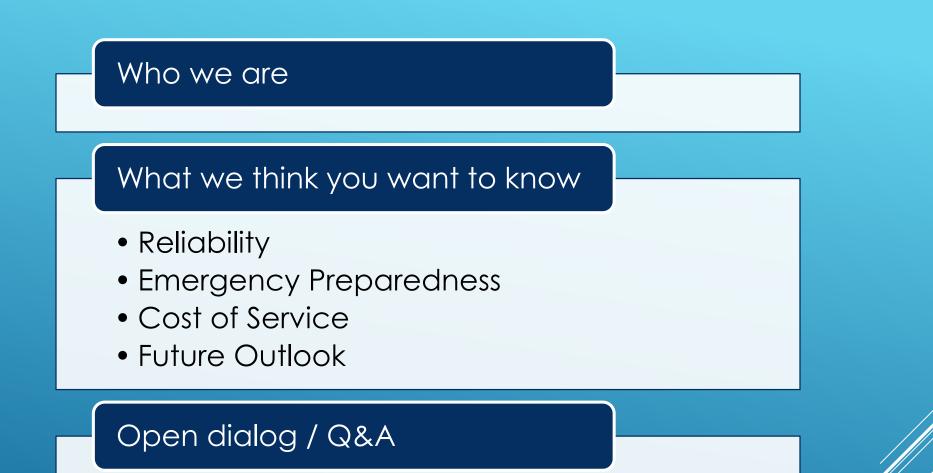


Valdez City Council Work Session

September 21, 2021



AGENDA



BEHIND THE SWITCH VIDEO







 Exceptional service through safe, reliable, cost-effective electric service and programs

CVEA'S MISSION STATEMENT

SHARON SCHEIDT

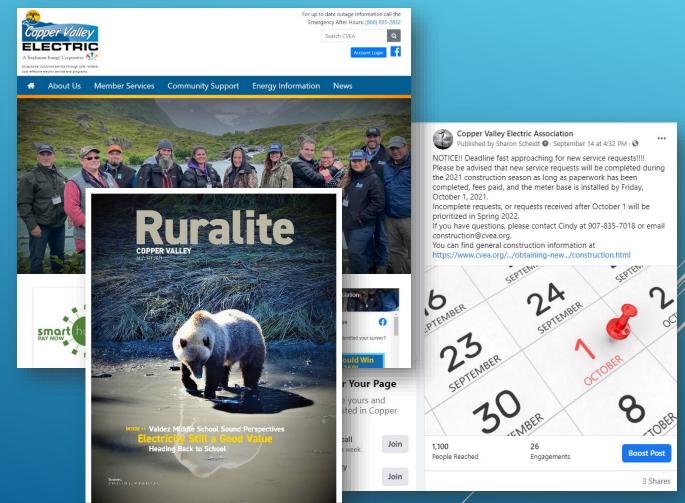
DIRECTOR OF COMMUNICATIONS

COMMUNICATIONS – WHERE TO FIND IT

Cvea.org is an award-winning website that is packed with information.

Check out Facebook for up-to-date information and real-time outage updates.

Read your monthly Ruralite for indepth information and stories.





Outage Communications
Current Electric Rates
Rate History
Project Reports

COMMUNICATIONS WHERE TO FIND IT



COMMUNITY & MEMBER ENGAGEMENT

2021 Member Satisfaction Survey

Deadline-Sept. 30

392 Submitted to date

Copper Valley Electric 2021 Member Satisfaction Survey

You Could Win \$250!

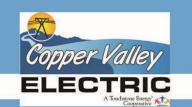
Complete and submit the survey by September 30, 2021

CVEA wants to hear from YOU! Please take 15 minutes to complete and submit the 2021 Member Satisfaction Survey.

- Scan this QR Code for immediate access to the online survey (hover over the image using the camera on your mobile device), or
- Visit cvea.org and click the survey link, or
- Pick up a printed copy at the local office, or
- Call the office (822-3211 or 835-4301) and have a printed copy mailed to you
- Members could win a \$250 energy credit!

Questions? Call the office or email sscheidt@cvea.org.







