

September 2018 Share Package

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Screen/Storm Door Combo Saves Money



Above, combo doors are easy to install. No cutting is required. Pre-drilled installation and assembly holes eliminate guesswork.

Photo by Pella

Top, this strong condo door has two retractable screens, strong corner supports and threshold weatherstripping.

Photo by ProVia



To ask a question, write to **James Dulley**, Energy Report, 6906 Royalgreen Dr., Cincinnati, OH, 45244, or go to **www.dulley.com**.

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Q: My screen door needs to be replaced. I thought about getting a screen/storm combo door with a glass panel for winter. Is it worth spending more for a combo door?

A: A primary door is a relatively small area, but even an insulated one can lose a significant amount of energy. Doors typically have glass—which has a lower insulation value—and the 10 feet of weatherstripping leaks air, so adding a combo door makes energy sense.

Before you consider adding a combo screen/storm door, make sure your primary door closes tightly and seals well. A combo door will improve energy efficiency, but it is not designed to correct problems with an old warped primary door.

If possible, buy replacement weatherstripping for your existing door from the original manufacturer. If you cannot find it, most home center stores sell generic weatherstripping. Pry off the old door molding, fill any gaps around the framing with foam insulation and caulk around the primary door frame.

The combo door construction is important for a nice appearance, long life and security. It must withstand a lot of abuse, so don't just pick the cheapest one. High-quality combinations—such as those from ProVia Spectrum—have internal polymer corner supports, rigid insulated foam core, reinforced kick panels and triple bottom-sweep weatherstripping.

Buying an aluminum combo door and installing it yourself is typically the lowest-cost option. Aluminum combo doors are lightweight with the glass panels removed, so installing one is a simple do-it-yourself project. They are made to the standard sizes of primary door frame openings.

With the store display door attached to a wooden door frame, the aluminum frame feels strong. When you open the box at home, the unattached aluminum frame strips are flexible. Be careful not to kink them during handling. Apply a bead of silicone or siliconized acrylic caulking on the aluminum frame before screwing

it to the door opening.

The newest, most convenient design of combo door uses one or two spring-mounted roll-up retractable screens built into the door. For ventilation, just lower the glass and pull the screens down. This design is attractive because the screen is hidden away during winter without having to remove and store screen panels.

If you plan to use natural ventilation during the summer, a self-storing triple-track combo door is a reasonably priced option. The screen panel has its own vertical track in the door, so it never has to be removed. At winter's end, slide one of the glass panels down and slide the screen panel up for ventilation.

For families with large pets or active children who may damage the screening, durable stainless steel screen fabric is available in retractable screen doors. It also is a simple DIY project to add this durable screening to a panel door.

If your budget is tight, consider making your own door. It is easy to mount hinges in the existing door opening for the storm door. Make a simple wood frame for the new door with only the top half open and a plywood lower panel. This panel improves rigidity for the door for a more airtight seal and better durability.

Most home center stores carry sheets of clear acrylic plastic to mount in the frame. Make another narrow wooden frame slightly larger than the open half and mount the acrylic sheet in it. Screw it over the door opening. Make a similar frame with screening in it for summer use.

If you prefer more durability and efficiency, and a perfectly clear view outdoors is not critical, select double-walled polycarbonate instead of acrylic. You can barely break the polycarbonate even with a big hammer.

Nail ½-inch-wide spring steel weatherstripping in the door opening on the latch side and top and bottom. This type of weatherstripping is durable where there is sliding friction. Adhesive-backed ¾-inch foam weatherstripping is effective in compression on the hinge side. ■

Stay Comfortable This Winter

Q: Last winter was our first in the older home we bought. Even with the heat turned up, it always felt chilly. We added insulation, but are there additional steps we can take to make the house more comfortable this winter?



A blazing fire in the fireplace provides warmth, but chimneys can pull warm air outdoors when not in use.

Photo by Pixabay



An annual tuneup of your heating system can increase your system's efficiency.

Photo courtesy of the National Renewable Energy Laboratory and the U.S. Department of Energy



To ask a question, send an email to **Patrick Keegan** at energytips@collaborativeefficiency.com.

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A: When we talk about comfort in our homes, we usually think about the thermostat. There is more to the picture than just the indoor temperature.

An important piece of the comfort puzzle is radiant heat, which transfers heat from a warm surface to a colder one. A person sitting in a 70-degree room can still feel chilly if there is a cold surface nearby, such as a single-pane window, a hardwood floor or an exterior wall.

Covering these cold surfaces can help. Try using area rugs, wall quilts or tapestries, bookcases and heavy curtains to help prevent heat loss.

Keep in mind, radiant heat can work in your favor. A dark-colored tile floor that gets several hours of direct sun can retain heat during the day and radiate it into the room during the evening.

