

A Touchstone Energy® Cooperative

## Cybersecurity CVEA Plays it Safe

Stories about cyber-attacks on businesses and government agencies are constantly in the news today. While less publicized, electric cooperatives are equally as vulnerable, and also require taking necessary precautions to protect sensitive information and member and employee data.

Cyber security, defined as “the state of being protected against the criminal or unauthorized use of electronic data, or the measures taken to achieve protection”, is confusing and ever changing, creating some myths about its importance.

This article explores and helps dispel those myths, while providing valuable cyber security information and tips to keep members and their information safe from cyber crimes.

### **MYTH 1: CVEA is just a small co-op; nobody would bother to hack us**

Not true. Cyber terrorists don't discriminate between small and large businesses. They indiscriminately sniff around for vulnerabilities until they find one. An analogy would be a burglar walking down the hallway of a hotel, gently checking each door until one opens.

The unlocked door in this case is an unprotected (or insufficiently protected) information system. Co-ops typically maintain a website, electronic member and employee records, a customer information system, etc. which may allow the bad guy — once in the network — to engage in a common form of cyber mischief known as phishing. He or she may masquerade as your co-op while engaging in fraudulent communications with trusted business partners such as power suppliers, bankers, insurers, vendors, or the statewide.

### **MYTH 2: CVEA doesn't have anything that hackers would want anyway**

Not so. Co-ops maintain member data that may include social security numbers, credit card information, usage data or other personally identifiable information (PII), which is extremely valuable to hackers. The cooperative has an obligation to keep this data secure. Co-ops also have employee PII for employees

that may include salary data as well as medical records.

All of this information is valuable in the hands of a hacker who can easily sell it to a third party anywhere in the world via the Internet. Personal data is said to be more valuable than credit card numbers.

### **MYTH 3: Because CVEA is a co-op, there are no cybersecurity requirements that apply**

Not true. A variety of different consumer privacy and data security laws, regulations and contractual requirements may apply to a Co-op depending on its activities. These may include: state data breach notification laws, consumer financing and credit reporting regulations, and payment card industry (PCI) standards (imposed on merchants who accept credit cards via contract with credit card brands like Visa and Mastercard).

### **Cyber Security at CVEA**

Cyber Security is a priority at CVEA. The Information Technology (IT) employees work hard to ensure the Co-op has the latest protections and the most secure environment achiev-

able. Think of security as layers. An example of just two layers of CVEA's security system includes a robust firewall perimeter defense system and a local antiviral solution.

As they grow, any company is vulnerable to cyber threats. Recent attacks to the City of Valdez and the Mat-Su Borough have shown just how vulnerable a business or organization, even in Alaska, can be to damaging attacks. An up to date network and security platform can help mitigate cyber threats. CVEA's data vendors actively participate in cyber security education and their networks are constantly reviewed and updated. Periodically, CVEA hires outside consultants to conduct network security audits. These audits assist the Co-op in making sure the newest and most valuable protections are in place in this evolving electronic world. Cyber Security at CVEA has four distinct areas of concern:

- Protection of members' private information



- Protection of administrative software and accounting system, email, and historical data files
- Protection of operating systems such as power plants, substations and maintenance records
- Prevention against internet, email and phone scams

### Private information of Members

CVEA utilizes “state of the art” computer security protection software to protect member information. Data retained is encrypted which helps protect member information online and in CVEA’s computer system. The Payment Card Industry Data Security Standard (PCI DSS) is a set of security standards designed to ensure that ALL companies that accept, process, store or transmit credit card information maintain a secure environment.

CVEA’s policy is to not store member credit card information in the file. Members update their own accounts for auto pay and online payment, and the data is also encrypted. In the future CVEA may not be able to accept credit card payments over the phone due to this high standard. Members can take extra precautions when having an online account by utilizing a strong password.

### Protection of administrative software, email and historical files

Many of CVEA’s software packages, as they relate to accounting and customer service areas, are backed up locally and remotely. If CVEA were to have a breach, the system could be recovered within 72 hours. Prior to being received, emails sent to CVEA are scanned offsite for phishing attempts and viruses.

