

NOT throwing caution to the wind: An open letter to the Members of Anza Electric Cooperative, Inc.

November 2019

Dear Members,

Much has been said lately in news and opinion pieces regarding the current state of the electric utility industry in California. Like so much of the news around us these days, there's a lot of fiction mixed in with the fact.

Our local Cooperative is not immune to this phenomenon. Even though we've managed to so far avoid the catastrophes that the large investor owned utilities have experienced, Anza Electric still operates in the same space as the bigger players. We're still exposed to the vagaries of weather, human actions (think Cranston Fire here), and legislative/regulatory considerations, all while managing our little piece of the largest and most complex machine ever built on this planet: the electric grid. It's a daunting challenge; I'd like to explain just a bit about why many of the opinions on this subject are uninformed at best- and destructive at their worst.

Our Changing Climate

California has been subject to the effects of climate change for some time. According to the California Environmental Protection Agency¹(see Figure 1), average annual air temperatures have increased since 1895. The last four years were notably warm, with 2014 being the warmest on record, followed by 2015, 2017, and 2016. While it can be politically divisive to discuss this subject, it's instructive to look at historical data to see what the record shows. Here's a table of recorded temperatures in California for the last 122 years, showing the relentless increase:

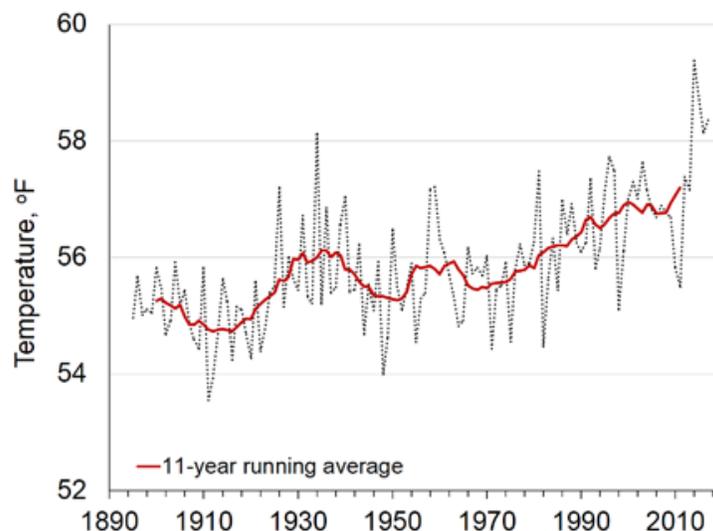


Figure 1. Statewide Average Temperature

¹ (n.d.). Retrieved from <https://oehha.ca.gov/climate-change/document/indicators-climate-change-california/>.

This trend in temperature increase, along with several extended periods of drought, have combined to create a dangerous mix of wildfire risk factors like nowhere else, at no other time in our history.² (see figure 2)