Another possible cause of discomfort during the winter is air movement. We recognize this when weather forecasts report chill factor, which is a calculation of air temperature and wind speed.

Moving air makes us feel colder, which is why we use fans in the summer. During the winter, cold, outdoor air can infiltrate our homes.

On average, a typical home loses about half of its air every hour. That amount can increase when outdoor temperatures are extremely cold and the wind is blowing. In this case, the best way to keep your home toasty is to minimize air leaks. You can easily locate air leaks in your home with a blower door test, which is typically conducted by an energy auditor. These are some of the most common spots air leaks occur:

- Penetrations and cracks around windows and doors.
- Exterior cracks in brickwork and siding.
- Plumbing and wiring penetrations from the exterior to the interior.

- Mail slots or pet doors.

Products such as caulk, weatherstripping, outlet cover gaskets and dryer vent covers can help seal leaks.

A fireplace also can be a source of air leakage. If you don't use the fireplace, seal the opening or install an inflatable chimney balloon. Before using the fireplace, consider this: Unless you have a high-efficiency insert, your fireplace will suck heated air from the room out through the chimney. Always close the fireplace flue when not in use.

Your pursuit of comfort should include a look at your home's heating system. Is it distributing heat evenly and efficiently? Forced-air systems distribute air through supply ducts and registers.

Small rooms may have only one register, but large rooms could have several. Some supply registers may blow copious amounts of warm air, while others blow little at all. Ideally, every room should have return air registers. If you see possible shortcomings with your forced-air system, enlist the help of a certified contractor who knows how to improve ductwork.

Ensure your furnace is running at peak efficiency by scheduling an annual inspection. Check your filter monthly, and replace or clean it as necessary. If you heat your home with radiators, bleed them at the beginning of the season so they flow more efficiently.

Beyond that, you can always warm yourself by wearing heavier clothing, doing some light exercise throughout the day and snuggling with a pet or under a blanket.

By taking some of these small steps, hopefully you will enjoy a more comfortable winter in your older home. ■

This column was co-written by Pat Keegan and Brad Thiessen of Collaborative Efficiency. For more information on staying comfortable in winter, visit www.collaborativeefficiency.com/energytips.

Creating Opportunities for Rural Youth

Annual youth rally is a solid investment in the future of our youth

For many teens, the Idaho Consumer-Owned Utilities Association Youth Rally is full of “firsts.”

It may be the first time they left the state, flew on a plane, were away from family and friends for an extended period of time, or something as simple as bowling or going to a WalMart to buy their first pair of purple tennis shoes.

Whatever it may be, the ICUA Youth Rally brings some of the most important “firsts” to the lives of many rural youth. It has been a phenomenal success since its inception in 1987. The rally offers youth from small, out-of-the way places throughout the Northwest a chance to be part of a life-changing leadership and team-building camp that inspires them, fills them with curiosity about the world, and allows them to expand their horizons and develop themselves and their leadership qualities.

Consumer-owned electric utilities, public utility districts and municipalities select and sponsor high school youth from their service territory to attend the all-expenses-paid camp. Don't let the “Idaho” in ICUA fool you. In 2018, there were 16 participating utilities from Idaho, Alaska, Wyoming, Nevada, Washington and Oregon representing 41 rural communities, including the northernmost town in America: Barrow, Alaska.

I've had the privilege of working with these outstanding youth for the past 10 years. I have seen for myself the positive impact this program and the National Rural Electric Cooperative Association's Youth Tour have on our youth. The ICUA Youth Rally provides outstanding educational, leadership and scholarship opportunities. Even more importantly, it provides an avenue for some of them to come to a new place in life and gain self-confidence and self-respect they may be lacking.

The activities are carefully crafted to enable youth to meet and interact with a broad spectrum of other kids and adults. We strive to create a safe place for them to discover the person they want to be. They can leave behind their hometown identity and venture into the future with a clean slate. By encouraging them to stretch themselves, talk to and interact with new people, they gain confidence, self worth and lifelong friends.

We include sections about utilities, utility career

opportunities, the importance of grassroots advocacy, how electricity works and electric safety. This year, motivational speakers encouraged participants to strive to reach their goals—and to recognize that when life's circumstances are out of their control, they can control their attitude and resilience.

A mother whose daughter died when texting and driving implored teens to not do the same.

“Don't let your send be the end,” she said.

Students learned about the dangers of social media, cyberbullying and digital addiction from a criminal investigator. Regional leaders from the power industry discussed important issues facing utilities today. The nonstop week also is filled with plenty of socializing time at a water park, bowling, a co-op obstacle course, dances and an action-packed talent show.