COMMUNITY & MEMBER ENGAGEMENT



Copper Valley ELECTRIC Annual Meeting each May

Co-op Month Pick-Your-Own Pumpkin Patch, October 23

Holiday Kids Activity Program

Community Foundation – Scholarships, Leadership Program, and \$19,254 in 2021 Contribution Season

WAYNE MCKINZEY

DIRECTOR OF POWER SUPPLY

RELIABILITY





COMMUNITIES WE SERVE





FIVE POWER PLANTS



- Solomon Gulch hydro with storage (year-round)
- Allison Creek hydro no storage (April November)
- Cogeneration naphtha from PSVR (November April)
- Valdez Diesel Plant ultra-low sulfur diesel (winter months, peaking, outage recovery)
- Glennallen Diesel Plant ultra-low sulfur diesel (winter months, peaking, outage recovery)

FIVE POWER PLANTS



- Normal Business Hours Mon-Thurs, 7 a.m.-5 p.m.
- Copper Basin and Valdez Offices
- Copper Basin and Valdez Line Crews
- > Valdez Diesel Plant 7 a.m.-7 p.m.
- Glennallen Diesel Plant 7 a.m.-7 p.m.
- Dispatcher (Solomon Gulch) (24x7)
- Off Hours
- Dispatcher (Solomon Gulch)
- On-call Lineman
- On-call Duty Supervisor

STAFFING



SOLOMON GULCH – DISPATCHER AND CHIEF PLANT OPERATOR



OPERATIONS BUILDING (AKA, THE LINE SHACK)



STAFFING





- More than a Single Consumer Real-Time Information
 - An outage affects more than 10 customers and is expected to last more than 2 hours
 - A District or Systemwide outage is expected to last more than 1 hour
 - A major feeder outage is expected to last more than 2 hours

