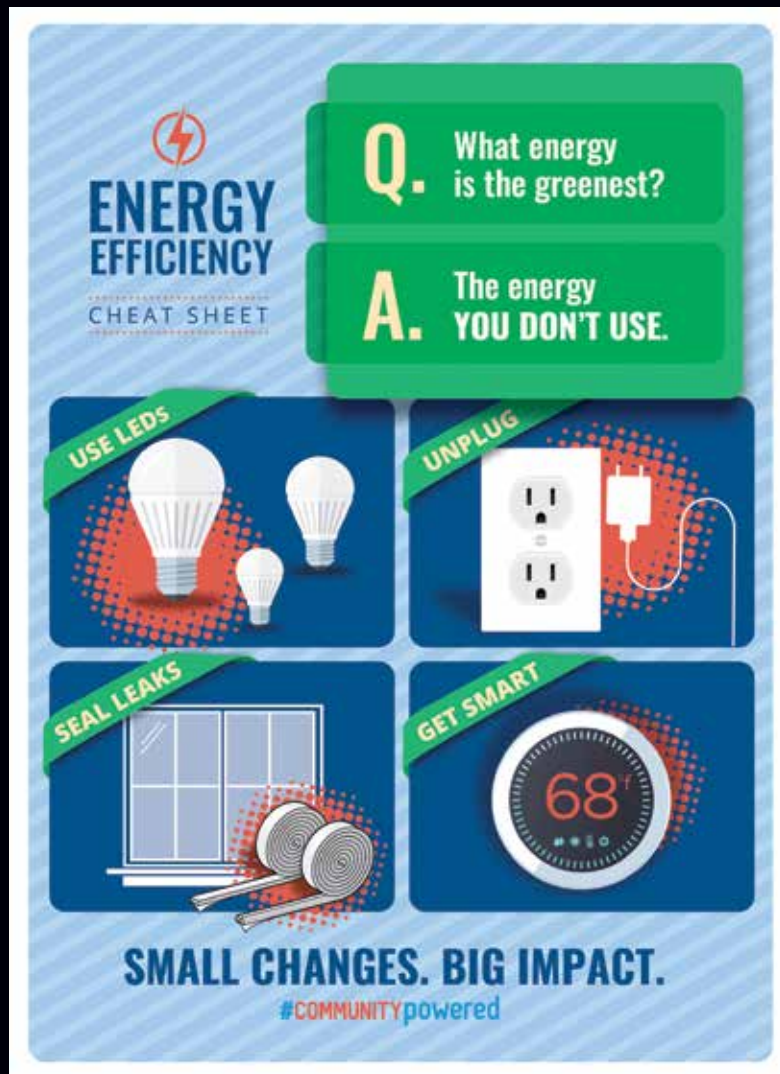
© 2020 Dentons. Dentons is a global legal practice providing client services worldwide through its member firms and affiliates. Please see dentons.com for Legal Notices.

THE MORE THINGS CHANGE...

SUPPORTING ENERGY EFFICIENCY



An ad template from 1955 encouraged utilities to promote electrical devices and appliances as time saving.



A sample social media graphic provides some visual-driven energy saving tips as part of the materials developed for the Community Powered campaign.

An ad template from 1977 encourages customers to update insulation to reduce their home's energy use, "presented as a consumer service by your consumer owned electric utility"



...THE MORE THEY STAY THE SAME

ADVISING ON ENERGY USE

The Chattanooga, Tennessee Electric Power Board holds an electricity educational fair in 1954



Kissimmee Utility Authority in Florida employees attend a local elementary school's Spring Carnival with a solar energy education trailer in 2019. Photo courtesy Kissimmee Utility Authority.

THE MORE THINGS CHANGE...

DRIVING TRANSPORTATION ELECTRIFICATION




The Los Angeles Department of Water and Power bought a battery-powered electric truck in 1967—which it named the “Volts-Wagon”—for an electric vehicle research program on operating costs and performance under L.A. conditions.



Silicon Valley Power celebrates with the city of Santa Clara, California at the unveiling of the “Breathe Easy Express” — an electric bus in 2001.

ADVOCATING FOR COMMUNITY OWNERSHIP

An ad template from a 2001 APPA campaign to promote community ownership.