The ICUA Youth Rally is a precursor to Youth Tour, a weeklong trip to the nation's capital interspersed with visits to many D.C. monuments and sites, including a day spent on Capitol Hill. Here, teens learn firsthand that their elected officials work for them and their hometowns. They often have the opportunity to discuss issues with legislators. Our chaperones are always impressed with the interactions and questions asked by our youth. As conversations evolve, so, too, do the teens' world-view. Their definition of community often changes from their hometown to something broader.

Nearly all the youth who have participated in the ICUA Youth Rally program look back with fond memories of an educational, interesting and eventful week. For many of them, Youth Rally is a transformational experience. I have received numerous letters and visits from parents who remark how their child returned noticeably different—more mature, more confident, with bigger goals and aspirations. They have a sense of purpose and self-worth.

The ICUA Youth Rally and NRECA's Youth Tour can be two of the most important programs a utility undertakes. I am constantly impressed by the caliber of students who attend each year.

Our youth are our future. It's our job to help prepare them to be the future leaders they are destined to be—even in purple tennis shoes. ■



Mandi Hitt is communications manager and executive assistant at Raft River Rural Electric Cooperative in Malta, Idaho.

Time for a Fall Tuneup

As summer comes to an end, assess the health of your home to maximize savings



Thermostat

- A programmable thermostat allows you to control settings to suit your climate, schedule and temperature preferences.
- Consider installing a smart thermostat. After installation, input your schedule and temperature preferences. As you change the settings, the thermostat adjusts to minimize energy use. Bonus: You can control the thermostat remotely with a smartphone.
- Don't adjust the thermostat drastically. Your home will not heat or cool more quickly.
- Keep the temperature at or below 68 F during the day and cooler at night.
- Save up to 10 percent on your monthly heating and cooling bill by turning back your thermostat 7 to 10 degrees for eight hours a day. ■

Windows and Doors

- Energy loss and drafts often occur in the cracks between window components. Use weatherstripping where a window's movable parts meet the window frame.
- The seam between the window frame and the wall is a common source of air leakage. Fill any crack less than ¼-inch wide with caulk. For larger cracks, use expanding foam and paint over it.
- Use window coverings to cut energy costs. Cellular shades, curtains and draperies can provide increased comfort year-round.
- Use a door sweep—a flexible piece of rubber or plastic held to the door's lower edge by a piece of aluminum—on an exterior door to block drafts. ■





Heating and Cooling

- Frequently replacing your furnace filter is one of the easiest and cheapest ways to keep your HVAC system running efficiently. A clogged filter causes your system to work harder and can shorten its lifespan.
- Depending on the home, filters should be changed every month or every other month when in use.
- Schedule an annual service on your HVAC system. A clean system is safer and more efficient. A preventive service call for a tuneup and cleaning usually is less expensive and less stressful than an emergency service call if your equipment fails.
- Leaky furnace ducts mean higher utility bills. Improve their performance by sealing exposed ducts in the attic, crawl space, unfinished basement and garage. ■



Insulation

- Insulation reduces heat loss during winter and heat gain during summer. Before you add or replace insulation, check your current levels.
- Check your attic. Aim for at least 14 inches of insulation in the attic for warmer climates and at least 18 inches in colder climates. The Department of Energy recommends an R-value, which refers to the insulation's ability to resist heat, of about R-60 for most regions.
- According to DOE, air leaks are among the greatest sources of energy loss in a home. They also are easiest to fix. Check for leaks throughout your home, including insulation. ■



Outdoors

- Trim shrubs, and clear leaves and other debris. Keep branches away from the house and electrical wires to prevent property damage or power interference. Cut cracked and diseased limbs close to the trunk. For large jobs, hire a pro.
- Rake yard debris away from the outdoor compressor unit of your heat pump. A heat pump needs good circulation to work efficiently, so make sure there is at least a 2-foot clearance around the outdoor compressor.
- Ensure gutters are clear and downspouts are correctly connected so water drains away from your home. The dirt grade around your home should slope away from the house. ■

Energy and Customer Services Supervisor Ryan Davies checks out the displays on the cooperative's electric vehicle, a Chevy Bolt.

Photo by Courtney Cobb



Going Green

Electric vehicles can save you money and energy

By Courtney Cobb

Every day it gets easier for consumers to go green—from the energy they use to the cars they drive.

Oregon Gov. Kate Brown signed an executive order last year setting a goal to have at least 50,000 registered electric vehicles in the state by 2020.

Around the world, experts say we can see huge increases in the purchase of electric vehicles. In May, the Bloomberg New Energy Finance released a market outlook for EVs stating projections show annual global sales could increase from 1.1 million in 2017 to 11 million by 2025.

Manufacturers are coming out with a plethora of

new electric vehicles in almost every make, model, and size. Like vehicles, charging stations are popping up in small towns such as Detroit, Oregon, bigger cities, and even local grocery stores. Why?

