#### SEPTEMBER 2019

**Copper Valley** 

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COO Travis Million speaks to members on the Solmon Gulch tailrace during the 2019 Copper Valley fall member tour.

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## Rate Changes Approved at Conclusion of Rate Study

A rate study is a multi-step process used to determine what rates should be charged for energy sales and services. When conducting a rate study, the results of three important questions are determined.

- 1. How much do we need to operate?
- 2. Which customers pay?
- 3. How does CVEA collect it?

#### How much do we need to operate?

Rates must produce sufficient revenue to recover 100 percent of the costs to provide electric service, meet lender requirements, and achieve financial targets. CVEA will identify the current and projected revenues and expenses for our electric system.

#### Which customers pay?

To design any type of electric rate, a cost of service analysis must be completed. This analysis is used by the electric utility

## Rate Study Steps



industry as a way of allocating actual costs associated with providing electric service to the various rate classes, such as residential, commercial, and industrial. CVEA will determine an equitable allocation of the annual revenue requirement for the various customer classes.

Costs will be classified to find out whether each individual plant investment or cost was incurred to meet a customer's demand, energy or customer related requirements. Finally, these costs are divided into customer classes: residential, commercial, and industrial. The goal is to have the costs of electricity paid by those customers who create that cost.

#### How does CVEA collect it?

Options are developed by using a variety of approaches ranging from the current rate design to alternative rate designs including blocks of usage and seasonal rates.

#### **Rate Study Goals**

In 2018, the Board of Directors gave staff specific direction on policy issues and goals for the rate study. The goals were to meet long term financial and operational needs (cash), understand rate class equitability (moving customer charges closer to cost of service), and to ensure necessary changes were simple and easy to explain to the membership.

The rate study was developed to be forward-looking, roughly five years, taking into consideration all projects required to maintain CVEA's assets, as well as increases for heating fuel, insurance, and other costs that go up with inflation.

#### **Rate Study Results**

The study concluded an estimated annual revenue shortfall in the amount of \$765,000. Cutting the budget to recover shortfalls is always a consideration. CVEA has made significant budget cuts the last five years. Recent examples are the elimination of two upper level management positions, and a revamped, more efficient fleet program. However, CVEA is not able to recover the shortfall with budget cuts alone and still maintain a reliable system.

After conclusion of the study, several meetings to discuss the findings, and a detailed review of options, the Board of Directors presented a plan to the membership to recover the shortfall.

- \$359,000 An increase in the customer charge, which covers a portion of the cost to produce a monthly bill. The residential member monthly customer charge will increase from \$12 to \$20, and the small commercial monthly customer charge will increase from \$20 to \$30. It is important to note that the customer charge has not been updated since the 1990s.
- \$283,000 A reduction in heat credits. When the Cogen produces heat revenue, members see a heat credit on their bill. This component changes monthly and is only available in months when CVEA receives heat revenue, typically November thru May. The percentage of heat revenue given back to the members as a credit on the bill will be reduced from 90 to 80 percent.
- \$123,000 Budget reductions for 2020. CVEA staff will continue to closely scrutinize annual expenditures.

#### **The Public Process**

The proposed changes noted above were communicated to the Membership through various media and a public meeting was held in both districts on Tuesday, July 23. All of this information, including the presentation given and a video recording of the public meeting, can be found at cvea.org, under press releases.

Members were given over five weeks to provide comment, and all comments were forwarded to the Board of Directors. The Board appreciates the feedback received by members and would like to address a few common questions that came up during the process.

Staff first addressed the breakdown of CVEA charges. Basically, 27 percent is the cost to distribute power to the members, 45 percent is the cost to generate and transmit power to the distribution system, and 28 percent is a direct pass through of the cost the Cooperative pays for fuel needed to generate power for the members. A more detailed description of each component can be found on cvea.org under 'understanding my power bill'.

Several people had questions surrounding past rate increases. Looking at all base rate revenue, rates have been stable. In 2009, base rate revenue was \$5.3 million, and in 2019, it is projected to be \$5.8 million. In 2009 CVEA had 65 million in kWh sales whereas 2019 is projected to be 85 million.

