

ANNUAL REPORT 2018

CONTENTS

“The new wrinkle in digitalization is how our organization has replaced the capability of our software and systems to be more **responsive** to member requests with **higher-quality data**.”

- Tim Stoner, Board President

JOINT LETTER FROM BOARD PRESIDENT AND CHIEF EXECUTIVE	01
ABOUT OUR AGENCY	02
MEET OUR BOARD	03
OUR MEMBERS	04
2018 HIGHLIGHTS	05
PORTFOLIO PROCUREMENT & MANAGEMENT MITIGATING RISK & PRICE	08
DIGITIZING UTILITY SYSTEMS	09
MEMBER SPOTLIGHT Mountain Lake Digitizes, Helps Largest Customer with Energy Efficiency Upgrades	12
MEMBER SERVICE ENHANCED WITH LISTENING TOUR	13
MEMBER SPOTLIGHT Windom's Economic Development Formula	15
MEMBER SPOTLIGHT Glencoe's Reliable Renewable Energy Source	19
ORGANIZATIONAL RENEWAL DRIVEN BY NEW TECHNOLOGY AND NEW APPROACH TO DOING BUSINESS	21
MEMBER SPOTLIGHT Springfield Recovers from 2018 Flooding, Helps Customers Lower Their Bill	22
LOOKING TO 2019	25



Tim Stoner



Chris Kopel

Dear Friends,

In keeping with the times, 2018 was a year of significant technological upgrades and continuous improvement for Central Minnesota Municipal Power Agency (CMMPA) and its utility service agent, Central Minnesota Power Agency and Services (CMPAS). The electric utility industry is enjoying a golden era of opportunity with new technologies, and CMPAS welcomes opportunities for improved safety and efficiency that technology usually brings.

Efforts to digitize our members' electric systems picked up speed this year, as several cities moved forward with implementing SCADA or Beehive in collaboration with Vignesh Subramanian, our very-much-in-demand systems engineer. The new wrinkle in digitization is how our organization has replaced and advanced the capability of our software and systems to be more responsive to member requests with higher-quality data.

This year, our entire staff also devoted time to travel as a group to each member's site for a listening tour. We conducted in-person surveys and encouraged conversations about what was working and what needed to be improved. The insights and initiatives that flowed from those meetings informed our work for the balance of 2018. Plans already are being made for the 2019 listening tour.

As the board completed its review of CMPAS' bylaws and continued its review of governance policies, we also started a strategic planning process with the help of Kent Myers of VISION Companies LLC. Kent helped us create a strategic plan to guide our passion for service and quality on behalf of the organization.

The growing importance of transmission convinced us to create a new transmission planner position. As the market changes, we must change with it. So, we began recruiting for a planner in late 2018, and we expect to have a person in the position in early 2019.

Adding to the good news for the year, we determined that through CMPAS' ongoing proactive and innovative management of our member utilities' portfolios, we will be able to dramatically lower member fees in 2019. We're especially proud of that. Our members are very budget conscious, and we're delighted we can provide them with added value at a lower cost.

The organization we lead today is on track in the modernization arena. In the pages that follow, we will detail our advancements and local utility projects with an emphasis on how we are providing higher levels of service to our members and public power customers.

Sincerely,

Tim Stoner
President, CMMPA Board of Directors and
General Manager, Blue Earth Light and Water

Chris Kopel
Chief Executive Officer,
Central Minnesota Municipal Power Agency (CMMPA)

ABOUT OUR AGENCY



Central Minnesota Municipal Power Agency (CMMPA) serves as a municipal, project-based, partial or full-requirements joint power agency. CMMPA formed a utility services agent, Central Municipal Power Agency/Services (CMPAS), to provide energy management and consulting services to public power members and affiliates.

CMPAS provides a wide range of services including strategic management, long-term power supply planning and procurement, project development and administration, accounting, and finance. The Agency also offers Midcontinent Independent System Operator (MISO) market-related services, including daily energy scheduling and related services. CMPAS' specialized expertise in long-term power supply planning and energy markets is important for CMMPA's long-term success.

MUNICIPAL COMPASS TO POWER

MISSION >>>

Identify strategies that minimize wholesale power costs, manage future risks, and maintain stable and competitive rates while allowing utility boards flexibility and autonomy to customize their own electricity portfolio.

VISION >>>

Serve in a consultative role as a municipal electricity portfolio adviser by offering specialized planning and procurement services for power supply and transmission.

COMMITMENT >>>

Deliver unbiased, independent portfolio system solutions as a municipal utility's fiduciary and strategic adviser to best serve their municipal customers.

MEET OUR BOARD

CMPAS currently manages the portfolios of 12 member municipals and provides power supply related services to non-member affiliates in Minnesota and Iowa. With headquarters in Blue Earth, Minnesota, the Agency is governed by a 12-member board comprised of a representative from each member city.