We'll Power the Future for New Generations.

Powering your homes and businesses is a community business for us. We're your local, hometown electric utility, operated for generations by the community to benefit all the citizens with safe, reliable, and not-for-profit electricity.

PUBLIC POWER
An American Tradition That Works

While deregulation changes are on the horizon for the electric power business, our commitment to you will remain steadfast: neighborhood service, low prices, and community service and benefits for all.

We're planning now to power the future for the new generations of local citizens who, like you, will have a big stake in our electric utility as customer-owners.

Hometown benefits, hometown service... your future is our future.

...THE MORE THEY STAY THE SAME



Marvin Moon, Pasadena Water and Power's assistant general manager of power delivery, at the Marengo Charging Plaza, which opened in February 2020 and offers 44 public fast charging stations for electric vehicles. Photo courtesy Pasadena Water and Power.

What does being #COMMUNITYpowered mean to you?

#communitypowered MEANS MORE LOCAL JOBS

#communitypowered MEANS FEWER OUTAGES

#communitypowered MEANS MY VOICE MATTERS

#communitypowered MEANS LOWER BILLS

PUBLIC POWER WEEK 2019
WeAreCommunityPowered.com

A social media graphic developed for Public Power Week 2019 encourages conversation about the benefits of public power.

Get Cool!

Extend transformer life!

Increase transformer capacity up to 166%!

- expert technical assistance
- low sound levels
- energy-efficient motors
- large inventory
- one-piece cast aluminum blades
- galvanized or stainless steel guards

KRENZ-VENT
quality engineered, performance tested

p.o. box 187 germantown, wisconsin 53022 262.255.2310 www.krenzvent.com

PUBLIC POWER WORKERS ARE ON THE FRONT LINES TO POWER AMERICA

WE STAY WORKING SO YOU CAN STAY SAFE AT HOME



Maintaining the System

Your hometown lineworkers continue to do critical repairs and maintenance to prevent outages or quickly restore power to your home.



Powering Essential Services

Power plant operators are still going to work to generate power for the healthcare facilities, grocery stores and homes, supporting friends and neighbors.



Ready to Respond

Customer service representatives remain on call for you to connect with your utility as needed



Powering Your Home Office

Public power utilities work with government leaders to limit disruptions, so you can stay on top of your work.



Powering Appliances

Public power utilities sync up with other municipal utilities, like water and gas, to make sure you have electricity to prepare meals.



Working for You

Public power utilities have enacted emergency preparedness plans to free up tools and resources that keep the lights on.

PUBLIC POWER MAKES IT POSSIBLE

THE ACADEMY

Public Power Connect

Virtual Summit &
Business Meeting

June 8 - 10
2020

80

YEARS OF POWERING STRONG COMMUNITIES

PublicPower.org/PublicPowerConnect

While we can't bring you the National Conference in person this year, we are excited to offer this virtual event to allow you connect with your national public power community.

Join public power leaders online to hear from keynote and breakout session speakers and share strategies and solutions. Stay on top of the trends shaping our industry and get expert advice on evolving threats and challenges. Share tips, resources and solutions with others facing the same challenges as you, and get innovative ideas for your community.

Engage with public power's leaders and celebrate the experience, innovation, and leadership of your national public power community at this virtual summit.

AMERICAN
PUBLIC POWER
ASSOCIATION

It's the Milsoft Way

Since 1989, Milsoft has always understood that we all serve a higher purpose. That higher purpose includes doing right by our customers. If we can help your utility in any way during this crisis, let us know.

If we can help, we will.



Milsoft adds Enterprise Accounting and Utility Billing to its Engineering and Operations line up!

We are all in this together.

Choose Operational Excellence. One Solution. One Integral Circuit Model that Drives all Operations. Dozens of Seamless Integrations.

Take Utility Operations and Customer Engagement to a Whole New Level.



Providing Powerful Solutions for Power System Professionals Since 1989.
Engineering Analysis • Outage Management • Grid Field Engineering • Communications • Enterprise Accounting & Billing
Financial Management • Work Management • Automated Customer Services

Find out more: www.milsoft.com • 800-344-5647



Call 800-344-5647 or Email support@milsoft.com

A Subsidiary of Milsoft Utility Solutions®