



2021 Projects Equal Progress

CVEA's mission is to provide exceptional service through safe, reliable, cost-effective electric service and programs. To accomplish this, the Co-op consistently pushes to complete projects that will improve reliability, efficiency, or cost effectiveness.

Like many businesses within the CVEA service territory, the Cooperative took advantage of increased daylight and long summer days to complete several important projects that benefit Co-op members.

Each fall, CVEA provides Members information on what the team has been up to. Following is a summary of some of the more significant projects that have been worked on or completed this year:

Stuart Creek Extension

The Stuart Creek Extension project was a 21-mile distribution extension project from roughly Mile 45 to the Department of Transportation station in Thompson Pass. The project, originally a service extension for Alyeska, expanded to provide service for Tsaina Lodge and the Serendipity community.

The project started in 2019 and took three years to complete; saving difficult bores up two very steep hills, through extremely rocky subsurface, for 2021. Through the combined efforts of CVEA, Copper Valley Telecom and Michels-the boring contractor-this work was completed successfully in three weeks.

Gakona Underground Project

Repeated outages due to trees in the line created a need to address a portion of the system serving the Gakona Subdivision in the Copper Basin District. The way the lines were built, crossing over properties with no established easements, thus no rights-of-way management, was determined to be the issue.

To solve the problem and improve reliability for these members, CVEA worked with property owners to establish new easements and with contractors to bury the lines underground.

Project planning and design began two years ago, and the project was completed this summer within a span of two weeks.

Right-of-Way Maintenance

CVEA remains dedicated to right-of-way clearing in an effort to keep vegetation from coming into contact with power lines and causing member outages.

This year, CVEA worked with Talus, a local contractor, to clear critical sections of distribution line on the West line between roughly Mile 165 and Mile 187 of the Glenn Highway and areas along Airport Road and behind Mark's Repair in the Valdez District, as well as 7 miles of transmission line.

It is the fifth year of this project, clearing transmission line back to the 100 foot-wide easements. At this time, the entire transmission line South

of Pump Station 12 has been completed in a proactive effort to improve power reliability.

Power Plant Maintenance

The Power Generation department completed two major projects in 2021: an overhaul of Unit 4 at the Valdez Diesel Plant and refurbishment of the Cogeneration Plant generator.

VD4 is a model DSR-46 diesel engine made by Enterprise in 1971. It has six cylinders and produces 2,672 horsepower. The unit was last overhauled in 1998.

The Enterprise engines are scheduled to be overhauled every 20,000 hours of operation to ensure they continue to run efficiently and reliably. The overhaul began in January and was completed in February.

This year, the Cogeneration Plant generator was thoroughly cleaned, epoxy coated, and tested. The project required the removal of electrical power panels, control panels and other components, allowing the generator rotor to be slid from the stator.

Cleaning included blasting with crushed walnut shells to remove built-up grime and dirt without causing damage to generator components.

This generator is the original unit installed in the plant in 2000 and is our primary source of power throughout the winter, running nonstop from November through April. The refurbishment of the generator will help ensure the unit runs efficiently and reliably for another 20 years.

The Cogeneration Plant also saw the installation of a

brand-new Ride-Through-Unit. In recent years CVEA has experienced outages due to faults on the distribution system that are severe enough to knock fuel controls for the unit offline. This loss during outages worsens the impact of the fault, and in some cases, results in system-wide outages.

This new Ride-Through-Unit will allow the controls to stay online even during the most severe faults, increasing reliability for the members.

Two multi-year projects for the Solomon Gulch Hydroelectric Plant were started in 2021; a Federal Energy Regulatory Commission required seismic analysis of the plant, which will take two years, and initiation of the plant relicensing process. Relicensing will take approximately seven years.

Additionally, control power batteries will be replaced at the Solomon Gulch plant. The existing batteries have reached the end of their five-year service life.

These batteries are known to fail without warning as they approach their end of life. One failed earlier this year which prevented using VD4 when needed. These batteries will be replaced by a more reliable battery with an extended 20-year service life.

Inspections

This year has been exceptionally busy for routine inspections as multiple CVEA facilities, with different inspection schedules, converged.

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COPPER VALLEY ELECTRIC

2021 Projects

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Inspections took over four weeks to complete, with two separate trips to meet power production schedules and weather limitations. This year the Co-op completed generator, switchgear, and substation inspections, as well as several maintenance items identified in 2020.

Generator inspections and testing are performed to identify preventive maintenance. They are visually inspected and electrically and mechanically tested. During normal use and faults on the system, generators can experience degradation and wear of the insulation. Testing is used to identify vulnerabilities and prevent catastrophic failure of the unit.

Routine switchgear inspection and testing at the Allison Creek Hydroelectric Plant, Valdez Diesel Plant, Glennallen Diesel Plant, and the Petro Star switch building are performed on a scheduled basis. This year, routine testing of circuit breakers, instrument transformers, relays, reclosers and surge arrestors was completed.