Richard A. Heinemann
CMPAS General Counsel



Bob Elston
Sleepy Eye, MN



Crystal Johnson
Granite Falls, MN



David Meyer
Glencoe, MN



Joel Grejtak
Fairfax, MN



Nate Zimmerman
Janesville, MN



Paul Twite
Delano, MN



Randy Eggert
Kenyon, MN



Scott Johnson
Springfield, MN



Steve Nasby
Windom, MN



Theresa Coleman
Kasson, MN

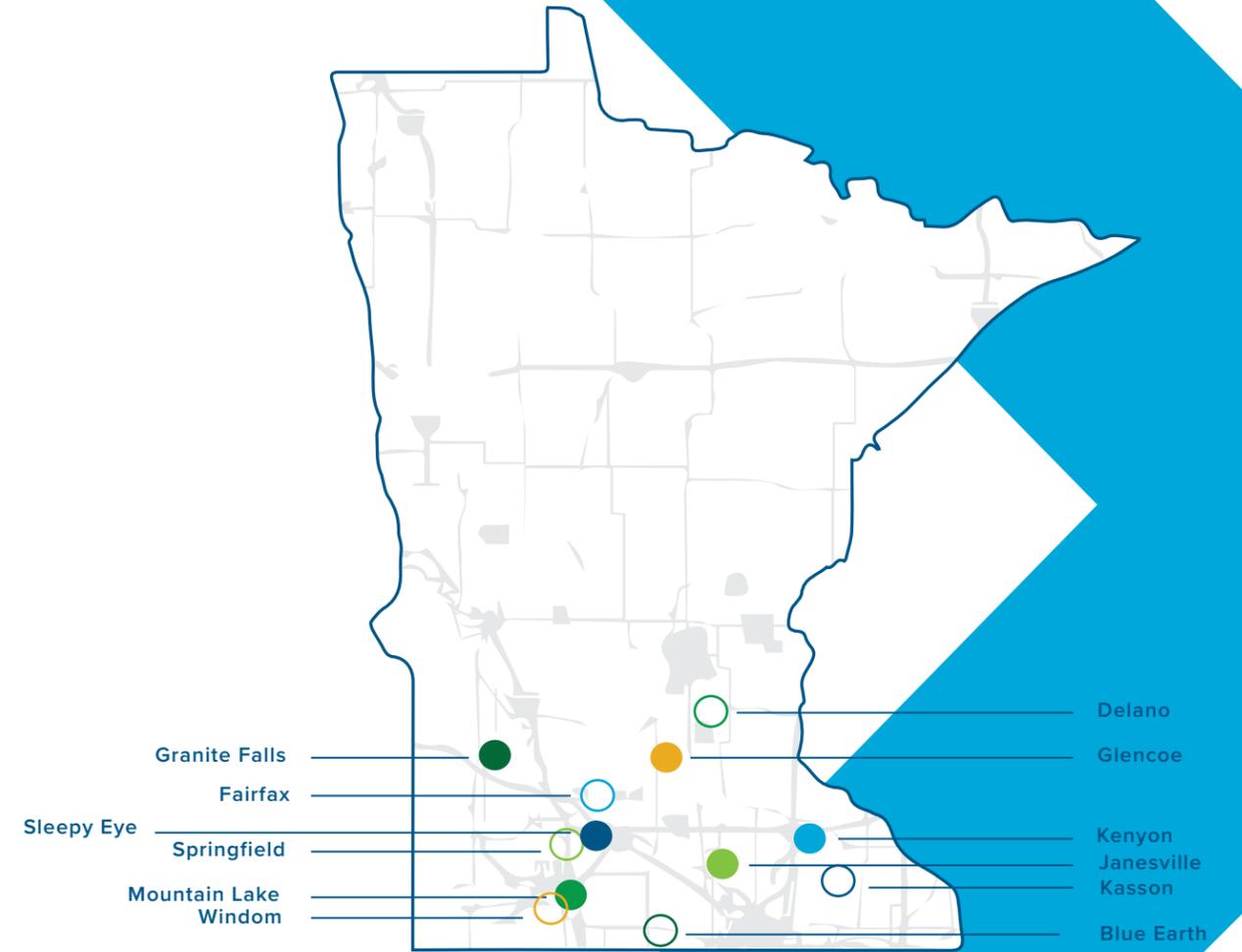


Tim Stoner
Blue Earth, MN



Michael Schulte
Mountain Lake, MN

OUR MEMBERS



Our Affiliates:

- Cedar Falls, IA
- Montezuma, IA
- Indianola, IA
- Waverly, IA
- Independence, IA
- Eldridge, IA
- Elk River, MN
- Willmar, MN

NOTE: The dot above each board member's name corresponds with their city's representation on the map.

2018 HIGHLIGHTS

R4 Solar

Through CMMPA's customer services division, CMPCS, the agency offers R4 Solar, a community solar program. The four R's of R4 represent your utility's practices that "Are For" utilizing sources of renewable energy, reducing unnecessary energy use, respecting the environment, and repeating steps toward responsible energy practices. Six cities actively market the program with a local utility solar billboard and panels to the Lemond Solar Project, near Owatonna, MN.

In 2018, 55 customers and 185 subscriptions were sold to local consumers.

Accounting and Finance

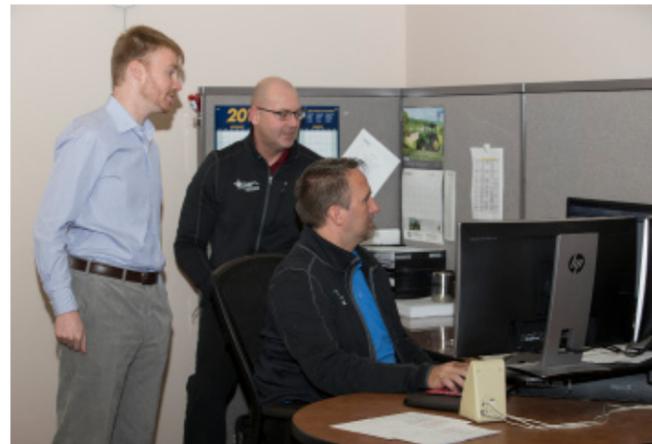
Our selection of Baker Tilly as our auditor paid dividends in 2018, and we expect those to grow in 2019. Baker Tilly, a well-recognized expert in utility accounting practices is keeping us abreast of industry changes that will affect our reported financial results. The notes to our annual financial statements are getting longer, however, today's strategic industry shifts require more explanation.

My Energy Savings

The ten members participating in the conservation improvement and energy efficiency program branded My Energy Savings helped residential and commercial/industrial customers collect rebates that achieved 4.7 million kWh in energy savings. Those same members achieved energy savings totaling 4,020,687 kWh in local electric utility infrastructure improvements. Altogether, the ten cities achieved more than 8 million in energy savings that exceeded state conservation improvement requirements.



Amber Patten, CIP administrator, works on updating the My Energy Savings rebate forms.



Kyle Haemig, resource planner/economist; Chad Hanson, supervisor of operations and analytics; and Ben Nelson, energy analyst, review members' electric load needs during the summer vegetable canning months.

CMPAS UPGRADES ITS DIGITAL PLATFORMS

Within CMPAS, the drive to digitize has been a top priority throughout 2018. Previously used software and databases were replaced with newer systems that provided added functionality as well as better-quality data while freeing staff to take better care of members.

"During 2018, and extending into the beginning of 2019, we replaced customized software with off-the-shelf systems, where vendors will be responsible for upkeep and upgrades," said Chris Kopel, the CEO of CMMPA. "That frees CMPAS staff to do more high-value forecasting and data analytic work for the members because we're no longer spending time maintaining and updating our customized, homegrown software systems."

One of the other benefits of the new systems is that members will be notified in multiple ways (email and text) if data

anomalies are found. That's particularly useful in tracking power transactions.

Chris's comments were echoed by Chad Hanson, CMPAS' supervisor of operations and analytics. "The new software will allow us to provide better and more reliable service to members. We'll be spending far less time on data maintenance. Our new energy accounting and settlements software, another off-the-shelf platform, will make it easier to schedule energy deliveries and account for transactions."

"CMPAS is really looking to the future," said Ron Melson, electric superintendent of Mountain Lake. "The digital upgrades they have installed on my system – SCADA and Beehive – help me sleep better at night. I can operate my system better using the detailed data those systems provide."

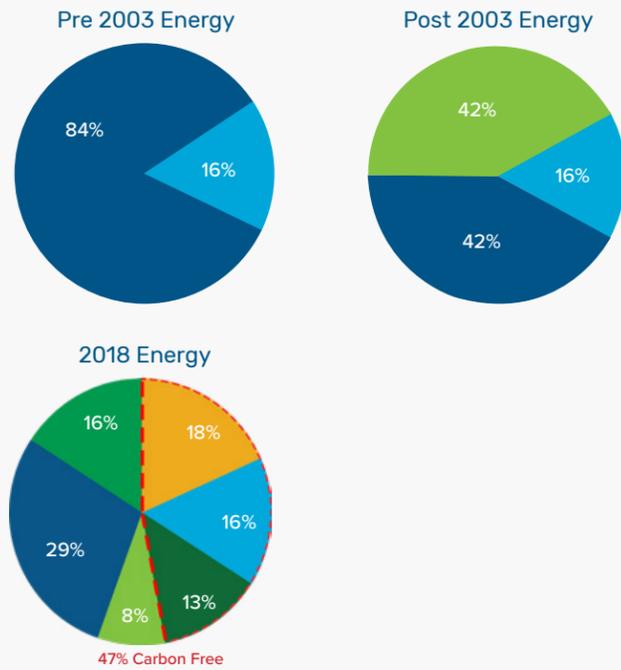


Ron Melson, superintendent of Mountain Lake Municipal Utilities, talks about the benefits of Beehive and SCADA to the electric utility system.