### Protection of CVEA’s operating systems

CVEA’s operating systems are protected so no outside entity can influence production and movement of power. Members do not think about generators being vulnerable, however, each unit has a mini computer in it.

The CVEA system has multiple ways to segregate power generation. If something happened to one generator, there are various ways to isolate that unit and still provide power, through other generators, to the Membership. A majority of CVEA’s generation is isolated from the Internet. CVEA works to ensure administrative and generation networks are properly isolated. This limits a breach from the administrative network to the generation network to ensure power flows to the members. Additionally, CVEA ensures vendors with access to networks are properly vetted and limited access is given.

### Protect basic communications and stop scammers from stealing member’s money

Phishing is a cybersecurity attack used to trick individuals into providing sensitive information via an electronic communication impersonating a trusted source. Internet, email and phone scams are evolving threats that change daily. Education is key to

protecting some of the largest vulnerabilities.

CVEA works hard to educate members and employees of evolving threats like phishing scams. Recently, CVEA tested employees through its first simulated phishing campaign. The goal was to determine who was most vulnerable. Further testing will take place and data captured will be used to conduct ongoing internal training.

In the past, CVEA has warned members of possible telephone scams circulating throughout the service territory. In many instances, members receive a call from a number that appears to be CVEA threatening to immediately shut off their power if they don’t give their credit card number over the phone. Please know CVEA has policies and procedures that must be followed to disconnect members, and the Co-op will never demand payment or private information over the phone.

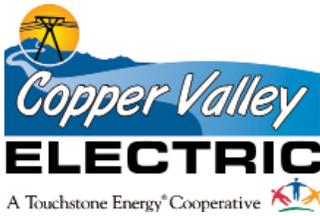
### Tips to avoid falling victim to phishing

- Be cautious of messages even if they are coming from a source you recognize; messages from your coworkers as well as friends and family could be sent from hacked accounts or spoofed email addresses
- Be cautious of clicking links or downloading attachments from someone, even if you know them, but weren’t expecting the email; these phishing emails could include links directing you to an infected website or the attachment could execute malicious software
- Be careful when responding to messages sent by third parties
- Don’t take for granted the contact information listed in these phishing emails, such as email addresses, web sites, and phone numbers; its good practice to verify the contact information of a known and trusted source before responding
- Use multi-factor authentication when you can; two-factor or multi-factor authentication can reduce the possibility that someone can hack into your account using just your password
- Keep your computers up to date with the latest security updates
- Make sure your anti-virus and anti-malware software is up to date and running on your computers
- Back up your data; if something malicious happens, you want the ability to restore valuable data if needed
- Education is key; the best tool you can use to prevent falling victim to cyber crime is to educate your family members and friends on the issue

CVEA encourages members to call their local CVEA office immediately if they have any suspicion the person emailing or calling them is falsely representing the Co-op.

For additional information contact Sharon Crisp at 822-5506, 835-7005, or email [crisp@cvea.org](mailto:crisp@cvea.org). ■

*References: NRECA, RE Magazine*



## CVEA Spotlight-Jim Ehret



Jim has worked for CVEA for seven years. He joined the Cooperative team in 2012 as the Chief Plant Operator in Valdez, a position he still holds today.

CVEA Production Manager, Wayne McKinzey, had this to say about Jim, “Jim oversees the system dispatchers and three power generating plants in Valdez. He is best known for his light-hearted humor and easy going demeanor. When a system outage occurs you can count on Jim to be one of the first to arrive and provide assistance. Jim is always willing to help in other areas as needed. We are lucky to have him on our team.”

In order to highlight Jim, we recently asked him a few questions:

**Q.** What do you do as the Chief Plant Operator?

**A.** I oversee the day to day operations of both the Allison Creek and Solomon Gulch Hydro Plants as well as the Cogeneration unit at the Petro Star Refinery.