The Generation & Transmission (G&T) rate was implemented in 2009 at a rate of 10.57¢ per kWh. The 2019 G&T rate is 11.88¢ per kWh. This 1.31¢ increase is a direct result of the Allison Creek project which cost \$55 million.

Another common question asked was why there would not be a customer charge increase for large commercial members. This is due to cost of service (see 'Which customers pay?' section on opposite page). The large commercial rate class already pays close to their cost of service. Increasing the residential and small commercial customer charge will move those rate classes closer to paying their cost of service as well.



#### Impact to the Members

It is important to remember that each customer is different based on their usage. An effort to determine member impact was based on the average residential member, defined as a member who uses approximately 500 kWh/month.

The increase in the customer charge, combined with the heat credit reduction noted on the left, is estimated to impact the average residential member by approximately \$114 per year, and the average increase to small commercial members is estimated at \$163 per year. Members interested in their specific impact may request an individual account analysis by contacting CVEA.

The rate changes, as presented, were approved by the Board of Directors at the regular meeting on Thursday, August 15, 2019. These changes will be effective September 1, and members will see the changes on the September billing.

For additional information please contact Jaime Matthews, CVEA Chief Financial Officer, at (907) 822-3211 or email matthews@ cvea.org. ■







**Employee Spotlight-Joyanna Hoffman** 



Joyanna is currently the Office and Billing Admin, a position she's held for two years, but she came to CVEA originally as the Customer Service Representative four years ago.

Jaime Matthews, CVEA's Chief Financial Officer had this to say, "Joyanna continues to grow her skillset at CVEA. She is the lead trainer for the CSR position and supports many employees with various tasks. Her hard work, calm demeanor, and positive attitude make her an excellent employee. We are lucky to have Joyanna as part of our CVEA family."

In order to highlight Joyanna, we recently asked her a few questions:

**Q.** What do you do as the Office and Billing Admin?

**A.** I order office supplies, create and manage forms, serve as the interoffice coordinator between district offices, and provide general support.

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

**A.** I have experienced the completion of the Allison Creek Hydroelectric Project and the installation of the AMI meters.

**Q.** What things do you do that might surprise members? **A.** During Co-op Month each October, myself and several





coworkers donate one lunch hour a week to help recycling for our community.

## **Q.** What kinds of things do you do that are 'outside' of your typical job duties?

**A.** I work with the Director of Communications on a variety of events, including our employee Christmas party, the Co-op Month food drive, and the annual Halloween Spooktacular. We decorate our entire office and I coordinate with over 30 businesses to plan an exciting Halloween experience for local kids.

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

**A.** I enjoy the people I work with and the variety of jobs and projects that come my way.

#### Q. What do you do in your spare time?

**A.** My daughter and I enjoy time at Moose Creek, the library, and playground. I also enjoy the outdoors, camping, hunting, fishing, and running.

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

**A.** I am glad to be a part of a cooperative that makes a difference in the communities we live in. We live in a vast wilderness and have reliable, affordable electricity at our fingertips.

## Copper Valley



**Energy News For Consumers** 

# 'Smart' Not Necessarily Efficient

Technology puts control in hands of consumers

Power Lines

**By Derrill Holly** 

Home automation systems are placing control in the hands of consumers, but questions remain about the best ways to use systems to save money and energy.

"Most smart home technology is about comfort and convenience," says Brian Sloboda, director of consumer solutions for the National Rural Electric Cooperative Association. "Consumers interested in saving money on monthly energy purchases should look at internet-connected thermostats first."

Around half of all thermostats sold today are smart thermostats. These devices have the potential to reduce air conditioning energy consumption by 10%. During winter months, the thermostats could save 7% on energy used to heat the home.

Brian has watched home automation systems evolve. He is particularly interested in identifying ways to enhance efficiency and savings.

"Laundry, dishwashing and water heating can be set to occur outside of your co-op's (or your utility's) peak demand periods, which typically are during weekday business hours," Brian says.