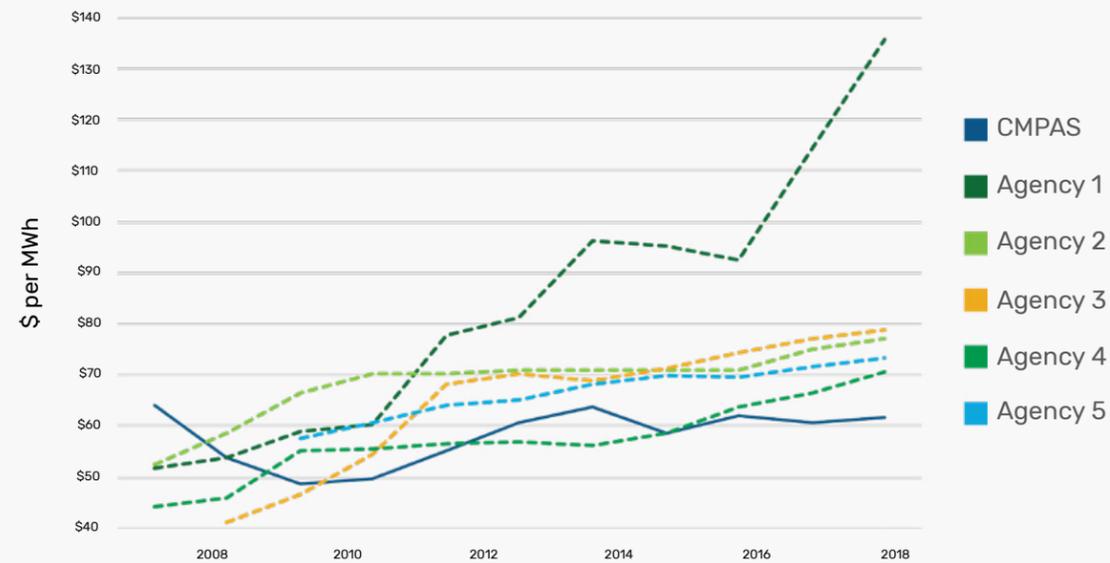
WHOLESALE POWER PORTFOLIOS

Energy Information

- WAPA Hydropower
- Coal
- Market
- Nuclear
- Fixed Price 5x16 PPA
- Renewable



WHOLESALE POWER COSTS



PORTFOLIO PROCUREMENT AND MANAGEMENT MITIGATING RISK AND PRICE

Wholesale power accounts for about 60 percent of the retail price of electricity delivered by CMMPA members to their customers. Given the volumes of electricity necessary to power a city, operating efficiently in the markets and securing stably-priced, low-risk contracts will result in a better bottom line for customers.

CMPAS buys and sells from the Midcontinent Independent System Operator (MISO) market to meet a small share of its needs and to find a buyer for occasional excess energy. CMPAS' planning objective is to balance short-term opportunities in the market with long-term cost stability.

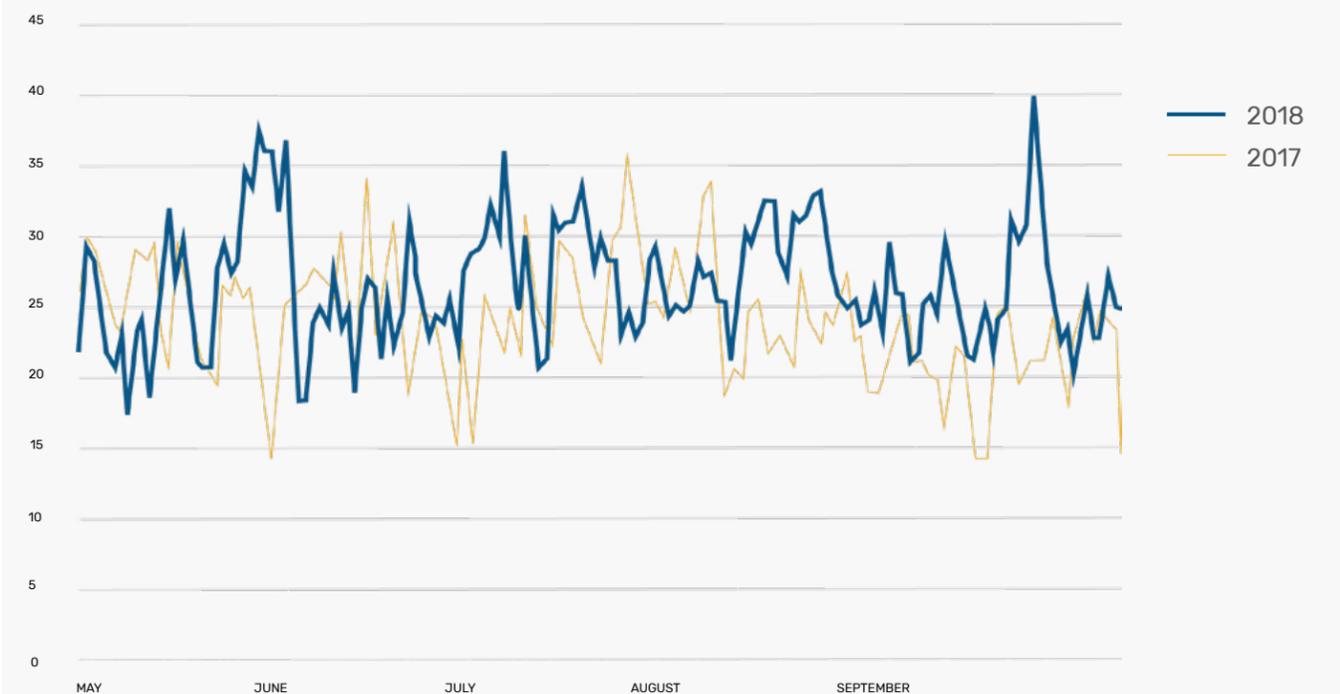
"As an agent for our members, CMPAS is active in MISO every day, searching for low-cost, reliable power options. If we are successful, our members are successful," said Kyle Haemig, our resource planner and economist. "We design and maintain a generation portfolio that manages turbulence in the market."

The exhibit on this page shows the monthly differences in prices between May and September in 2017 and the

comparable period in 2018. As shown, the summer of 2018 saw higher power prices than the same period in 2017 – to the tune of approximately \$3 per megawatt-hour. That works out to three tenths of a percent per kilowatt-hour (kWh). Over this period, higher temperatures mainly drove higher prices. Other factors can impact power prices include fuel prices, generation and transmission constraints, outages, and the pattern of weekends and holidays during the course of a month. When meeting members' needs from the market, CMPAS conducts a great deal of both short and long-term research on how to manage volatility, particularly with natural gas prices. We also analyze how the market may change with increasing amounts of wind and solar resources.

As Chad Hanson, our supervisor of operations and analytics often states, "Our mantra is, low-cost, low-risk and low-volatility. We conduct a lot of evaluations and analysis of loads and prices to find the sweet spot of low-cost, low-risk and low-volatility."

POWER COSTS HIGHER IN SUMMER 2018 THAN SUMMER 2017



DIGITIZING UTILITY SYSTEMS

To the non-digerati, hearing that a business is “digitizing” may sound like no big deal. There may be a few new bells and whistles, some new buttons to push, but nothing fundamentally different from the previous model.

That would be a far cry from the reality that took place during 2018, both at CMPAS’ member utilities and within CMPAS itself. Mountain Lake and Windom were two members that spent a lot of time in 2018 working with Vignesh Subramanian, our systems engineer, to implement System Control and Data Acquisition (SCADA) software, the Beehive distribution system mapping platform, or both.

“CMPAS has been instrumental in integrating our antiquated SCADA and installing Beehive. This will without a doubt change the way we prepare for future growth and help us make better decisions in current operations,” said Nate Zimmerman, general manager of Janesville Municipal Utilities. “I am grateful we have partnered with CMPAS and look forward to them continuing to show us ways to maximize the value of these systems.”

In 2018, Vignesh provided demonstrations of SCADA and Beehive to a few members who had not yet installed those systems. Others who had installed those systems but did not know how to use them asked for training, which Vignesh happily provided. Installing and activating SCADA and Beehive was an area of support we provided in the just-concluded year to members who were digitizing their operations. Another area of support was tied to advanced metering infrastructure (AMI).

During the member site visits we held in 2018, several members, including Springfield, Granite Falls, Sleepy Eye, and Kenyon, asked for Vignesh’s help in understanding and assessing AMI. This discussion with members confirmed our belief that the time was ripe to begin investigating AMI technologies, partnerships, and potential deployments.

As always, Vignesh was more than willing to fulfill members’ requests. David Meyer, general manager of the Glencoe Light and Power Commission, spoke for many members when he said, “Vignesh is awesome!”

SCADA AND BEEHIVE EXPLAINED

As Vignesh explained, “SCADA provides the necessary data foundation for network owners to see what is happening on

their systems. It’s a dynamic tool that shows how the system is performing.”