**Q.** What things do you enjoy doing in your spare time?

**A.** In my spare time I shoot archery, ride my Harley and ATV, and hang out with my family and pups.

**Q.** What do you like most about living in Valdez?

**A.** On nice weather days, it would be very difficult to find a more scenic place to live.

**Q.** What are some of the big projects you’ve been involved in since you began working at CVEA?

**A.** I’ve been involved with the rebuild of the H2 unit at Solomon Gulch, controls upgrades at Solomon Gulch, turbine replacement and system upgrades at the Cogeneration Plant, installation of two CAT generators at the Valdez Diesel Plant, and the construction and completion of the Allison Creek Hydro Plant.

**Q.** What is one little known fact about you?

**A.** Prior to my start with CVEA, I worked with Houston as a journeyman wireman, working my way up to the electrical superintendent. I also worked with EPC on the Valdez Marine Terminal after leaving Houston in 2011.

**Q.** What do you like about your job at CVEA?

**A.** I enjoy working with some of the most incredible employees I have ever had the privilege to work with, along with working on projects in some of the most beautiful scenery in the state of Alaska.

**Q.** What about your job are you most proud of?

**A.** Providing reliable and renewable electric service to the members of CVEA. ■

## Winter is On the Way



Winter is on the way for CVEA members, and with it comes the start of the winter generation season.

Heading into winter each year, inflows at the Allison Creek and Solomon Gulch hydroelectric projects cease. Allison Creek eventually freezes and the run-of-river project stops generating power, and the lake level at Solomon begins to fall as that water continues to be used to generate hydroelectricity.

This is what is called the winter generation season. This used to typically run October through May, but in 2017, Allison Creek continued to generate power into early November, extending summer generation by roughly 4-6 weeks.

During winter CVEA backs off Solomon Gulch to manage water use, and brings the Cogeneration Plant online which generates the majority of CVEA's requirements, roughly 60 percent, using fuel. This was the average fuel usage from November 2017 - May 2018.

In 2017 Allison produced power into early November before the creek froze. As planned, Allison is contributing to maximize hydropower generation and has proven to provide additional hydro in the summer and the shoulder months of the generation season (November and May), but will not provide winter power. In addition to Allison Creek reducing the amount of fossil fuel needed to generate electricity, CVEA continues to perform upgrades to increase efficiencies and further reduce the amount of fuel used.

As typical, CVEA members should expect to see higher electric bills throughout the winter generation season due to

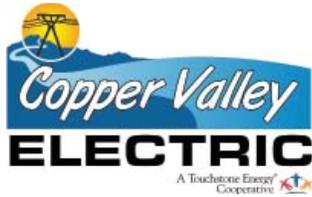
the increase in fuel usage. Members can easily see all of these impacts by reviewing their electric bills. There is a separate line item on the bill that denotes the amount each individual member is charged for generation and transmission (G&T) and the fuel costs associated with their electric usage.

CVEA encourages members to prepare for the fuel charges that will begin to increase their bills starting in November. Visit SmartHub at [cvea.org](http://cvea.org) for information on individual historical usage and charges.

CVEA also encourages members to take control of their power bill by becoming more efficient with their energy usage. Often times, a substantially higher winter bill is not only caused by additional fuel costs, but increased usage during the coldest, darkest time of the year. Many often think rates have increased, when in fact, rates stayed the same and it was higher usage that caused the bill to increase.

CVEA encourages members to take advantage of the energy calculator on CVEA's website. The calculator can help members determine which commonly used items around the house and yard have the greatest impact on their power bill. It not only creates awareness, but allows members to adjust their usage accordingly. Preparing a home for winter is the first line of defense against high energy consumption during winter months.

Visit [cvea.org](http://cvea.org) for ways to reduce energy consumption and lower monthly bills. If you have questions, contact Sharon Crisp at 822-5506, 835-7005, or [crisp@cvea.org](mailto:crisp@cvea.org). ■



## CVEA Packed Important Projects into Summer 2018

Summer is the busy season for most Alaskan businesses with construction projects to complete. CVEA, like many others, took advantage of increased daylight and long summer days to complete several important projects that will provide benefit to Co-op members and communities. Below is a summary of some of the more significant projects the CVEA team has worked on this summer.