“We are seeing a shift in the consumer mindset as they look for convenience in travel while promoting green energy,” says Jeff Beaman, CEC Member Services director. “The Pacific Northwest and places like Central Oregon are great areas for EV owners because we have some of the lowest rates in the country thanks to 95 percent of our energy coming from renewable energy sources like hydro, solar and wind power.”

The average consumers are not the only ones

Electric Vehicle Facts

There are various electric vehicle (EV) types available; these are the three most common types:

Battery Electric Vehicles (BEV or AEV)



Battery Electric Vehicles have a battery and an electric motor instead of a gas tank and an internal combustion engine. Sometimes EV are also referred to as "All Electric Vehicles" or "Plug-in Vehicles" (not to be confused with Plug-in Hybrid Electric Vehicles). They run entirely on electricity and do not produce any exhaust from the burning of fuel. It is important to note that a portion of the electricity supplied to your home may be generated from fossil fuels such as coal and natural gas.

Plug-in Hybrid Electric Vehicles (PHEV)



Plug-in Hybrid Electric Vehicles have an electric motor AND a gas-powered internal combustion engine. Some PHEVs operate exclusively, or almost exclusively, on electricity until the battery is nearly depleted, then the gasoline-powered engine turns on to provide power. Like Battery Electric Vehicles, PHEV can be plugged in to charge the battery when the vehicle is not in use.

Hybrid Electric Vehicles (HEV)



Hybrid Electric Vehicles have an electric motor AND a gas-powered internal combustion engine and don't plug-in for charging. HEV can have substantial range on a single tank of gas, but they still burn fossil fuel, produce carbon emissions, require trips to the gas station and scheduled engine maintenance. HEV may be an ideal choice for those with extended commutes and limited charging system access.



Vehicle Range

Range refers to the number of miles an EV will travel before the battery needs to be recharged. Electric cars typically have a shorter maximum range on a charge than fossil fueled cars can travel on a full tank of gasoline, however, EV can be charged at home - no gas station required - and the overall operation cost is typically substantially less than a gasoline-powered vehicle. It's worth noting that 78% of all commuters in America drive less than 40 miles per day¹, thus if they are driving an EV, they can go multiple days without recharging. Many 2017 EV have a range well over 100 miles per charge, with some models reaching over 300 miles per charge.

With a variety of electric vehicles on the market, CEC's website breaks down information on this new tech from range to charging.

plugging into an EV. This summer, CEC added a new car to its fleet, a Chevy Bolt. Unlike its hybrid cousin the Chevy Volt, the Bolt is an all-electric vehicle that does not produce any exhaust.

"The Bolt is a lot of fun to drive and has a little more pep to it than most people would think," says Jeff. "We are excited to show this vehicle to our members and learn more about EVs right along with them."

To help members learn more about electric vehicles, calculate savings, and discover tax credits and rebates, CEC has launched a new section on its website to focus on this newer technology.

Jeff says the site will help members who are curious about electric vehicles, but aren't sure about the technology.

"Our FAQ page actually breaks down the different types of vehicles currently on the market so consumers can better understand what they are purchasing, for example, the differences between

all-electric vehicles and hybrid vehicles," he says.

"We also have information on batteries, the different charging level types, as well as maintenance and operational costs."

Do you wonder what savings you would achieve going from a gas car or SUV to an EV? CEC's website includes a calculator option where members can calculate their potential savings with the cooperative's current kWh rates and the current average local gas price.

"The calculator allows a member to put in their current vehicle model and then compare the savings to an EV they are considering," Jeff says. "This is an important educational piece for many consumers because they can see the numbers they'll need in order to decide if an EV is for them." ■

To explore the new electric vehicle information, go to www.ccc.coop and click on the Going Green tab at the top of the home page.

A Survey in Your Future



Please Help Us Plan for Your Future Energy Needs

Lane Electric Cooperative is conducting its biennial survey of a random sample of our residential members this month. This survey is an important part of our ongoing effort to wisely plan for your future energy needs. The information gathered helps keep costs low for our members, and helps us tailor programs that are meaningful to you.

Only a small, randomly selected portion of our residential members will receive a copy of the survey in the mail. If you receive a survey, please take a few minutes to complete and return it in the postage-paid envelope provided. The survey asks questions about your home, your appliances, energy-efficiency measures, and your opinions about energy use and related topics. Your timely input will help with decisions about power supply and conservation efforts at both the cooperative level and the wholesale power supply level.

Since only a small number of our residential members are receiving this survey, your response is important to us. Surveys

help create a clearer picture of member needs. No identifying information is requested, so you will remain anonymous. Your responses are held in the strictest confidence.