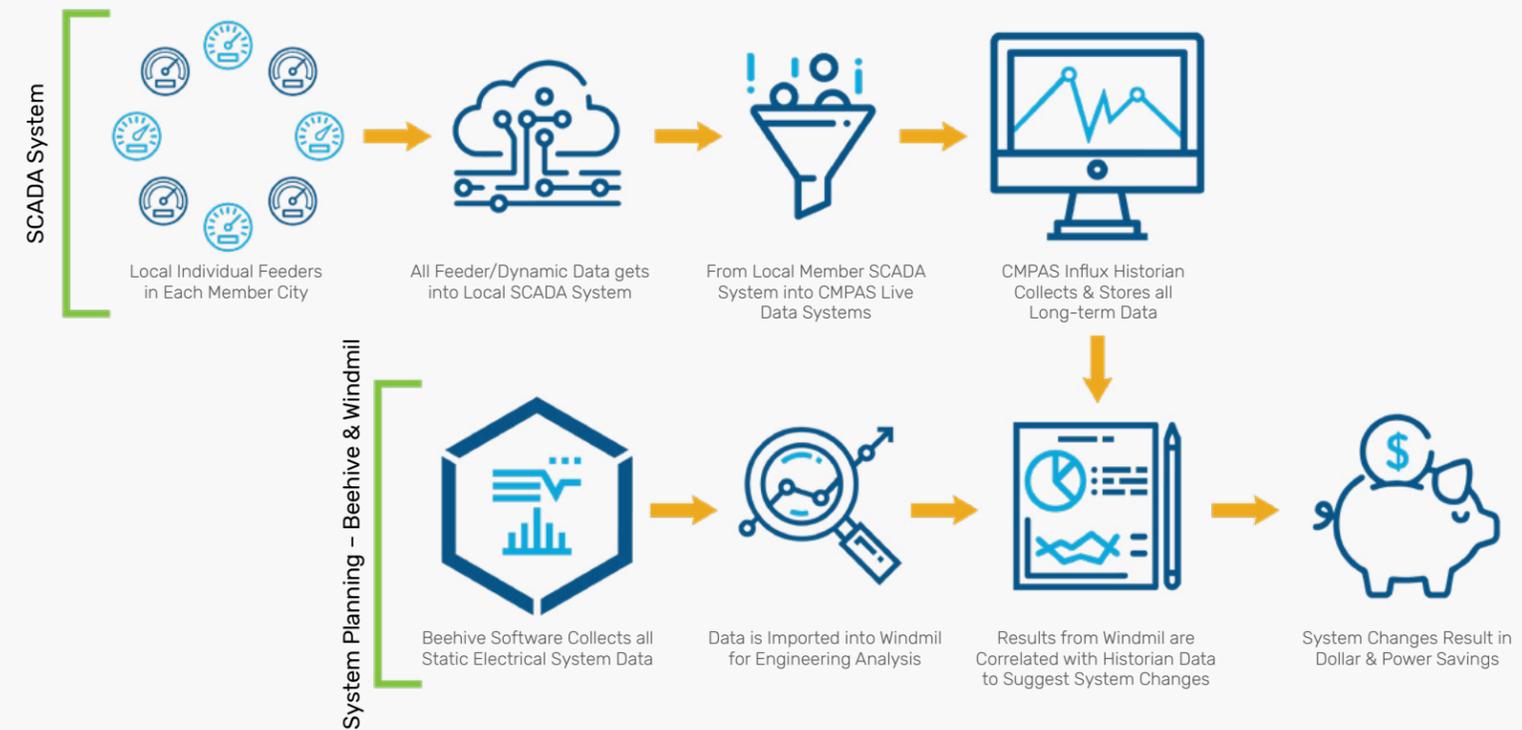
“Once SCADA is installed, members have a better understanding of their electric system’s history and the performance of each physical asset on the system – including substations, transformers, overhead lines, underground lines, capacitor banks, relays, and so on.”

SCADA is the first step to helping members improve their networks’ reliability and performance. “If you were building a house, you could think of SCADA as the foundation,” Vignesh continued. “Once the foundation is in place, we can put in a basement, build the first floor, and so on. Each phase needs the prior phases to perform.”

In this analogy, the Beehive platform would be the basement that sits atop the SCADA foundation. Beehive helps members map their electric assets, improve power factor, and better plan for future system additions. The platform allows members to practice digital asset management, reducing the risk of relying on outdated paper maps of a system.



Vignesh Subramanian, systems engineer, provides a demonstration of SCADA and Beehive screens to monitor distribution systems.



MOUNTAIN LAKE AND CMPAS BENEFIT FROM ADVANCED DIGITAL TECHNOLOGY

SCADA and Beehive offer members qualitative and quantitative benefits.

Using Beehive, Blue Earth Light and Water was able to identify a system improvement that increased the power factor (PF) on its system to about 90 from 75. By installing capacity banks to increase its PF, it saved an estimated \$70,000 per year.

Vignesh has installed and activated SCADA and/or Beehive for most CMMPA members over the last 18 months. In 2019, he plans to continue his digitization efforts by installing a data visualization application, called Live Data, and Historian, a data warehouse, for some members.

“Electric reliability is an important selling point when we speak with manufacturers who are considering building a facility in Mountain Lake,” commented Michael Schulte, city administrator for Mountain Lake. “SCADA and Beehive provide us with more and better data about the health of our electric system, helping identify ways to improve operations by increasing efficiencies.”

Michael tells the story of a customer who came into the city’s office to report a possible water leak.

“This customer had some low-lying land where there was standing water, even when there had been no rain. We couldn’t identify a leak in the water system, but because we had Beehive, we could take a look at where our electric lines were. We found an electric line that ran under that property, and we thought, if there’s a buried electric line there, maybe there’s a buried water pipe there. Sure enough, there was, and we were able to fix it.”

Michael doesn’t know how much water was lost because of the leak, but he thought it could be thousands, even tens of thousands, of gallons.

“Although we’re not using Beehive to map our water system, we’re glad we could use it to identify where water could be leaking on our system,” Michael said. “Thanks to advanced digital technology, and CMPAS, we are taking better care of our customers. We only have three employees in the electric department, so digitizing our system and leveraging CMPAS’ expertise helps us stretch our resources.”



Original primary substation



Second substation for reliability and potential growth



Motor energy efficiency verification at Milk Specialties in Mountain Lake



MEMBER SPOTLIGHT

MOUNTAIN LAKE DIGITIZES ITS NETWORK, HELPS LARGEST CUSTOMER WITH ENERGY EFFICIENCY UPGRADES

Ron Melson, electric superintendent of Mountain Lake, is a Minnesota Wild fan. He likens the amount and quality of data he now receives from SCADA and Beehive to a hockey scoreboard. "It's always nice to hear the Wild beat the Dallas Stars, but the final score only tells me so much. I want to go deeper – how many goals did Zach Parise score? How many assists did Mikael Granlund get?"

"The systems Vignesh installed allow me to monitor all the physical assets in our electric system from my office," Ron continued. "Before those systems were installed, I had to guess at electric load scheduling by looking out the window and checking the Weather Channel. I had to call someone to confirm a generator was operating. If a circuit needed repairing, I had to guess what equipment should be loaded onto a truck. If a circuit needed reopening, someone had to drive to the site and do it manually. To monitor the health of the distribution system, we had to call Vignesh at CMPAS."

"Now we can do all that digitally, from our office, thanks to SCADA, Beehive, and Vignesh," he commented. "Now, we can troubleshoot problems from our office, using a laptop computer, before we go into the field."

"We're really grateful Vignesh installed and populated these systems at no added cost to us – it was all covered in our member fee."

Mountain Lake used SCADA and Beehive in planning the construction of a new substation, which was completed in early 2018.

As Ron explained, "Our one substation, which was over 40 years old, needed to be replaced for reliability purposes and also to plan for future load. Our load is growing slowly, but there have been rumors that a commercial-industrial (C&I) customer may expand its operations, and we are in conversations with a potential new C&I customer. If those business plans happen, that would be a meaningful increase in our load."