POWER OUTAGES



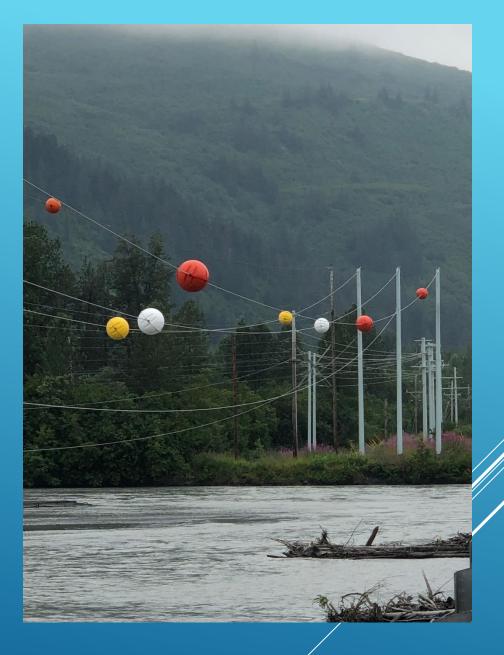


TRAVIS MILLION

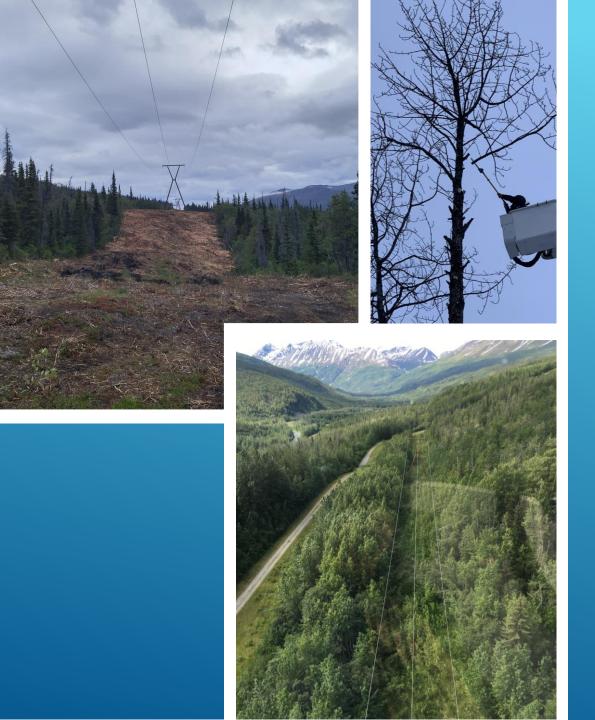
CHIEF EXECUTIVE OFFICER



UPGRADES







ROW CLEARING





VALDEZ GENERATION







PROTECTION & SCADA



EMERGENCY PREPAREDNESS



Emergency Events

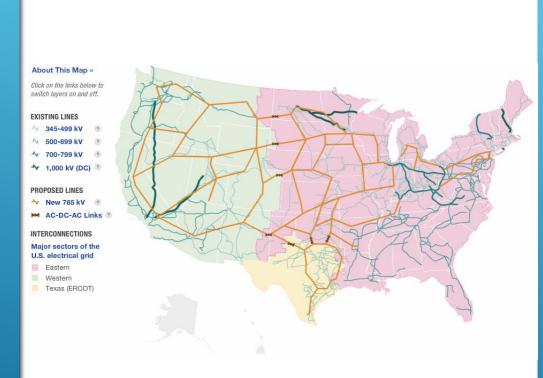
- Severe weather
- ► Flooding
- Avalanche
- ► Fire
- ► Earthquake
- Any other event where the Incident Commander determines that additional assistance or coordination is needed

ICS EVENTS

- If an emergency incident or event is likely to cause significant outages or damage
 - Outages affecting more than 10 percent of the membership for >24 hours
 - Outages affecting more than one feeder > 24 hours
 - Distribution system damage from extreme weather or causes that are beyond the normal capabilities of CVEA resources

DECLARATION OF ICS





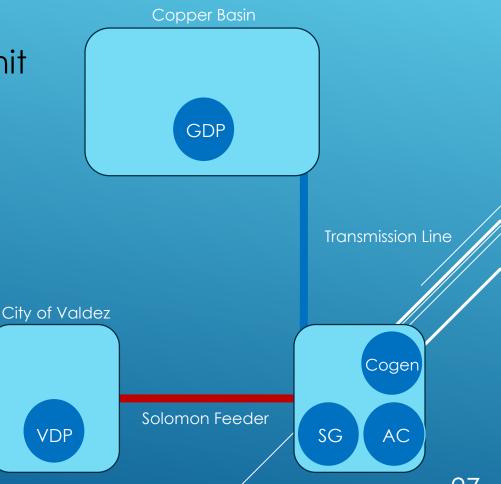
TEXAS STORM

- Record-setting, subfreezing temperatures across the state
- Nearly 50 percent of all power generation was lost due to extreme weather conditions
- Not enough firm power generation (coal, nuclear, not urg gas)
 - 34.5 percent installed capacity non-firm (wind & solar)

CVEA

Plan for N-2 contingency

- Transmission line and largest generating unit out of service
- Multiple power plants in different locations (Glennallen & Valdez)





	Texas	CVEA
Extreme temperatures	Not prepared for extreme cold for long durations	Well prepared for cold temperatures. Extreme high temps (for Alaska) shouldn't cause issues since hydro would be the prime generation source
Loss of generation	Primary loss of generation was wind and natural gas	Variable generation sources and stand-alone fuel sources minimizes this from happening
Insufficient firm capacity	Not enough firm generation capacity for system load, too much non-firm generation	Ample firm generation capacity for system and isolated districts

COMPARISONS

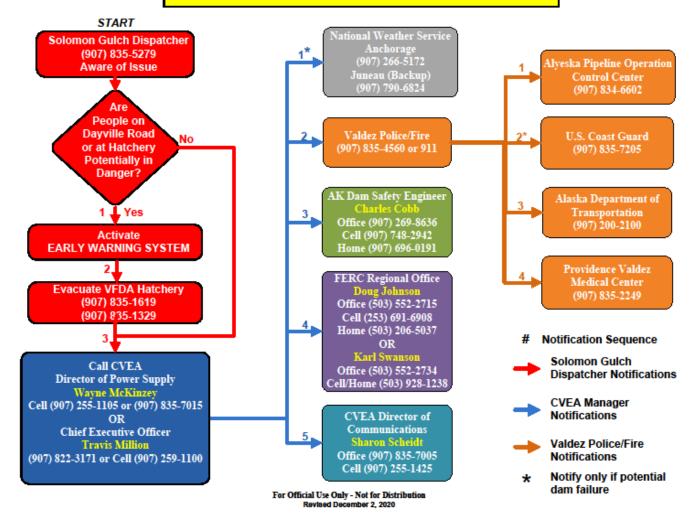




SOLOMON EMERGENCY ACTION PLAN



Solomon Gulch EAP Notification Flowchart (FERC Project No. 2742)



SOLOMON EMERGENCY ACTION PLAN



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dez High Schoo

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1925: Strong shaking damaged buildings in Valdez, caused by a magnitude 7.0 earthquake more than 100 miles away. Part of the dock collapsed, and a tsunami tore up a section of boardwalk in Old Valdez. The Valdez-Cordova and Valdez-Seward submarine telegraph cables broke.