### Advanced Metering Infrastructure

The project to upgrade all the electrical meters on the CVEA system began this summer in Valdez. These meters are being replaced to increase efficiency and reliability of the electric system in CVEA's service territory. All Valdez meters are scheduled to be replaced by the beginning of October, with the Copper Basin meters scheduled to begin installation in spring 2019.

### Right-of-Way Clearing and Line Enhancements

CVEA continues to work diligently to maintain rights of way (ROW) on the transmission and distribution lines. In 2018, over nine miles of transmission line was cleared to ground level, reinstating the original 100-foot wide easement between Meals Substation, in Valdez, to Brown's Creek. This

is part of an aggressive four year long project to get the transmission ROW in good condition along the entire 106 mile long line.

CVEA also focused efforts south of the Edgerton Highway to the Pump Station 12 Substation, clearing nearly 20 miles of ROW where the winter storms in December 2017 and January 2018 hit the CVEA system the hardest. In addition to the ROW clearing, CVEA installed 30 inset poles on the section of line where the spans between poles were long enough to create reliability issues with heavy snow and ice loading. These poles will reinforce the line along this section, reducing sag and snow slap and improving reliability for members in the affected area.

Finally, CVEA will take ownership of a new piece of ROW clearing equipment in November. This equipment will allow the crew to drive down the edges of the ROW and cut vertically removing all the canopy, branches, and trees that are leaning into the ROW, as this has been the highest cause for outages in recent history.

### Marker Ball Replacement

CVEA replaced 265 marker balls on the transmission line this summer. The markerballs are used to alert aircraft of the location of the transmission lines and are typically located over rivers, gorges, near airstrips, or over highways where aircraft are typically flying. These marker balls are required by the FAA and were due for replacement because of damage or fading. All the marker balls were replaced by an Alaskan contractor utilizing a helicopter to access and replace them.

### Underground Cable Replacement Project

CVEA has been replacing aging Underground Residential Distribution (URD) primary conductor since 2011. As the conductor begins to age it will fail and become a reliability concern. This project is a proactive effort to replace the conductor before it became a problem. In 2018, all the primary conductor was replaced at the Valdez Mobile Home Park and the east side of the park strip in downtown Valdez. Final remediation efforts were completed



in the Robe River Subdivision where the effort was focused in 2017.

### South Harbor Drive

Many upgrades were made in 2018 to allow additional power delivery to South Harbor Drive, where the fish processing plants reside. New poles and conductors were installed between the Bear Paw RV park and South Harbor Drive, new voltage regulators were installed, and capacitor banks were put in place to ensure proper voltage is maintained. During the fall of 2018 and spring of 2019 nearly two miles of line near Bear Creek along the Richardson Highway will be replaced as part of this project.

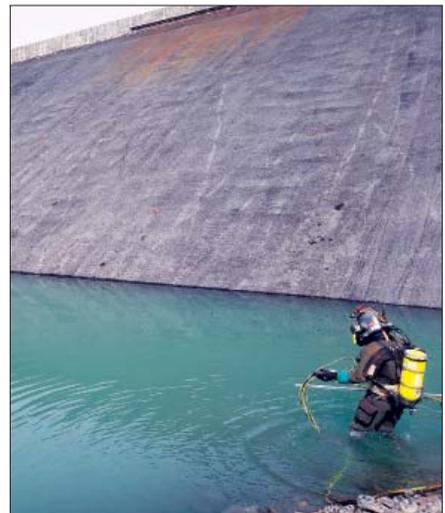
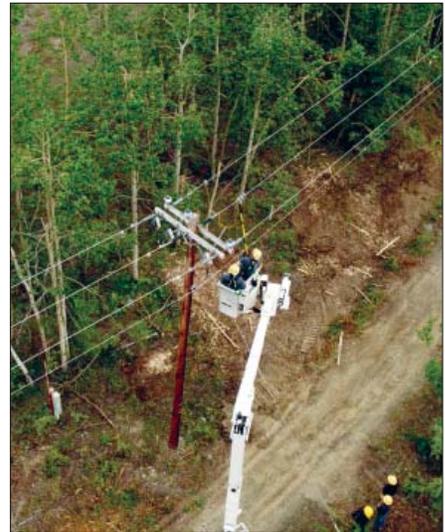
### Valdez Office Roof Replacement

In order to maximize the life expectancy of CVEA's equipment and facilities, we are constantly performing preventative maintenance. The office buildings are no exception. In 2017, the Valdez office received a face lift through replacement of the aging and failing siding. In 2018, the efforts continued with roof replacement. The old roofing material, insulation, and decking was removed and replaced. Additionally, insulation was added to the roof to minimize heat loss in the cold winter months. The new roofing will last the Co-op many years.

