PLUGGED IN
MOUNTAIN PARKS ELECTRIC, INC.
AUGUST 2024

MPE staff checked in on a hummingbird mother and her eggs, then hatchings, nestlings, and fledglings nestled in a tree at the MPE headquarters in Granby. Photos by Raymond Gabriel and Dan Reynolds.

TECHNOLOGY IMPROVES MPE'S RELIABILITY

MPE'S OUTAGE MANAGEMENT SYSTEM PROVIDES EXACT LOCATIONS OF OUTAGES

A power outage used to mean phone calls coming into MPE's member service representatives, leading to stacks of paper with meter locations, then to sticky notes on white boards in the dispatch center showing which crews were responding to the affected areas. As technology continues to advance at MPE and other electric distribution cooperatives, automation and real-time communication are streamlining processes, lowering lineman response times along with the stress levels of the dispatchers.

Advanced Metering Infrastructure (AMI) technology means the electric meter will notify the co-op instantaneously when there is a power outage. Gone are the days when each and every household needed to call in to report an outage. MPE's outage management system (OMS) compiles meter data for each affected member and can help accurately determine the location of the outage. On the morning of July 18, 21 meters in a small subdvision were reported out and the OMS map highlighted the area back to the tripped fault. Linemen responded and were able to restore power in less than 40 minutes.

The OMS map also showed all the relays that were placed on "one-shot" (also known as non-reclose) the previous week due to high risk of fire in MPE's service territory. "One-shot" means that MPE's system sensitivity settings have been increased so that when an object (i.e. trees or other vegetation, animals, etc.) creates an interruption to the line, the line will immediately be de-energized. In normal conditions, an electrical device known as a reclosure will de-energize and re-energize overhead power lines multiple times to attempt to clear these types of temporary contacts (faults). "One-shot" is a critical part of cooperatives' fire mitigation plans, including MPE's, but members should anticipate longer and more frequent outages when the sensitivity levels have been increased. MPE posts on www.mpei.com and on social media when the system sensitivity settings are increased.

Nathan Klindt, metering superintendent, energizes a meter to get readings and check the display.

Laura Constenius, operations coordinator, radios a lineman so they can complete a switch.

For some larger outages and during some maintenance projects, MPE dispatchers can coordinate with field crews to cut off power at specific locations for work to be completed while electricity is pulled from other substations to "keep the lights on." MPE's system is designed at substations for redundancy and loop feeds to be able to do these switches, as needed.

As SCADA (supervisory control and data acquisition) technology continues to be added to areas of the system, made possible by MPE's investment in our middle-mile fiber network, more of these switches can be done in the dispatch center in MPE's headquarters as opposed to having linemen manually make switches in the field. MPE's radio system is also set to be upgraded this year from analog to digital, which will alleviate dead zones and greatly improve communication between dispatchers and field staff.

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POWER SUPPLY DEEP DIVE

RELIABILITY

In this second of four deep dives into MPE's power supply transition, we look at the reliability of the MPE system, which aways has been and will always continue to be a priority of our members, board, management, and staff.

Guzman will have the responsibility of maintaining a balanced set of resources to make sure "the lights stay on" for us and their other power distribution customers.

Guzman has a mix of resources, including coal, gas, wind, and solar. For us and the other Colorado co-ops, Guzman and other power suppliers (including Tri-State) are mandated to continue to increase the percentage of renewable energy sources to meet state decarbonization standards.

Guzman owns generation assets and purchases power from across the U.S., ensuring that electricity will be available even if a certain region or regions are hit by a severe weather event or other issue causing stress on the power grid.

RESOURCE ADEQUACY:

MPE's contract with Guzman Energy includes resource adequacy considerations above current requirements. Simply put, resource adequacy ensures that power suppliers have more than enough power to continuously meet the need for electricity despite fluctuations in power generation and consumption. As load growth continues with more electrification and power suppliers move toward a generation portfolio that relies more heavily on renewable sources, which are more variable than traditional base load generation, resource adequacy requirements will likely increase. Robust resource adequacy was an important factor in our new power supply agreement with Guzman.