"Whether or not it happens, we needed to have a backup for our existing substation, to ensure continued high reliability. That way, if and when, growth comes, we'll be prepared."

The new substation, which CMPAS played no role in constructing, is double the capacity of the old substation. By providing a digital map of Mountain Lake's system, Beehive helped the city pinpoint where they wanted to build the substation and how it would interconnect to the existing network.

Efficiency Upgrades Improve Customer's Competitiveness

Mountain Lake's largest customer, Milk Specialties, operates a whey-processing plant on the east side of the city. Operating around the clock, it produces around 800,000 pounds of protein each week from shipments of whey. The protein is used in sports nutrition and functional food applications.

Milk Specialties' production has more than quadrupled over the last decade, as the global demand for dairy protein products has skyrocketed.

A large and growing market, sports nutrition also is an intensely competitive one, where small changes in input costs could translate into big shifts in market share. So, Milk Specialties tightly manages all its costs, including electricity.

That's where Energy Insight comes in. Since 2015, Energy Insight's engineers and analysts assisted with determining energy savings, provided payback analyses, verified implementation, and processed rebates that lowered Milk Specialties' electric bill by about \$72,000 per year. Another eight projects underway will save an additional \$57,000 annually, estimated Margit Barot, an energy engineer with Energy Insight. That's real money for a facility with annual electric bills of about \$750,000.

"It's a huge time saver for us to have Energy Insight analyze efficiency opportunities, make recommendations, schedule the contractors to do the work, and process rebate applications," Eric said. "The variable-speed drives we installed on our motors reduced the stress on those motors, which extended the lives of the equipment and lowered future replacement costs."

"If we had to do all of the paperwork for the rebates, it would be a very time-consuming endeavor. Energy Insight's partnership with Mountain Lake Municipal Utility produces real value for us," he continued. "Our partnership helped make efficiency upgrades possible, and it makes us more competitive in the global protein market."

MEMBER SERVICE ENHANCED WITH LISTENING TOUR



CMPAS is a membership organization whose goal is to make its members more successful. Agency employees are a resource that help members by answering their questions and staying current with their needs.

A close working relationship between employees at member utilities and the agency is the necessary first step to provide service and value to those members.

Member Visits A Way to Strengthen Member Relations

In early 2018, our staff took to the road and traveled to members' sites to engage in a dialogue, asking them about their challenges and how we could help.

Although we interact with board directors and board alternates at monthly board meetings, we wanted to enhance our relationships with local utility staff members through face-to-face interaction. At their place of work, we wanted to hear, without the filtering of email, conference calls, and voice mail, how we were doing, what we could do better, and what we were doing that didn't add value.

"During the spring and summer, CMPAS' leadership and staff logged an estimated 2,000 miles visiting each of its 12 members," said CMPAS Chief Executive Chris Kopel. "Each member visit had at least four and sometimes several more CMPAS representatives."

Among the goals of the visits was to gather user input on new technologies that CMPAS was considering for its members. Another goal was to enlist members in

redesigning their monthly bills to make them more intuitive and customer friendly.

During those visits, we heard many questions, including these:

"Can someone demonstrate how SCADA and Beehive work, and how they could help us?"

"Is advanced metering infrastructure (AMI) right for my city? What would it cost?"

"I may need to purchase new generating capacity – what are my options?"

"I may have spare generating capacity I want to bid into the market – what are the rules governing that?"

"Can you provide me with a list of government-mandated compliance reports and their respective due dates?"

"How can our commercial and industrial customers lower their costs with Energy Insight's energy-efficiency services?"

"Can you provide training on the new web-based applications for scheduling power and financial settlement?"

"How can I explain 'electric capacity' to commissioners?"

How CMPAS Responded

Some questions were easily addressed. For example, CMPAS maintains a list of government-mandated compliance reports and their respective due dates, so members seeking that quickly got what they needed.

Other questions also were easily addressed, though not always in the way members hoped – The popular web-based application tracking the status of each city's Conservation Improvement Program (CIP) was being discontinued because it was too time-consuming to maintain. That same functionality would be provided by a replacement app, though members would need some training to operate it.

Still, other questions, such as AMI, would take more time to answer, and the answers were likely to be nuanced and specific to each member's situation. Whether AMI made sense, and what it would cost, would vary from one member to the next and likely would depend on, among other things, each member's existing electric infrastructure. Still, it was helpful to know members were thinking about the benefits of AMI.

They say you can't truly understand another's point of view until you walk a mile in their shoes. During these visits, members and CMPAS staff spent a lot of time walking in each other's shoes, understanding the challenges and limits confronting each side. Through our robust interactions, the metaphorical shoes softened.

Members Provide Feedback on Visits

What we heard when we visited members confirmed our commitment to go the extra mile to provide outstanding service to them.

During the onsite meeting with Mountain Lake, Electric Superintendent Ron Melson said, "I've been here 18 years and know that there are transformers and cabinets that I've never visited. When Beehive was first installed, we immediately discovered a specific problem with one piece of equipment in our electric network. By installing the Beehive program, we now have the ability to take our laptops right to the problem area and use these tools to our advantage which also provides safety and efficiency."

Bob Elston, public works director for Sleepy Eye, made this comment during his meeting with CMPAS representatives:

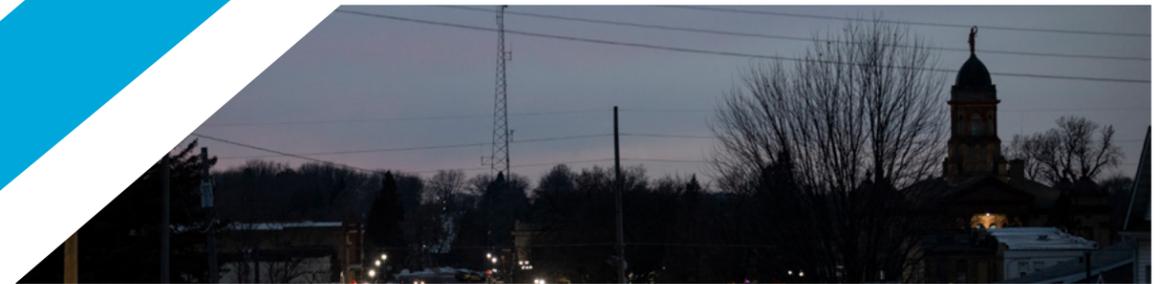
"I want you to know you have the support of the board. Staff helps us in many ways, and we are grateful for their efforts. No member is big enough to take care of everything in a complex and rapidly changing market. That's why we need CMPAS and their talented staff."

As Board President Tim Stoner said, "These member visits were very productive. Face-to-face interaction allows CMPAS to be more deeply involved in the work of its members and provide us with quality services. We value the productive outcomes and the sentiment for continuous improvement."

"It's obvious to me that more authentic interaction leads to better-quality decisions," he continued. "This new direction was codified in the strategic planning work we performed in 2018 that will extend into 2019. Forging deeper professional relationships is not a 'one-and-done' exercise. Rather, it's more of an ongoing process. It's a very positive way of doing business."

“ We value the productive outcomes and the sentiment, for continuous improvement. ”

MEMBER SPOTLIGHT



WINDOM'S ECONOMIC DEVELOPMENT FORMULA

Steve Nasby, the city administrator for the City of Windom, believes there's a formula to guide a city's economic development efforts. Asked what it is, he smiled and said, "There's no cookie-cutter solution."

A city has to start with its physical assets. In Windom's case, two highways — Minnesota Highway 60 and U.S. Highway 71 — bisect the city. So, the city set its sight on developing land to make it maximally attractive for truck transportation-related businesses.

"In essence," Steve said, "what we've developed for the East Highway 60 Development are highway frontage roads, and we're trying to attract businesses that are truck-dependent, such as a large truck stop and/or warehousing."