### Solomon Lake Trash Rack Inspection/Modification

To continue with the theme of preventative maintenance, CVEA had to modify the trash rack, a screen which prevents logs and debris from entering the penstock, in Solomon Lake. To accomplish this, in the spring of 2018, the team had to drain the lake below normal draw down levels and allow divers into the penstock. Divers inspected the penstock to determine how to isolate the penstock intake. The penstock intakes will need to be isolated to replace the 40 year old main valves located at the base of the dam at Solomon. Now that the inspection has been completed, the work to replace the valves will be scheduled in 2019 or 2020. ■

**Opposite, CVEA Lineman, Walt Lynch, cutting trees during ROW clearing in the Copper Basin** photo courtesy Seed Media  
**Top left, crews installing a voltage regulator for the South Harbor Drive project in Valdez**  
**Top right, Copper Basin crews making line improvements near Tonsina** photo courtesy Seed Media  
**Middle left, Valdez Line Foreman, Todd Stahley, installing new advanced meters**  
**Middle right, a diver preparing to inspect the interior of the trash rack at the Solomon Gulch Dam**  
**Bottom, contractors replacing one of 265 aging marker balls on the CVEA system** Photo courtesy Marc Hill





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 (907) 822-5586 (fax)  
 Mile 187 Glenn Hwy.

**Valdez District**  
 (907) 835-4301  
 (907) 835-4328 (fax)  
 367 Fairbanks Dr.

**After hours outage line**  
 (866) 835-2832

**Important Dates**

**October**

**National Co-op Month Activities**

**Ruralite Cover Photo Contest:**

Submit photos October 1 - October 29, 2018

**Co-op Month Food Drive:** Bring non perishable food items to the CVEA office October 1 through October 31 and be entered to win a \$100 CVEA energy credit

**Halloween Trick or Treat Spooktacular:** Stop by the CVEA office in your district for Halloween fun from 3-5 p.m., Wednesday, October 31

**CVEA Board Meeting:** The October meeting of the Board of Directors is 1 p.m. Thursday, October 18, 2018, in Glennallen

**November**

**CVEA Board Meeting:** The November meeting of the Board of Directors is 1 p.m. Thursday, November 15, in Valdez

**CVEA Offices Closed:** The CVEA offices will be closed Thursday, November 22 for the Thanksgiving Holiday

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**Local,  
Trusted,  
Serving You!**

**Help CVEA celebrate Co-op Month this October!!!  
Join us for scheduled activities  
& events throughout the month!**

**October 1-29 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 2019
- Submit your photos by 6 p.m., Monday, October 29
- Visit [cvea.org/ruralitecoverphotocontest](http://cvea.org/ruralitecoverphotocontest) for details, rules, and application instructions

**October 1-31 Joint Cooperative Food Drive**

- Bring nonperishable food items to CVEA or CVTelecom during normal business hours and be entered to win a \$100 CVEA Energy Credit or a \$100 CVTelecom Service Credit
- Food items will benefit local organizations
- The drawing will be held Thursday, November 1
- One ticket per item. Want more tickets? Bring more food!!
- Sorry, we cannot accept expired food

**Tuesday, October 31, 3 p.m.-5 p.m.**

**CVEA Halloween Spooktacular**

Don't forget to bring your kiddos to the CVEA office as part of the downtown Halloween Spooktacular.

- Enjoy a trick or treat parade with five treat stops at CVEA
- Get your photo at our fun, themed photo booth
- Kids will receive a Spooktacular surprise that includes a chance to WIN a \$25 Visa card; 5 Chances to WIN in each district!