Accounting

In an effort to gain efficiencies related to billing, accounts payable, payroll, customer service, and general accounting, CVEA completed a full software business review with the Cooperative's vendor NISC, a software leader in the utility industry. With a 2005 original system implementation, new employees and new offerings, the CVEA project team thought this would be a worthwhile project.

Through the review, they learned about enhancements to the billing and collections processes and product offerings that could benefit members in the future. It is expected that some of these enhancements will be prioritized as goals for 2022.

Communications and Community

CVEA launched its first-ever Member Satisfaction Survey in 2021 to learn what is important to members and how they think the Co-op is performing. As of the writing of this article, surveys are being submitted at a rapid pace. The deadline is September 30. CVEA looks forward to sharing the information with the board and Membership in the future and using the information to guide future decision making.

It is October, and that means Co-op Month! Each year Cooperatives across the nation celebrate the Cooperative difference. Commitment to community is one Cooperative guiding principle that CVEA takes seriously. On October 23, CVEA is partnering with CVT and local nonprofit organizations and vendors on a brand-new community event. We hope you'll join us in both districts for the first Co-op Month 'Pick Your Own' Pumpkin Patch. Watch for event details on Facebook, www.cvea.org and wherever you get your local news.

If you have questions about these or other CVEA projects, please contact Sharon Scheidt, Director of Communications, at 907-835-7005 or email sscheidt@cvea.org. ■



Pg. 4 Boring at Ptarmigan Drop for the Stuart Creek Project.
Pg. 5 Top, repainting the stator during the Cogen generator project.
Pg. 5 Middle, crushed walnut shells used for generator cleaning.
Pg. 5 Bottom, pistons removed as part of the VD4 overhaul.
Top, the Cogen generator rotor going back into the stator.
Above, right-of-way clearing on the transmission line.



Building Ambassadors Through Member Tours

On Tuesday, August 24, CVEA hosted 10 members for the fall Member Tour in Valdez. The Member Tour Program was developed to be a tool in the members' communication toolkit and an opportunity for CVEA members to gather information, learn how the system works, and ask any questions they have in a small, informal setting.

According to Travis Million, CVEA CEO, "This program is important to us as we believe everyone who is interested in the facilities, as member-owners, should be able to see them and learn about them."

Participants from Valdez and the Copper Basin spent the better part of the day with CVEA's CEO, Director of Power Supply, Director of Communications, and Valdez Chief Plant Operator visiting the Valdez Diesel Plant, the Cogeneration Plant, and the Solomon Gulch and Allison Creek Hydroelectric Projects. Members were treated to a quick lunch and enjoyed a video showcasing construction of the Allison Creek project and the award winning *Behind the Switch* video.

According to a post-event survey, the tours were extremely well organized, informative and fun. Every participant said they felt the tour was very beneficial and would highly recommend it to others. One commented, "I would recommend the tour to all members if they get the opportunity; they will not be disappointed." Another said, "I loved discovering everything I didn't know about CVEA! I loved every minute!"

The tour went on hiatus in 2020 due to the COVID-19 pandemic, but was back for the fifth year in 2021. CEO Million believes the member tours are a very successful member engagement opportunity for CVEA. He weighed in saying, "members leave with an incredible amount of knowledge and appreciation. We believe we are building Co-op ambassadors one member, or one small group, at a time."

Registration is required and begins 30 days prior to each tour date. Space is limited to 20 members. If you have questions regarding this program, contact Sharon Scheidt, Director of Communications, at 907-255-1425 or sscheidt@cvea.org. ■



Get Familiar with Cyber Basics

At a time when we are more connected than ever, being “cyber smart” is of the utmost importance. This year has already seen more than a fair share of cyber attacks and breaches, including the high-profile attacks on the Colonial Pipeline and other critical infrastructure. Furthermore, as has been underlined by these recent breaches, cyber attacks are becoming more sophisticated with more evolved bad actors cropping up each day.

Luckily, there are several steps that we can take on a daily basis to mitigate risks and stay one step ahead of malefactors. Here are a few quick tips:

Enable multi-factor authentication

Multi-factor authentication (MFA) adds that necessary second check to verify your identity when logging in to one of your accounts. By requiring multiple methods of authentication, your account is further protected from being compromised, even if a bad actor hijacks your password. In this way, MFAs make it more difficult for password cracking tools to enable attackers to break into accounts.

Use strong passphrases/password manager

This may seem obvious, but all too often securing strong passphrases/password managers is overlooked. People spending more time online during the pandemic has certainly contributed to more bad actors prowling for accounts to attack.

Using long, complex and unique passwords is a good way to stop your account from being hacked, and an easy way of keeping track and remembering your passwords is by using a password manager.

Perform software updates

When a device prompts that it's time to update the software, it may be tempting to simply click postpone, and ignore the

message. However, having the latest security software, web browser, and operating system on devices is one of the best defenses against online threats. So, don't wait - update.

Do your research

Common sense is a crucial part of maintaining good online hygiene, and an intuitive step to stay safe online is to do some research before downloading anything new you are downloading to your device, such as apps.