TRANSMISSION PARTNERSHIPS:

MPE will continue to have transmission partnerships with Tri-State and the Western Area Power Administration (WAPA). MPE will be served through the same transmission systems that serve us today. MPE is working through the contractual changes that are necessary with both WAPA and Tri-State to move forward as ongoing transmission customers after Guzman becomes our power provider.

Tri-State and WAPA are both required to meet the same reliability standards on the transmission system, regardless of who MPE's power supplier is.

Guzman will not be responding to transmission outages; the work on transmission systems will continue to be done by the transmission owners (Tri-State and WAPA).

Guzman will not be responding to distribution system outages; that work will continue to be done by MPE line crews.

RELIABILITY IMPROVEMENTS THROUGH INCREASED CARVE-OUT:

Area community generation projects and those that support MPE's electric grid will be priorities for the future increased carve-out – or the portion of power that can be purchased outside the power supply agreement (PSA) – under Guzman Energy. One of the driving factors behind the Board's decision to move toward a new power supplier was for greater flexibility in purchasing power from other sources, including local generation projects from members. The Board directed MPE staff to move forward with a plan to have three rounds of request for proposals (RFP's) over the first two years of the Guzman contract to fulfill the 2 MW initial carve-out. Details and scheduling of the RFP's are yet to be determined, but an early plan of the RFP roll-out includes an RFP round dedicated to prioritizing resiliency, reliability, and system benefit.

EXAMPLE OF RESILIENCY / RELIABILITY / SYSTEM BENEFIT PROJECT:

- Power generation and/or storage to support reliability for critical community needs, such as emergency services or water/sewer.

Pricing and development for future resiliency, reliability, and flexibility of system operations will be the priorities for the RFP process for PPA's for the remaining bulk of 60,000 MWh with the Guzman carve-out.

PAULSON EARNS ADDITIONAL DEGREE

With the support and assistance of MPE, Manager of Operations Adam Paulson's hard work paid off as he completed his final course to earn an Associate of Applied Science (AAS) Degree through Trinidad State College on May 5, 2024.

"I have the approach that you always must keep learning to keep your mind sharp," said Paulson. "If we aren't learning something, our minds can grow stagnant. I was also inspired by our previous Ops Manager, Don Finn, who was a Journeyman Lineman and held an MBA."

Taking into account Paulson's previous education, to earn this AAS degree he needed 15 credits, which he completed online. Through MPE's Employee Education Reimbursement Policy, Paulson received assistance to further his education as the five courses he took enhanced his communication, technical, and management skills. Paulson has more than 20 years of experience in supervising employees in the field, but he said this degree will help with the "inside part" of managing the Operations Department.

"Some of the best things I learned were very simple, such as the proper memo format, how different employees learn and communicate, and some in-depth HR and supervision training," said Paulson.

He was able to immediately implement some of the things he was learning, such as recommending to the management team that company-wide memos be sent to outline important decisions that are made during management meetings.

ADAM PAULSON
MANAGER OF OPERATIONS
At MPE since 2012
adambp@mpei.com
(970) 887-7015

"I am thankful to Mountain Parks to continue to invest in me and my future here at the cooperative. I am blessed to work here. This has been a ton of hard work to juggle with a very demanding job, a growing family, and a million other things going on right now at the cooperative," said Paulson, who started this degree journey in 2022. "I am hopeful to be an example to upcoming employees with MPE that they will realize MPE will invest in them with a little hard work."

7-10 a.m. on Sept. 4

MPE Headquarters

2024 MPE MEMBER APPRECIATION EVENT

- **Tethered hot air balloon rides**
- **Breakfast (while supplies last)**
- **Information and updates about your electric cooperative**

Thanks to event sponsors Tri-State G&T and Western United Electric Supply.

July 11, 2024

GENERAL MANAGER'S BOARD MEETING BULLETIN

- The MPE Board reviewed and approved two donation requests to support the Mountain Family Center's (MFC) senior programming and West Grand School District's (WGSD) school bus electrification. The growing senior population will benefit from the funding of $15,000 to MFC through weekly delivery and well-check visits. WGSD is receiving state and federal funding for the buses, but the MPE donation of up to $15,400 will support the charging infrastructure needed for the additional buses.

Read the full report at **www.mpei.com/BOARDBULLETIN**