The survey is administered by PNGC Power, the wholesale power cooperative of which Lane Electric is one of 14 members. Lane Electric members have participated in this survey since 2010, and it is a great tool in forecasting needs and planning effective ways to meet them.

Once the survey data is tallied, we will report what we learn to our members. Please don't hesitate to give us a call at (541) 484-1151 or get in touch via email at comment.question@laneelectric.com if you have any questions or concerns about the survey.

By completing this survey, you are helping Lane Electric ensure a stable supply of electricity at the lowest rates for all our members. If you are called upon, we greatly appreciate your participation. ■



Report Your Power Outage Via Text

Northern Lights is pleased to announce a new simple and fast way for you to communicate with us when your power is out. NLI can now accept text messages to our outage reporting system. This allows you to report your problem and get status updates.

To use this service, make sure your cellphone number on file with us is current. **Call our office at (800) 326-9594** to speak to a member service specialist and ask that your account be updated with your current cellphone number.

Once your cellphone number is up to date, you can opt in.

To join, simply **text "NLI" to (866) 665-4837**. A response will be generated confirming your service location. Confirm your location by texting back the appropriate response.

Now you're ready! To report a power outage, **text "OUT" to (866) 665-4837** and follow the prompts.

For outage updates, text **"STATUS"**. Updates are available after line crews are on location and evaluate the situation.

When service is restored for all members impacted by the outage, you will receive a text that power has been restored. ■



Rural Nevadans Should Vote No on 3

By the Coalition to Defeat
Question 3

One factor often overlooked in the current Question 3 debate is the fact that rural Nevada communities would be at risk if the ballot measure were to pass. Question 3 would cost Nevada consumers and taxpayers billions, cause the loss of thousands of good-paying jobs, and eliminate guarantees for affordable, reliable electricity service in rural communities.

Rural Nevadans who currently rely on co-op's would be at risk of losing their provider and left to rely on an unknown system with higher electricity rates. Fewer protections would be in place for consumers in these small, hard-to-reach areas to

“Question 3 would cost Nevada consumers and taxpayers billions, cause the loss of thousands of good-paying jobs, and eliminate guarantees for affordable, reliable electricity service in rural communities.”

obtain affordable and reliable electricity.

The reality is many rural areas are difficult to reach and expensive to serve, but the rural electric co-ops that many of our communities rely on for affordable electricity aren't protected under Question 3. Eliminating

co-ops would require rural consumers to rely on for-profit electricity providers that could charge whatever rates they wanted with no limitations. Under Question 3, Nevada would lose its ability to protect consumers from these rate increases.

Another factor often

overlooked are the costs that would be passed on to all Nevada ratepayers and taxpayers if Question 3 were to pass. The state's existing major providers would be forced to sell their power plants and cancel long-term energy agreements, many of which are for renewable energy projects built right here in Nevada. This would cost at least \$4 billion. Those costs would be passed onto consumers and would increase average residential electric bills for Nevadans for at least a decade.

Question 3 would require more than \$100 million in startup costs and, thereafter, more than \$45 million in new annual operation and maintenance costs that, again, would be passed on to Nevada ratepayers.

NO on 3

RISKY & COSTLY

Dismantling Nevada's existing system—one of the most reliable electricity systems in the nation—poses serious consumer health and safety concerns because of the potential for rolling blackouts and less reliable service. Rural areas have come a long way in the last 50 years, from small providers that historically gave consumers low voltage in the afternoons and evenings, which led to interruptions in electricity for blocks of time. If Question 3 were to pass, it would be a major setback in the progress made in rural areas and eliminate the reliable electricity systems consumers depend on.

Question 3 would also raise the cost of natural gas for 165,000 customers in the

Reno-Sparks area by as much as \$20 million to \$25 million. Sierra Pacific Power Co. natural gas customers receive a significant cost-savings because Sierra Pacific Power shares the cost of transporting natural gas for those customers with the cost of transporting gas for electricity generation. That means Sierra Pacific would no longer buy such large amounts of natural gas and those savings—essentially a bulk discount passed on to individual customers and small businesses—would disappear, according to the Public Utilities Commission.

Question 3's vague wording doesn't provide any clear plan or details on how the new electricity system would be set up or how it would function. Instead, implementation

would be left to the state legislature and, ultimately, the courts, resulting in years of complicated lawsuits, yielding unpredictable results and costing Nevada taxpayers millions.

In the late 1990s, many states, including Nevada, tried to implement laws like Question 3. California's attempt in the early 2000s led to skyrocketing rates and consumer complaints, rolling blackouts, the Enron scandal, and more than \$40 billion in added costs for consumers and taxpayers.