1911: Intense shaking from a magnitude 6.9 earthquake threw household items from shelves. The earthquake broke the Valdez-Sitka submarine telegraph cable just north of Fort Liscum, about 3 miles west of the dock at Valdez, and an underwater landslide buried 1,640 feet of the cable.

> Safety area: Ascend the Solomon Gulch Trail past the first steel gate. Consult City of Valdez for current trail maintenance.

Old Valdez

WHAT ABOUT A TSUNAMI?



slopes in Prince William Sound.

0.5 mile

Inundation/Flood Zone based on

scientific report (see Learn More) Areas with expected dangerous eddies and whirlpools Pedestrian evacuation requires half hour or more to reach safety (at 2 mph) Probable locations of unstable sediment buildup that could cause underwater landslides Evacuation line designated by the

Tsunami shelter designated by the

+ Airport

圙

Bridge

Ferry

City office

Hospital

School

City of Valdez

City of Valdez

JAIME MATTHEWS

CHIEF FINANCIAL OFFICER

- Cyber insurance policy
- Review trends
- Training for all employees
- Offsite backups daily



- Local workstation scans, firewall inspections, traffic monitoring, etc.
- Power plants do not have a direct connection to the internet
- Annual security assessments
- Occasional penetration tests
- Recent implementation of multi-factor authentication for all VPN access

CYBER SECURITY



COST OF SERVICE

SISTE

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Components of CVEA's Monthly Bill

Customer Charge





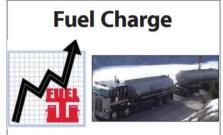
The Customer Charge covers a portion of
the cost to produce the monthly bill.Residential\$20Small Commercial\$30Large Commercial\$100



The energy charge per kWh/KW charge, also known as the distribution charge, is the cost to deliver power to you and includes system operation and maintenance, customer service, member services, administration, depreciation, taxes, and interest.



G&T stands for Generation & Transmission. It is the cost per kWh to generate power at the CVEA power plants and transmit the power into the distribution system that brings it to your home or business.



The Fuel Charge reflects the actual cost per kWh CVEA pays for fuel used to generate power. This cost changes monthly. CVEA's vision is to reduce or eliminate our dependence on fossil fuel which will reduce or eliminate this cost.

Heat Credit



When the Cogen Plant is producing heat revenue, members see a credit per kWh on their bill. This changes monthly and will only be available in the months CVEA is receiving heat revenue, which is typically October through May.

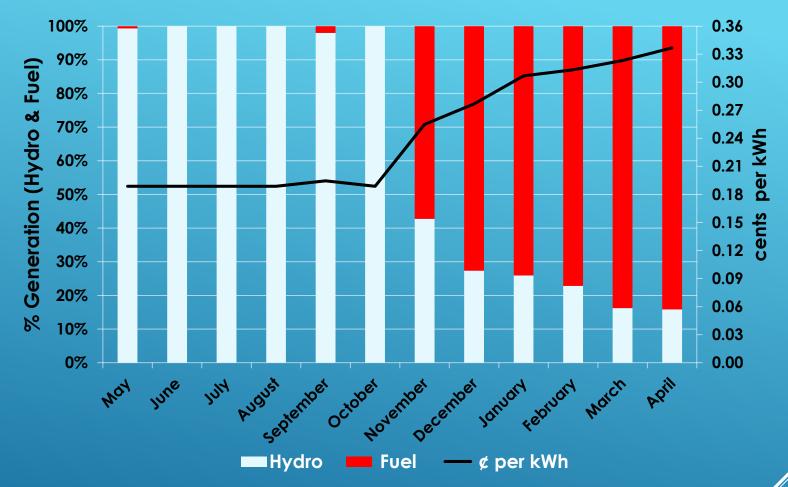
CVEA Member Monthly Bill

Please contact CVEA with questions: (907) 822-3211 (907) 835-4301 or visit cvea.org

November 2019



(October 2020 - September 2021 Actual)