NRECA is working with one of the Department



of Energy's national laboratories on a demonstration project examining energy-saving options that could time-shift some activities. However, Brian says actual cost savings for the consumer is likely to be limited.

"Pool pumps, dishwashers, thermostats and car chargers can learn their owners' behavior and then communicate with the utility so the data can be used for demand response," Brian says. "The goal is to determine if a system like this can be implemented without inconveniencing the consumer, providing energy demand savings to the utility."

Security system notifications and thermostat controls that adapt to home automation are among the most popular options available.

"There are different kinds of smart when it comes to smart appliances and devices," says Peter May-Ostendorp, principal researcher at Xergy Consulting, which specializes in emerging technologies for energy savings in buildings. "For some, smart simply means "We connected this thing to the network," which adds minimal value to the consumer. In other products, smart means that there is some intelligence either built into the product or connected via the cloud that enables a taste of artificial intelligence."

Not every product using artificial intelligence is designed to save energy. In many instances, energy use is secondary to convenience or connectivity.

"Most smart devices have nothing to do with energy use, grid management or other resource conservation, like saving water," Peter says. "Generally, the benefits—dollar savings to the consumer—have not been proven, with the exception of smart thermostats, grid-connected water heaters and similar devices."

According to the Environmental Protection Agency, interest in connected or smart appliances is trending upward among consumers. Manufacturers are responding with a growing list of products.

"If you are thinking of purchasing a smart appliance or thermostat, look for one that is Energy Starcertified with connected functionality," EPA officials suggest. "Those that meet our criteria are designed to encourage interoperability and offer the following features: low energy use, energy use reporting and consumer ownership of all data."

Products available include room air conditioners, refrigerators and freezers, laundry equipment, lightbulbs and fixtures, and power strips.



Today, more than 4,000 smart devices are available to consumers.

A recent international survey asked people how they are using smart home assistants.



While owning a smart product doesn't automatically save you energy, if you are smart about using them, they can make a significant difference in your home, according to EPA officials.

That means making the investment pay off could take lifestyle changes.

"I don't think many people want infinite control over dozens of appliances and systems in their homes," says Spencer Sator, president and CEO of Crimson Consulting, an energy-efficiency adviser. "What we really want is set-it-and-forget-it features that we don't have to actively manage. The best devices get installed, adjusted and the consumer can walk away and still potentially save some energy."

Spencer says consumers are looking for simplicity. That's feeding the popularity of virtual assistant technologies such as Amazon's Alexa and Echo, Google Assistant and Apple HomeKit. Other companies—including Samsung, Logitech and Wink offer home-management hubs and platforms designed to help manage connected technology.

Convenience and programming simplicity are among the most important factors fueling consumer acceptance of what Spencer describes as "home ecosystem" products. Home security controls—including locks, alarm systems and lighting—are popular.

"We're seeing adoption of the technology not necessarily for energy-saving reasons, but for lifeenhancing applications, including some that help elderly consumers maintain independence in their homes," Spencer says.

The challenge for consumers is deciding which features justify the investment, and how well products work together under a particular hub device or app.

"No one wants a hodge-podge of technologies that can't communicate with each other," Spencer says. "The technology isn't very smart if devices can't work together."

#### **Command, Control and Energy Savings**

Artificial intelligence is changing the way we live, and that has the potential to bring major changes to the way we use energy.

Smart home automation allows folks from all income levels to become more energy efficient. Using a platform to further tie together appliances and loads, consumers can pick and choose their preferred efficiency routes depending on their lifestyle and budgets.

According to the Consumer Technology Association, about 5.5 million units of Wi-Fi enabled devices are added to the internet each year. By 2020, the total is expected to surpass 21 billion.

That prediction has designers and manufacturers of consumer products looking for new ways to add value to products with Wi-Fi enabled features.

As artificial intelligence devices create opportunities for home automation, consumers will play larger roles in deciding how and when systems in their home are controlled.

Smart thermostats have been around for a while. Some electric utilities offer discounted smart thermostats to not only encourage consumer savings, but to help manage peak energy demand.