The East Highway 60 Industrial Park began taking shape in 2016 with electric and water utilities and broadband infrastructure. Windom also has worked with Prime Pork, a pork-processing plant, and Windom Wash, a full-service truck and trailer washing facility, to expand and grow in the East Highway 60 area. Both began operating in 2017.

Prime Pork is a highly automated facility, where water jets operating at up to 60,000 pounds of pressure per square inch are used to slice and trim the pork. The plant's high reliance on computers for cutting and weighing makes it a safer and

more economical workplace for the hundreds of people who work there.

Pork processing facilities need truck transports to bring in live animals, and refrigerated trucks to carry away the processed pork. In between, each truck needs to be thoroughly cleaned, to ensure there is no contamination. That's where Windom Wash comes in. Its state-of-the-art washing and decontamination facility ensures trucks meet federal and state sanitary requirements.

It is anticipated that the expansion of Highway 60 to four lanes will lead to an increase in the volume of trucks going through the community. The City of Windom's economic development team is continually recruiting businesses that would complement the businesses already operating in the East Highway 60 Industrial Park. A large truck stop, warehousing, and related truck-based businesses are prime economic development targets.

In 2003, Windom bought 80 acres of raw land for about \$3,500 an acre north of the City on U.S. Highway 71. Ten years later, the City installed the streets and utilities that enabled it to market and sell the land for industrial development. By putting in streets and utilities simultaneously, cities can minimize rework and present shovel-ready parcels to potential businesses. In 2018, the City purchased an additional 78 acres to expand the North Windom Industrial Park.

The Windom city administrator observed that other factors, such as a trained workforce and a culture that supports economic development, also are critical to success. "If you have great transportation networks and shovel-ready land with utilities, but no workers, what's the point?"

Sometimes luck plays a role, but luck is not a strategy, he cautioned. For example, Prime Pork operates in a building originally occupied by a beef processor that went out of business. Extensive upgrades to the facility costing millions of dollars were required before it was ready for Prime Pork. It wasn't as if the facility stopped processing beef on a Friday and then switched over to hogs the following Monday. The City leaders thank well-known Minnesota entrepreneur and civic leader, Glen Taylor, and his partners for their investment in Windom.

Steve recommends other cities considering jumping into economic development projects have an appreciation of the time, effort, and money involved. "Some people think economic development means handing out massive incentives," Nasby said with a smile. **"You may have to confront that assumption in your community. Really, what is comes down to it understanding your assets, upgrading them if necessary, and staying close to the market. Done properly, economic development is a long game for a community."**

While bringing new businesses to town may be glamorous, Steve emphasized that cities need to work as hard to improve the economics of existing businesses. "Prime Pork is our largest utility customer in terms of dollars, but Toro is the town's largest employer, with about 750 employees," Steve said. "While much focus is on the large employers, cities need to make sure they are working locally with the downtown merchants, landlords, and other retailers.

"Economic development is not a question of 'either/or' — either you attract new businesses or you expand existing businesses. Instead, it's more of a 'both/and' situation: We need to work hard to bring in new businesses while doing everything we can to keep existing businesses operating."

Part of that hard work consists of introducing local businesses to the City's energy conservation program, which is designed to save the business money and to minimize environmental impacts. An on-going success has been the relationship between Toro's representatives and Energy Insight, the energy-efficiency consulting firm that works with CMPAS members to help their commercial and industrial customers use energy as wisely as possible.

Toro's 307,000-square-foot plant is roughly the size of three city blocks. Since 2014, Energy Insight has completed ten energy efficiency projects there.

The projects mainly involved LED lighting, lighting controls, HVAC (heating, ventilation, and air-conditioning), and high-efficiency air compressors. On an annual basis, Toro fixes compressed air leaks by having a third-party perform a leak study that Windom Public Utility incentivizes.

Together, these efficiency measures lower the company's annual electric bill by about \$100,000. That sum is expected to rise in 2019 when two additional projects are completed that will add another \$23,000 in annual electricity savings.

At its Windom facility, Toro assembles riding mowers, commercial mowers, snow blowers, and other lawn-care products. It also manufactures parts for Toro production facilities worldwide.

"We must compete in global markets, and a lot of time consumer purchasing decisions are based on the price of the product," said Tim Dibble, the manufacturing engineering manager at the facility. "That's why it's so important to use energy wisely because it's an important cost input for our products."

"Beyond the economic reason to reduce energy waste, we have an overriding environmental concern," Tim continued. "We consider ourselves environmental stewards. Our business is green, so we must be green as well."

The facility operates three shifts around the clock. For competitive reasons, company representatives were mum on specific details, such as how many pieces of equipment are assembled here or the size of its electric bill.

Tim's colleague Todd Hanson, a facility maintenance supervisor, expressed thanks to Energy Insight and Windom for their help in reducing energy waste. "We're really grateful for Energy Insight walking the floor, identifying potential upgrades, calculating the cost-benefit analysis, and filing for the rebates."

Many of the rebates available for a lawn-equipment assembly plant like Toro's are customized, which requires more detailed calculation than simply replacing a T-12 fluorescent bulb with a T-8 or replacing a fluorescent fixture with an LED. That's where the detailed expertise of Energy Insight's staff comes in.

The LED upgrades installed in the Toro facility will cut the plant's energy use by 60-70 percent, Todd estimated. "Not only do the LEDs last substantially longer than traditional fluorescent and HID (high-intensity discharge) lights, but they also provide much higher quality lighting, by a factor of ten times. It's like night and day."

Under Minnesota's Conservation Improvement Program, utilities are responsible for investing in energy-efficiency projects that have the effect of lowering the utility's operating revenue by 1.5 percent per year. The state's smallest utilities, including a few CMPAS members, are exempt from this law.

On behalf of its members and their customers, CMPAS has worked with Energy Insight for five years to ensure members' energy savings are fully documented and rebate applications filed.

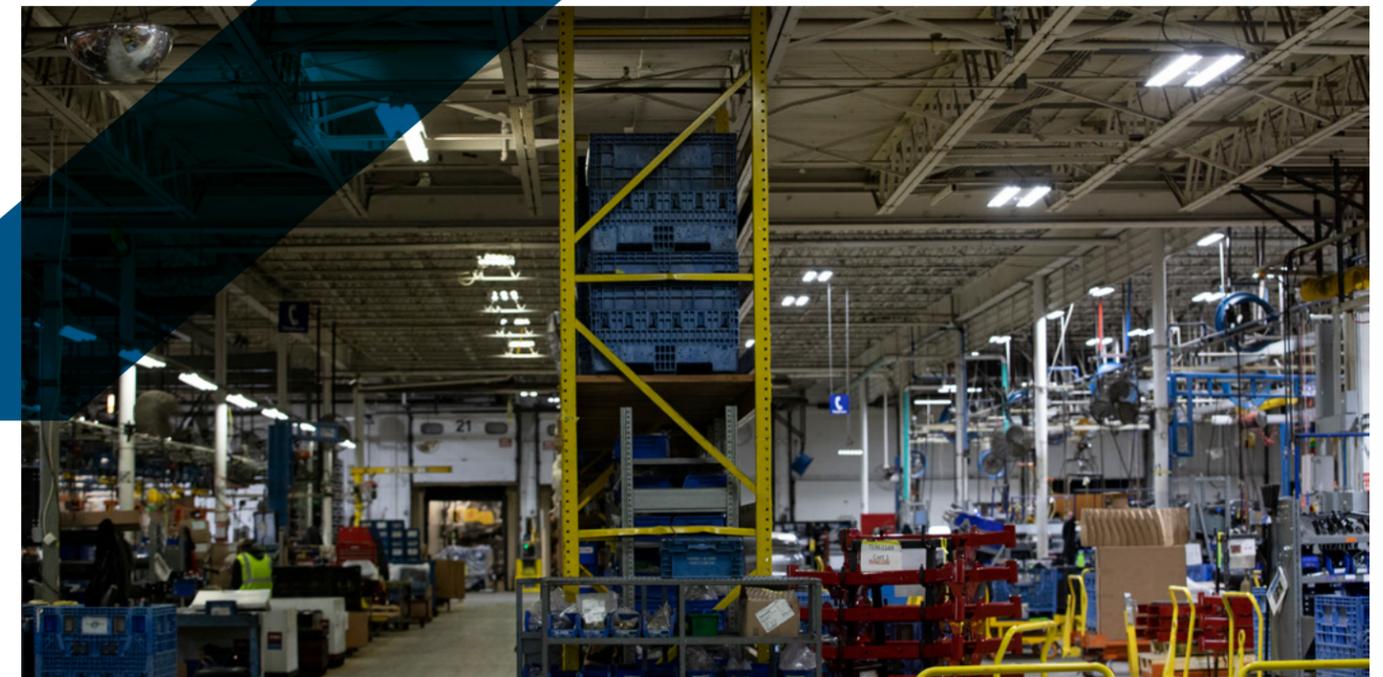
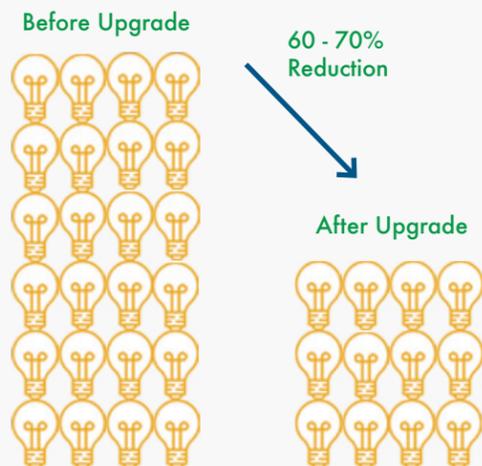