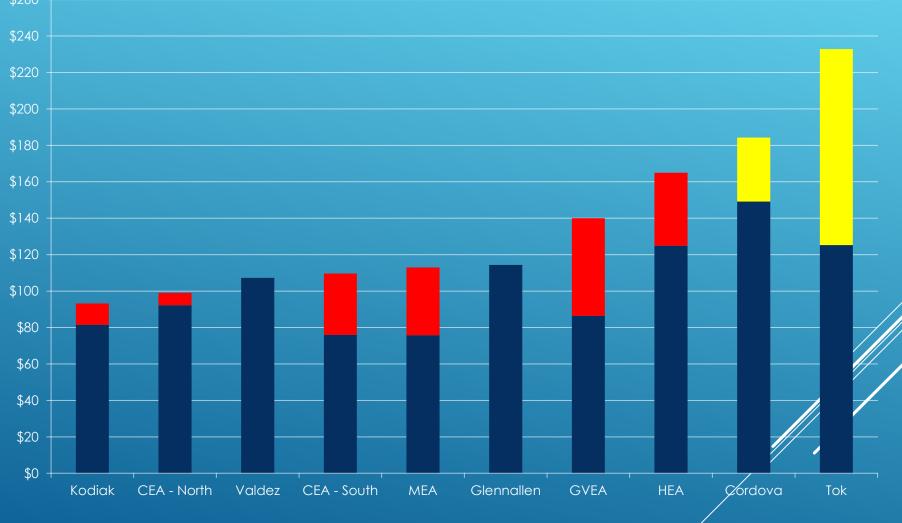


COST PER KWH – HYDRO VS. FUEL



Avg ANS \$61/barrel

500 kWh Bill Utility Comparison August 2021





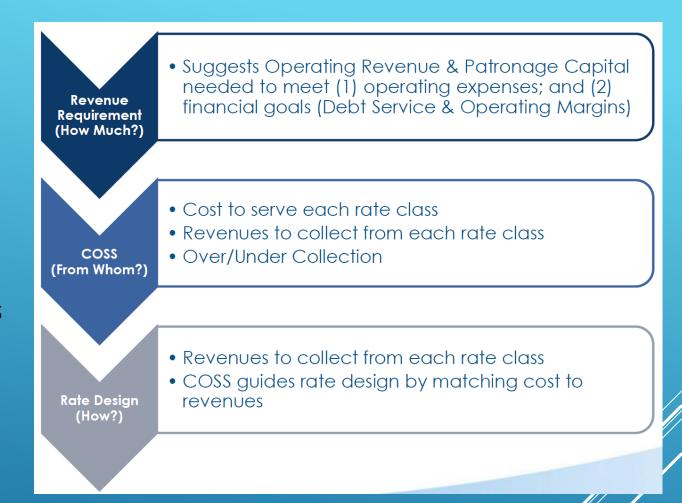
500 kWh Bill Utility Comparison August 2021 - CVEA includes average fuel





Reviewing capital requirements this fall

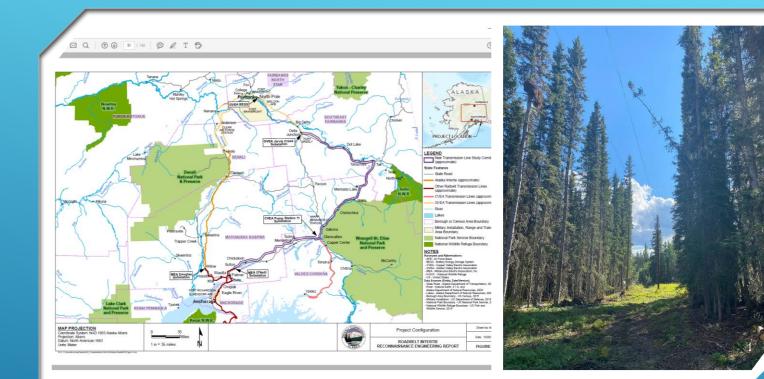
- Board will set goals
- Public process for any change in base rates



RATE STUDY 2022



FUTURE OUTLOOK



LEGISLATIVE UPDATE

SB110/HB29 – Electric Utility Liability

SJR11 – Support for the Roadbelt Intertie Transmission Project 41



STRATEGIC PLAN GOALS



SUCCESSION PLANNING

Proactively planning for retirements Encourage promotion from within Lineman apprentice/power plant trainee programs