Before downloading any new learning app on your device, make sure it's authentic by checking who created the app, what the user reviews say, and if there are any articles published online about the app's privacy and security features.

Check your settings

Be diligent to double check your privacy and security settings and be aware who can access your documents. This extends from Google docs, to Zoom calls, and beyond. For meetings on Zoom, for example, create passwords so only those invited to the session can attend, and restrict who can share their screen or files with the rest of the attendees.

Being cyber smart and maintaining stellar online hygiene is the best way to protect yourself and others from cyber attacks. No single tip is foolproof but taken together they can make a real difference for taking control of your online presence.

Following these tips is also easy, and free. By taking preventive measures and making a habit of practicing online safety, you can decrease your odds of being hacked exponentially, and prevent lost time and money, as well as annoyance.

Source: Department of Homeland Security (DHS) and the National Cyber Security Alliance (NCSA)

OCTOBER IS NATIONAL CYBERSECURITY AWARENESS MONTH

We all share responsibility for our organization's online safety and security, and YOU are our first line of defense.

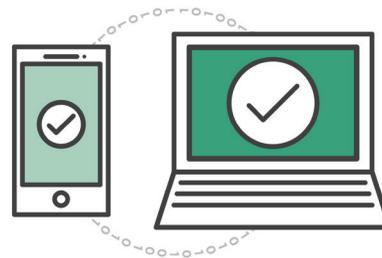
Think Before You Click

- Always hover over a link first to be sure it is safe.
- Report suspicious emails or emails from an unknown sender to your spam filter and delete them from your inbox.



Lockdown Your Log-in

- Create long and unique passwords. Use familiar phrases or song lyrics you'll remember.
- When possible, use 2-factor authentication as a second layer of defense.
- Change passwords regularly and do not share them.

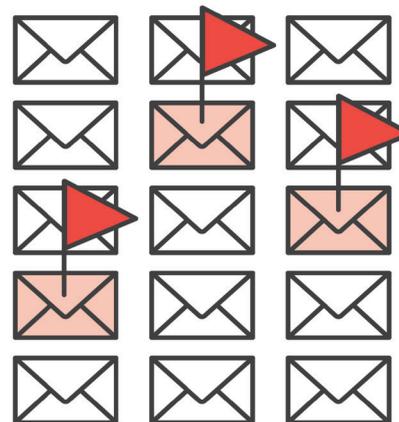


Watch for Red Flags to Identify Potential Phish Attacks

- Phishing attempts seek to steal or compromise data and will often mimic a known sender.

Look for red flags:

1. the email is unexpected;
2. there is a sense of urgency conveyed;
3. there is an offer that seems too good to be true; and/or
4. there are typos and misspellings.



Want more tips to improve your cyber hygiene?
Visit www.staysafeonline.org



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Important Dates

October

Ruralite Cover Photo Contest: Submit photos October 1 - October 28, 2021

CVEA Board Meeting: The October meeting of the Board of Directors is 9 a.m. Thursday, October 21, 2021, in Glennallen

Co-op Month Pick-Your-Own

Pumpkin Patch: This fun, new event will be held in each district on Saturday, October 23. The fun will start at 10 a.m. *Please be prepared for weather conditions. Subject to cancellation.

November

CVEA Board Meeting: The November meeting of the Board of Directors is 9 a.m. Thursday, November 18, 2021, in Valdez

CVEA Offices Closed: CVEA will be closed Thursday, November 25, for the Thanksgiving holiday

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OCTOBER IS CO-OP MONTH

Help CVEA Celebrate Co-op Month!

Ruralite Cover Photo Contest

- Winners will receive \$100 per winning photo, be announced to the local media, and be featured on the cover of Ruralite for one month in 2022
- Submit your photos by October 28 @ 6 p.m.
- Visit cvea.org/ruralitecoverphotocontest for details, rules, and application instructions

Co-op Month Pick-Your-Own Pumpkin Patch

- Join CVEA and CVT for a NEW Co-op Month community event on Saturday, October 23
- The fun starts at 10 a.m. in each district
- Stop by and pick your own pumpkin from the pumpkin patch
- Stay and decorate your pumpkin, participate in pumpkin games, and pose for a picture at the photo booth
- Enjoy sweet treats, hot drinks, snacks, lunch or dinner at local food vendors
- Support local nonprofit organizations through a Jazzy Gourmet popcorn fundraiser and quilt raffle
- Watch for details on Facebook, cvea.org, and other local news sources

Co-op Month Cooperative Food Drive

- Bring nonperishable food items to the Co-op Month Pick-Your-Own Pumpkin Patch community event on Saturday, October 23 (see above)
- Food items or a cash donation for the local food bank in your district allows you to pick-your-own pumpkin
- BONUS - bring donations and be entered to win a \$150 CVEA energy credit
- Sorry, we cannot accept expired food
- Watch for details on Facebook, cvea.org, and other local news sources