Of the 24 states that originally attempted a deregulation scheme like Question 3, only 14 states still have those systems in place. In those states, average residential electricity rates are 30 percent higher

than Nevada's, and California's overall electric rates are nearly double ours.

It's been nearly 20 years since any state has taken the risk of implementing a system like the one Question 3 proposes. Given this history, Question 3 is especially risky for Nevada because it would be very difficult to repeal from our constitution and take years to undo the damage it would cause.

We call on all Mt. Wheeler Power customers and community partners to join us in defeating this risky and costly ballot measure and preserving one of the most reliable and affordable electricity systems in the nation. ■

For more information and to join the Coalition to Defeat Question 3, visit NOon3.com.

Surviving the Cranston Fire

Damage by a suspected arsonist causes 10-day systemwide outage

By Katherine MacIver
AEC Member Services Manager

By the Numbers

- ▶ **Damage to utility structures (poles, cross arms, etc.):** 126 Southern California Edison; three Anza Electric Cooperative.
- ▶ **Crews, each consisting of four to five men:** 40 line construction, 40 civil; 38 vegetation; 13 traffic control; and 16 damage assessment.
- ▶ **Air support:** Three helicopters.
- ▶ **Generator use:** Six 2-megawatt generators powered the entire AEC service territory while repairs were made using, on average, 20,000 gallons of fuel a day.
- ▶ **Three staging areas:** Edison City vehicle and equipment compound set up in Anza, Mountain Center at the CalTrans yard and Camp Ronald McDonald.
- ▶ **Social media:** 112,360 text messages and 33,670 emails sent between July 25 and August 3, with 458 new Facebook likes to the AEC page, increasing the number of followers to 1,676.
- ▶ **Member calls:** 7,578 calls—each averaging 2.3 minutes—during the 10-day outage, adding up to 17,480 minutes and equating to 12 solid days spent on the phone.

Nothing gets us more on edge than a large vegetation fire or an outage. We know what can happen—and it can happen fast.

With the Cranston Fire, we had both.

Because of a suspected arsonist, the fire broke out near Idyllwild just before noon July 25. It spread rapidly, endangering two circuits on the Southern California Edison transmission line from Hemet.

Due to imminent fire threat, the Resort circuit that feeds Anza Electric Cooperative's service territory was de-energized. We had no power and—since most of us have private wells—no water.

With the fire rapidly spreading toward the Resort line, SCE indicated the outage would not be brief. SCE's onsite personnel were evacuated late the evening of July 25.

Temperatures exceeded 100 degrees, and we had communication problems with local cell carriers as battery back-ups or generators failed due to lack of on-site maintenance. On day six, phone calls were not possible. Within hours, that was resolved when Anza Electric provided fuel to Frontier's generators.

About 20 hours after the start of the outage, the first 2-megawatt generator arrived. Crews connected it through the transformer in the solar array. Another five generators arrived within the next two days and were set up so most of the area had a temporary source of power.

Due to the circuit design, three areas had to be on a rotation, receiving power every eight to 12 hours for four-hour blocks. We started feeding power to members intermittently on July 28. AEC crews worked around the clock to fuel generators and handle other important tasks.

Given the 2-MW capacity of generators, distribution networks had to be sectionalized to prevent overloading generators. At each rotation, linemen were positioned at AEC's three substations to complete switching from one circuit to another. The substations on either end



Lineman Scott Davies isolates the AEC feeder from the switch station so the Lake Hemet Substation can be back fed from the temporary generator.

of the system, Lake Riverside and Lake Hemet, are nearly 27 miles apart.

AEC asked members to refrain from using air conditioners to limit the load on generators. If generators became overloaded, they could shut down, leaving everyone without power and water again. Members responded by reducing load.

Had the fire started two days later, these generators would have been earmarked for the Carr Fire in Northern California and not available to us.

AEC has a small supply of standby generators, which were immediately used at various locations. The local county cooling center received one, as did the Lions Club Gymkhana field, where water was pumped and distributed at no charge for use by households and livestock.

The community came together, as individuals and organizations provided services, assistance and, most importantly, water, at no charge. Within days, Sen. Jeff Stone, Congressman Raul



Ruiz and County Supervisor Chuck Washington provided assistance ranging from large generators and food and water deliveries to financial assistance.

Hamilton High School became a care center. The Red Cross was on site providing water, food, blankets, cots and more. Hamilton High School was also open for much-welcomed showers.

Within days of the outage, Southern California Edison set up a command center next to the AEC office. Dubbed Edison City, it was a staging area for hundreds of crew members, trucks, generators, material and more.

Due to the rugged terrain, vehicles were unable to reach the transmission line area. Crews had to hike in to hand dig holes. Helicopters were brought in to lift and place 80-foot poles.