As the energy sources we use to generate power evolve and management of the electric grid becomes more agile and sophisticated—the true potential of energy load control provides opportunities for more savings through wholesale power supply.

That's challenging electric utilities to find ways to strengthen partnerships with consumers who are more interested than ever in actively managing their energy use. Two-way, real-time communications and artificial intelligence offer opportunities to learn consumer preferences and how best to reduce energy during peak demand periods.

"We could soon see serial commands allowing your appliances to interact with other devices," says Keith Dennis, senior director of strategic initiatives for the National Rural Electric Cooperative Association. "Your HVAC system could learn your schedule and regulate heating and cooling for your comfort based upon when you are home. Instead of maintaining a steady supply of hot water when no one is home to use it, water could be heated during periods when demand is lowest and electricity costs less, and then boosted to ideal temperatures to meet specific needs like bathing, laundry or washing dishes."

Thus far, expectations are not being met.

"The Jetsons-like experience—where your Fitbit recognizes you're awake, tells the coffee to brew, queues up your morning news on a smart speaker, ramps up the heating setpoint—isn't really happening," Peter says. "People have thought that Alexa or Google Home might be the answer, but do we all really want to talk to our home, Star Trek style, to accomplish basic tasks?"

From a technology perspective, Spencer says, "This is still the Wild West. When you consider available options and actual performance of the devices available, some gadgets perform well and can save consumers money and energy, while others don't measure up to the hype."



#### **Board of Directors**

Paul Kildal, President Will Stark, Vice President Dan Stowe, Secretary Yvette Delaquito, Treasurer Lon Rake, Director Jeff Saxe, Director Mark Shorten, Director Fred Williams, Director

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#### **Important Dates**

#### September

**CVEA Offices Closed:** The CVEA offices will be closed, Monday, September 2, 2019, for Labor Day

**CVEA Board Meeting:** The September meeting of the Board of Directors is cancelled

#### October

**Ruralite Cover Photo Contest:** Submit photos October 1 - October 30, 2019

**CVEA Board Meeting:** The October meeting of the Board of Directors is 1 p.m. Thursday, October 17, 2019, in Glennallen

**National Co-op Month:** Stay tuned for Co-op Month activity announcements

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## 2019 Ruralite Cover Photo Contest

Would you like to see your photo on the cover of *Ruralite Magazine*; CVEA's primary member communication tool? Over 2500 copies of Ruralite are distributed each month to members in the Copper Basin and Valdez. That means excellent exposure for local photographers!

#### Details

- Winners will be chosen by CVEA employees
- Final decision will be announced by Monday, November 25, 2019
- Winning photos will be featured on the cover of Ruralite for one issue in 2020 and on cvea.org
- Winners will receive \$100 per winning photo and will be announced to the local media
- CVEA will retain rights to utilize all photos submitted in various communication tools including print and web
- Future photo usage in Ruralite or on cvea.org will include photo credit

#### **Contest Rules**

- Photographers must reside in a dwelling that receives service from CVEA
- Photos must be from within CVEA's service area (Valdez to Sourdough, out to Kenny Lake, and over to Sheep Mountain)
- Content can include scenery, community events, and community residents enjoying local activities; photos from all seasons should be considered, **at least two winter photos will be chosen**
- Only vertical photos will be eligible to win cover contest; horizontal photos may be submitted for use in other print or web based applications
- Maximum six photos submitted per contestant
- Each photo submission must include a digital and printed copy at 8X10 inches; digital files must have a resolution of 300 dpi at 8X10 inches
- Each photo submission must include photographer's name, location of photo, and photo title
- Photos must be submitted between October 1-30, 2019
- Photos can be dropped off at the CVEA offices in each district or sent directly to Sharon Scheidt: scheidt@cvea.org or P.O. Box 927, Valdez, AK 99686
- Photographer submissions must include permission form; visit cvea.org or email crisp@cvea.org for blank form
- Contact Sharon Scheidt at 822-5506, 835-7005, or email scheidt@cvea.org, with questions

### Submission Dates: October 1 - October 30, 2019