Placing new utility infrastructure



Economic development growth and potential

LIGHTING UPGRADE CUT ENERGY USE AT TORO FACILITY IN WINDOM, MINNESOTA



At the Toro plant in Windom, note how dark the left side of the photo is in comparison to the right. The right side shows the much brighter, finished light upgrade.

MEMBER SPOTLIGHT

GLENCOE'S RELIABLE RENEWABLE ENERGY SOURCE

"Landfill gas generation is an underappreciated renewable resource," Glencoe Light and Power General Manager David Meyer said during a tour of the Spruce Ridge Methane Gas Plant operated by Waste Management, Inc. "It's more reliable than any other form of electric generation, and it's renewable."

Unlike a waste-to-energy power plant, which burns trash to generate electricity, landfill gas generators capture the methane produced by decaying trash in a landfill and burn that methane to produce electricity.

"Even if the nearby landfill closed tomorrow – which it won't – the Spruce Ridge Gas Plant would have decades of fuel going forward," David added. Over the course of the year, Spruce Ridge provides Glencoe with more than 30 percent of its electricity.

The Glencoe landfill has been accepting trash for decades from cities and counties as far as 80 miles away. Before the Spruce Ridge Gas Plant was built a decade ago, landfill methane was flared on site. But once Minnesota officials determined that landfill gas generation would be considered a renewable energy resource, Waste Management built four generating units of 800 kilowatts each at the Glencoe landfill, for a total of 3.2 megawatts of electric generating capacity.

With a capacity factor of about 98 percent, the plant produces electricity nearly all the time. As such, it is a critical baseload resource that also is a renewable resource.



Power generators at the Spruce Ridge Methane Gas Plant operated by Waste Management, Inc., near Glencoe, MN,

"Spruce Ridge has a higher capacity factor than coal, wind, or solar," commented David. "Having a baseload resource with greater availability than a coal or gas plant, or wind or solar generation, is a huge benefit to the city and its customers. Generating electricity from methane is environmentally friendly, which makes it an attractive resource."

Waste Management operates around 100 landfill gas generators around the country.

David praised CMPAS' efforts to help Glencoe incorporate a local resource. "There was a time when being a full-requirements member of a joint action agency was the only option, but that is not the case anymore," he said. "Now, I firmly believe that being in a partial requirements agency like CMPAS is the best option for Glencoe," David continued. "It's like an all-you-can-eat buffet – no two people will have the same appetite. You can take what you need and leave what you don't. With public power utilities having very diverse needs for their power supply, the ability to choose which power contracts would best suit your utility is a great option."

"Our vegetable canning load is pretty significant, and we need that load covered during the three or four months when the canning facilities are operating," the Glencoe manager said. "But when they're not running, they're not using electricity. CMPAS provides me with customized services based on our varying need."



Dave Meyer, Glencoe Light and Power Commission's general manager, checks the situation at the utility's power plant.



ORGANIZATIONAL RENEWAL DRIVEN BY NEW TECHNOLOGY AND A NEW APPROACH TO DOING BUSINESS

“The words ‘organizational culture’ mean different things to different people,” said Kent Myers, an organizational effectiveness consultant who also teaches at Harvard Business School. “But organizational culture is simply the aggregation of attitudes and behaviors held by an organization’s stakeholders, mainly its leaders and employees. And the fastest way to impact an organizational culture is through the behavioral examples of the organization’s leaders.”

“Organizational culture is not about motivational slogans or a new logo,” continued Kent, the managing principal at VISION Companies, a Twin Cities-based consultancy. He began working with CMPAS in mid-2018. Drawing on his work with nearly two dozen utilities, including shareholder-owned firms, joint-action agencies, electric cooperatives, and public power utilities, he commented: “Organizational culture is one of the most important factors driving an organization’s success, or its failure.”

At CMPAS, 2018 was a year of transition as the board of directors followed its succession plan strategy when a retirement triggered natural organizational change. Chris Kopel, previously the chief operating officer, became interim CEO then permanent CEO.

As the CEO, Chris directed a soup-to-nuts review of CMPAS technology infrastructure, always asking, “Is this the best we can do for our members?”

In the interest of continuous improvement, the CMPAS team determined that members could be better served using off-the-shelf IT systems that would meet everyone’s needs. When you purchase an off-the-shelf system, you also purchase the vendor’s commitment to update those systems as needed. By switching systems, CMPAS also freed staff to do more value-added work for members.

Throughout the year, we worked with solutions providers installing new systems, integrating the new systems, developing new processes, and learning new procedures. By year’s end, the old saying about absorbing short-term pain for long-term gain was proving itself true.

While our technology infrastructure was getting rebooted, CMPAS conducted its “listening tour” and visited all 12

members at their place of business. Together we discussed members’ informational and operational needs. We looked into 2019 and beyond to identify even more potential future technology needs.

Then, we brought all that new member intelligence back to CMPAS’ office, where Kent Myers conducted individual interviews with each board member and CMPAS employee. The interviews were a critical ingredient in a strategic planning workshop Myers led in November 2018.

“In all our work, we try to focus on the future, mainly because you can’t change the past,” Myers said.

The listening tour and strategic planning workshops helped drive the creation of CMPAS’ strategic roadmap. “Outcome-based roadmaps are so important, but many organizations don’t invest the time and effort to create one,” Kent reflected. “Then, for those that do, there needs to be an equal commitment to implement that roadmap. It can be altered if conditions warrant. But any alterations can only be made after all stakeholders have participated in a full and frank discussion.”

“Since we started working with Kent, we have experienced a surge in staff-board interaction and collaboration,” said CEO Chris Kopel. “We’re now much clearer about our strategic direction, and everyone has a pretty clear idea of how they can help the organization get there.”

“The CMPAS board deserves a lot of credit for recognizing the changes needed to advance with the industry. They supported the changes the Agency staff needed to implement to meet and exceed the expectations of our industry partners.

“We took to heart Kent’s advice for success: an organization’s culture, the way it conducts business, can be a limiting factor or a factor that enables success,” Chris said. “We’re really pleased he’s working with us to harness the collective knowledge, experience, and creativity of all our stakeholders to make CMPAS the best it can be as an organization that exists to serve our members. I can’t wait to see where we go in 2019.”