By day eight, the prospect of power restoration looked good. We anticipated full restoration by Monday, August 6, but power was actually restored to all areas by 9 p.m. Friday, August 3.

While SCE crews repaired the transmission line, the import upgrade SCE and AEC had planned to do later this year also was completed, since crews and materials were available.

Thanks to the upgrade, SCE will be able to provide AEC with more power during peak summer and winter times. ■

We Love Our Members!

Thank you for all your kind words and gestures. Below are a few notes, texts and Facebook posts we received.

"Thank you so much for all your hard work. We know this was horrible for you guys, but you did an awesome job and we appreciate it."

—**Stephanie and Joe Klein**

"Watching the ceiling fan kick on knowing that this is the real deal was one of the most magical things I've ever experienced. You all are so awesome!!!" —**Amanda Johnson**

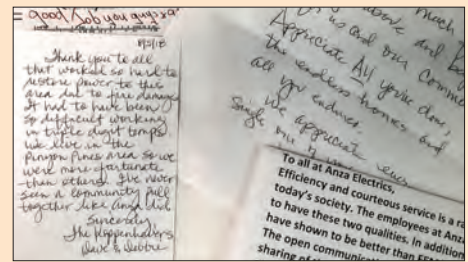
"A difficult situation was much easier to deal with, just because we knew what was happening. Thank you! I can't say enough about how much I appreciate the co-op and everyone who works there, so I decided a batch of yummy lemon bars would be my way to say thank you. AEC, you are an awesome organization!" —**Lisa Bromley**

"I feel saying thank you is not enough. The hard work you put in to get our lives back to normal is so greatly appreciated."

—**Lisa Yang Porter**

"You all ROCK!! Thank you for everything you have done and the continued updates!!"

—**Shelly Drake**



Carl Virden My wife, Karen, and I were just talking about the way AEC has handled this power situation. We both have lived in places where there were power outages which lasted hours and up to a day. Our services then came from SCE. There were no notices, timelines, announcements, nothing. Just, the power went down and when it was fixed it returned. AEC cares about their customers and it has shown in each announcement and daily update. SCE is, no doubt, playing a huge part in making our near future better with their incredible workforce and their team effort. It's just that Karen and I have never known a power company to go out of their way to keep us informed. AEC's customer service is top shelf.

Like Reply Message 1w



Clatskanie PUD Owned by the People We Serve **Ruralite**

SEPTEMBER 2018



We are public power. We are

MORE
POWERFUL TOGETHER



#MorePowerfulTogether

MORE POWERFUL TOGETHER



Brad Witt is the state representative from Oregon's House District 31.

PHOTO BY SCOTT LAIRD

Use Energy Wisely

Keep Your Refrigerator Humming



For maximum energy efficiency, keep your refrigerator and freezer well stocked.

Look for ways to maximize its energy efficiency

The refrigerator is one of the home's biggest energy hogs. You can help it run more efficiently by:

- **Keeping it level.** A fridge on an uneven floor can lean forward just enough to prevent the door gasket from sealing tightly when the door is closed.
- **Checking gaskets.** Even on a level floor, a refrigerator's door gasket can wear out over time. If your door isn't closing tightly, replace the gasket.
- **Filling it up.** A full refrigerator and freezer work more efficiently than a half-empty one. If you don't have enough food and beverages in the refrigerator, fill it with jugs of water until about two-thirds of the empty space is taken. The same goes for the freezer. Pack bags full of ice and scatter them around the freezer so it is at least three-quarters full.
- **Cooling food before refrigerating it.** Putting hot food into a refrigerator or freezer forces the unit to adjust its temperature to compensate for the heat.
- **Covering food before storing it in the fridge.** Uncovered food and liquids release moisture and can force the compressor to work harder.
- **Giving it some breathing room.** For proper ventilation, a refrigerator needs clearance between its top and the cabinets above it and between its sides and the walls. Likewise, don't use the top of a refrigerator for storage. Cartons and other items can restrict airflow.
- **Moving the unit out of the sunlight and away from the oven.** The refrigerator has to work harder to keep everything cool when the outside of it is exposed to heat.
- **Cleaning it.** Regularly wipe dust, dirt and cobwebs from the top of the fridge and from the coils behind it. ■

Need a New Fridge? Upgrade to an Energy Star Model to Increase Savings

Got an old, energy-wasting refrigerator? Replace it with a new Energy Star-certified model. Not only will you enjoy a state-of-the-art fridge, according to the Energy Star website, you can save more than \$270 during the next five years and do something good for the environment.

Thanks to recent improvements in insulation and compressors, today's refrigerators use much less energy than older models. With an Energy Star-certified refrigerator, you can maximize your energy and dollar savings without sacrificing the features you want.