MEMBER SPOTLIGHT

SPRINGFIELD HIT WITH JULY 4 FLOODING

While most Americans celebrate the 4th of July, as a day of rest and relaxation with a parade, a picnic, BBQ, and fireworks, a very different Independence Day played out in Springfield, Minnesota. Heavy rains caused the Cottonwood River to overflow its banks, submerging nearby streets and the city’s Riverside Park.

Instead of being busy with picnics and softball games, the park was populated with public safety and emergency crews to ensure public safety and a reliable flow of electricity to public power customers.

After about three days, the river receded, and life started to return to normal in Springfield. But for Scott Johnson, superintendent of Springfield Public Utilities, it was a 4th of July he’ll never forget as the city recovered from the dumping of approximately five feet of water on the park and its recreational and utility assets.

“When the river overflowed its banks, it shorted out our generator, which knocked out power for a dozen homes and an apartment complex,” recalled Scott. “We needed to rent a generator, tie it in with our transformer, and get the lights back on for those customers. That took about 12 hours.”

Flooding Temporarily Stalls Efficiency Upgrades

The flooding, though temporary, forced the city’s energy-efficiency contractor, H&H Electric, to take a few days off from projects to reduce energy waste in the city. Soon enough, H&H’s employees were back installing energy-efficient lighting and cooling to cut the electric bills of businesses in the city.

H&H is doing a brisk business upgrading electric equipment in Springfield. Matt Horkey, H&H’s owner, said that one of his more interesting and unique projects, due to the age of the fixtures, was completely retrofitting the lighting in the city’s Salonek Professional Building. The building houses an Anytime Fitness Studio, an eye clinic, and a dental clinic. His team installed over 300 fixtures there.



A typical Springfield day



The Springfield flood of summer 2018



Emergency back-up power is ready for flood-ravaged parts of city.

"The building's lighting was becoming an operational problem," Matt recalled. "The maintenance costs were rising because the property manager was replacing a lot of lighting ballasts. And, once a fluorescent lighting tube was replaced, there were special environmental regulations regarding its disposal."

Matt's team replaced hundreds of traditional fluorescent fixtures with advanced light-emitting diode (LED) fixtures. The new LED lamps are expected to last for at least ten years, and when they need to be replaced, the old lamps can be disposed without special disposal regulations.

Besides their longer lives, the new LED fixtures generate brighter light using only a fraction of electricity used by fluorescent lighting.

"When a building installs new, higher-quality lighting, customers start to ask about the carpet," Matt said with a laugh. "The visitors start saying, 'Isn't it time for some new carpet? The old carpet is starting to look pretty-faded.'"

Although about 25 percent of Springfield's lighting fixtures have been upgraded to LEDs, Matt sees plenty of new business. "The low-hanging fruit has not nearly been picked," he said. H&H has worked with Springfield for six years.

Matt's team is one of the several contractors upgrading the efficiency of lighting and cooling in Springfield, using recommendations from Energy Insight. Over the last two years, Margit Barot, an Energy Insight associate energy engineer, estimated that 18 upgrade projects had saved businesses about \$20,000 annually on electric bills.



A typical Springfield day

Another project completed in 2018 was upgrading the lighting for the Springfield Community Center. It was long past due for a lighting technology upgrade that would brighten the facility and enhance the property's safety and value. Although replacing the interior three-lamp ballasts with high output LEDs was the impetus for the project, it was decided to replace the exterior lighting fixtures' as well, which generated a lot of positive comments from users of the facility.

For the busy facility's users, the new high-pressure LED lights greatly enhance exterior visibility and safety, particularly during the long evening hours that prevail in Minnesota for two to four months of the year. As the electrical contractor on the project, Matt wanted to maintain the building's popularity in the community and maximize the energy savings of the entire complex.

Working with Scott and Margit, Matt was able to incorporate utility lighting rebates that made it possible to look beyond the interior to the exterior of the building as well.



The Springfield flood of summer 2018



Springfield provides energy-efficiency rebates through the CMPCS Energy Savings program that makes partnerships possible with Energy Insight consultation and verification and H&H Electric planning and installation.



New lighting using a My Energy Savings rebate keeps the storeowner happy.

LOOKING TO 2019

We are excited about building on the changes we enacted in 2018 that allow us to enter 2019 stronger financially.

CMPAS intends to be a full participant in the fast-evolving transmission market in the Upper Midwest. In late 2018, we began recruiting for a transmission planner, and we expect to have the new staffer on board in 2019. We expect whoever fills this new position will be actively engaged in discussions with members as well as third parties about future transmission needs.

When we finish installing the new software and systems, we anticipate a streamlined and shortened accounting and settlement process. More intuitive member bills already are being produced.

We are grateful for all the good things that took place in 2018. Updating our software platforms, digitizing our members' systems, holding face-to-face meetings with members at their place of work, and transforming our organizational culture took a lot of time and effort during 2018. These activities will continue into 2019.

Most of all, we want to thank our members for their expertise, their upbeat attitude, and their perseverance. None of what we did in 2018, or what we plan to do in 2019, would be possible without their support.



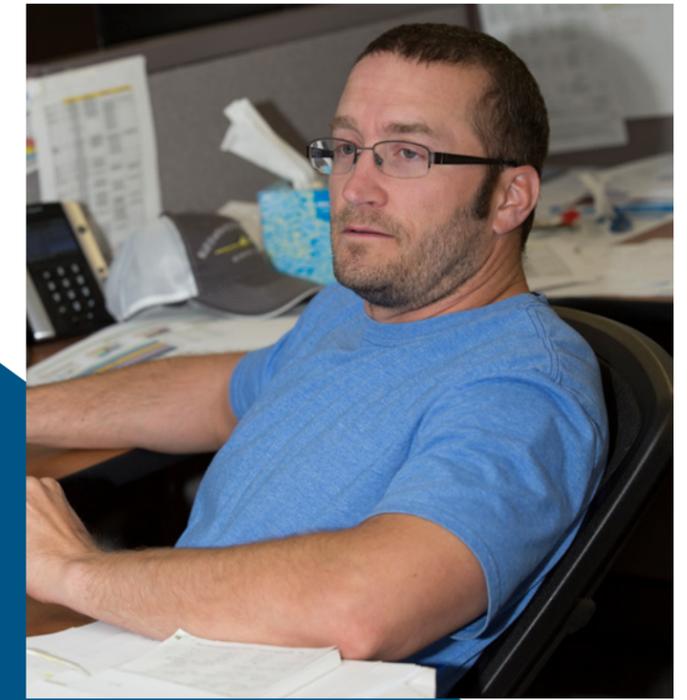
Christina Pierson, CMPAS public affairs director, welcomes Delano Municipal Utilities manager, Paul Twite and finance director, Chris Hart to CMPAS' Blue Earth office.



Executive Team: Malinda Hibben, CFO and Chris Kopel, CEO



CMPAS board director and Kenyon Municipal Utilities Superintendent Randy Eggert arrives for a board meeting.



Andy Ristau, CMPAS energy analyst, readies transactions for the day-ahead energy market.



2019 CMPAS Board Members and/or Alternates from left to right starting in the front row: Randy Eggert, Kenyon; Steve Nasby, Win-dom; Michael Schulte, Mountain Lake; Joel Grejtak, Fairfax; Dave Meyer, Glencoe; Nate Zimmerman, Janesville. Back row: Crystal Johnson; Granite Falls; Paul Twite, Delano; Bob Elston, Sleepy Eye; Scott Johnson, Springfield; Tim Stoner, Blue Earth; Theresa Coleman; Kasson.

CMPA's Contact Information

MAIN OFFICE

459 South Grove Street
Blue Earth, MN 56013

TWIN CITIES LOCATION

6870 Washington Ave S
Eden Prairie, MN 55344

PHONE

888-970-8267

WEBSITE

www.cmpasgroup.org