When shopping for a new fridge:

- ▶ Look for the Energy Star label to ensure it is energy efficient.
- ▶ Check the yellow EnergyGuide label to determine the model's energy use, compare it to similar models and estimate annual operating costs.
- ▶ Buy a refrigerator with a top-mounted freezer. They use 10 to 25 percent less energy than bottom-mount or side-by-side models.
- ▶ Buy an appropriately sized refrigerator. Generally, the larger the fridge, the greater the energy use. The most

energy-efficient models are 16 to 20 cubic feet.

- ▶ Skip the automatic ice-maker and through-the-door dispenser. They increase energy use 14 to 20 percent and raise the price \$75 to \$250. Don't forget to recycle your old refrigerator. If you have a second refrigerator in your basement or garage, you should recycle that one, too. Refrigerators more than 10 years old could be costing you \$110 a year.



Debunking Common Health Myths

A consumer guide to what you need to know

By Allison Goldberg

Health and nutrition are young sciences. Better information constantly emerges from new studies. It is easy to miss new information, and our brains naturally cling to the first versions of what we hear.

Here are some stubborn health myths.

Antiperspirant causes breast cancer.

According to the American Cancer Society, researchers found no link between aluminum-based antiperspirant or deodorant use and breast cancer risk. This was based on a study comparing 813 women with breast cancer and 793 women without breast cancer.

Being cold will give you a cold.

A cold is a virus. Catching a cold means you have become infected by a virus—or many viruses. There are thousands.

Cold air is not a virus.

There are a few reasons we are more likely to catch a cold during winter:

- We are more likely to be in closer quarters indoors. As a result, we share more air and germs.
- Drier indoor air leads to drier nasal cavities. Mucus membranes are better at protecting us when moist.
- Rhinovirus germs replicate faster at lower temperatures.

Cracking joints will cause arthritis.

The cracks and pops you hear when you crack your joints is air being released from the liquid that lubricates your joints. It does not cause arthritis, but that does not mean it is good for you.

Harvard University Medical School says people who crack their knuckles tend to have lower grip strength and increased inflammation in their hands.

Organic food is more nutritious and pesticide-free.

A 2010 study by British researchers compared 162 scholarly, peer-reviewed published articles that compared organic and traditionally grown produce. Their review found no difference in 15 noted nutrients, including vitamin C, beta-carotene and calcium.

They also analyzed results for organic and traditionally raised meat, dairy and eggs. They found organic livestock products had higher levels of fats.

Both traditionally grown and organic farms use pesticides, herbicides and



When it comes to optimal health, a diet rich in fruits and vegetables is more important than detoxing.

Photo courtesy of the U.S. Department of Agriculture

Beat the Extreme Heat

During periods of extreme heat, hot weather mixed with outdoor activities can lead to dangerous situations. According to the CDC, people can suffer heat-related illness when their bodies are unable to properly cool themselves. During extreme heat, follow these guidelines to protect yourself and your loved ones.

Source: Centers for Disease Control and Prevention



AMERICA'S ELECTRIC COOPERATIVES



STAY INFORMED: Check local news for extreme heat alerts.



STAY COOL: If you do not have access to an air-conditioned space, visit a shopping mall or public library for a few hours.



STAY HYDRATED/DRESS APPROPRIATELY: Drink fluids regularly, regardless of activity level. Wear lightweight, light-colored, loose-fitting clothing.



DON'T leave anyone in a closed, parked vehicle.



DO check on elderly friends and neighbors.

fungicides. According to Scientific American, more than 20 chemicals are approved for use by the U.S. Organic Standards. The amount of chemicals used on organic crops is not limited.

Even though organic pesticides, herbicides and fungicides are created from natural sources, that does not necessarily mean they are safer.

Vaccines cause autism.

In 1998, a British gastroenterologist named Andrew Wakefield published a falsified paper in which he linked the measles, mumps and rubella (MMR) vaccine to autism.

His findings were not replicable, the conclusions he drew were not supported by data and he had financial conflicts of interest. He and his autism study have been discredited, and he is no longer allowed to practice medicine in the United Kingdom.

According to Autisms Speaks, the risk factors for autism include parental age, pregnancy and birth complications, closely spaced pregnancies and environmental risk factors.

You need to cleanse your body of toxins (detox).

Your body is a self-cleaning machine.

You expel toxins (carbon dioxide) when you breathe thanks to your lungs. Your kidneys and liver clean your blood. Your colon removes waste. Your sweat releases excess salts from your skin.

The best way to detox is to treat your body right by drinking enough water and moderating unhealthy foods, alcohol and drug use—and that includes quitting the use of tobacco.

There is no need to fast or deprive yourself. In fact, eating an abundance of fresh or frozen fruits and vegetables, drinking more water and getting more sleep are the best ways to help your body perform at an optimal level. ■