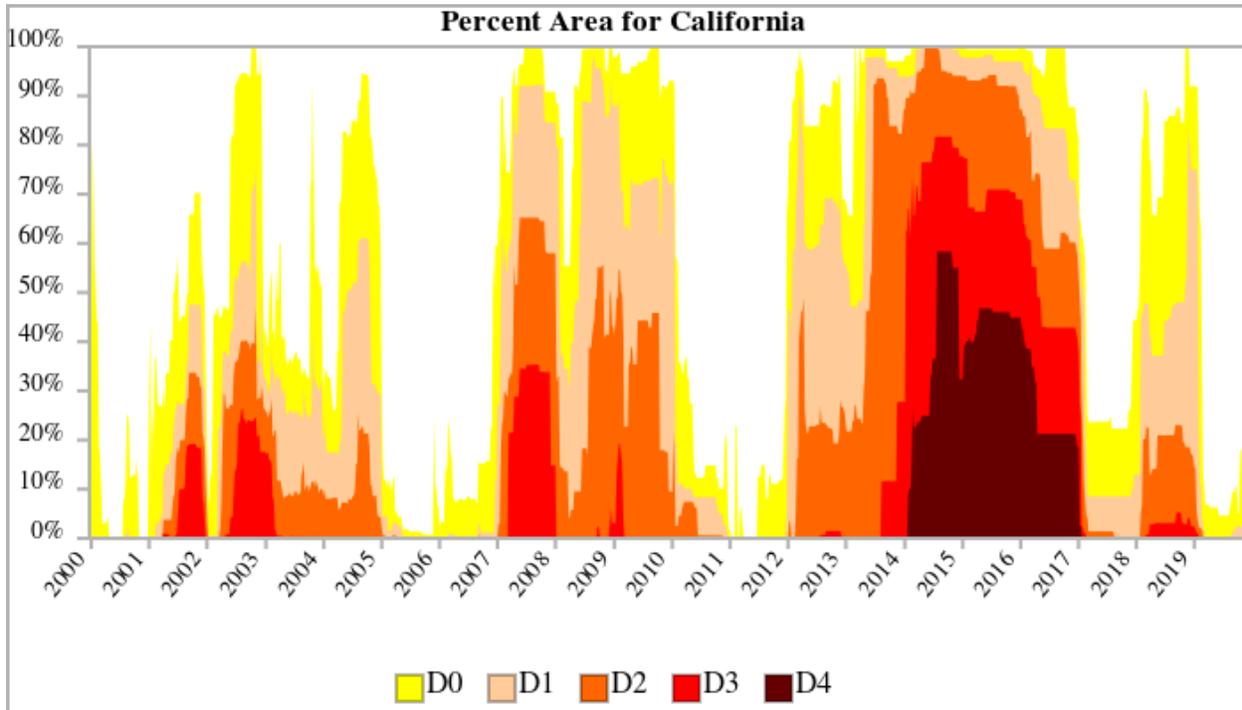


Figure 2 Drought in California 2000-2019

Wildfire risks

These risk factors- high temperatures, low humidity and a heavy fuel source- when combined with the high winds that are a normal factor in California due to the geographical realities³ of our state, make for an explosively dangerous mix that can lead to massive wildfires with deadly potential.⁴

This issue is exacerbated by the ignition potential of flying debris striking energized electric lines or damaged electric poles and lines falling to the ground. Many of the most recent California fires have been proven to have started by these sources.⁵

² California. (2019, October 16). Retrieved from <https://www.drought.gov/drought/states/california>.

³ What are Santa Ana winds? (n.d.). Retrieved from <https://www.accuweather.com/en/weather-news/what-are-santa-ana-winds/70006350>.

⁴ CalMatters in News on October 28, 2019 10:40 A. M. (n.d.). California Fires Are Getting Worse. What's Going On? Retrieved from <https://laist.com/2019/10/28/california-fires-explained-why-they-are-getting-worse.php>.

⁵ California utility equipment sparked more than 2,000 fires in over three years. (2019, January 28). Retrieved from <https://www.latimes.com/politics/la-pol-ca-california-utilities-wildfires-regulators-20190128-story.html>.

History of The Electric Utility

The development of electric energy and its availability as a modern electric utility is a long story. Suffice it to say that for nearly 140 years, our industry has been growing and evolving into a modern convenience that has become a necessary aspect of everyday life.

This history also saw the development of utilities as “natural monopolies”. Because of high capital costs and economies of scale, there were limited entrants into this new market, creating single source suppliers of generation and transmission assets, along with distribution to homes and businesses. This monopolistic nature created a call very early on for governmental regulation, in order to avoid the negative economic effects of such monopolies and provide electric service for the public good. The result is the collection of Investor Owned Utilities (IOUs), municipally owned utilities, cooperatives, and a few other entity types we have today.

PSPS

Contained within the multitude of new legislation following the deadly wildfire years of 2017 and 2018 is a new mandate referred to as Public Safety Power Shutoff (PSPS). This is intended to be a last resort effort to mitigate the risk associated with operating electric transmission and distribution lines that are exposed to potential damage during extreme weather events such as high winds and low humidity⁶.

2019 has seen an extensive use of this tool in various regions by the IOUs; the most widespread shutoffs in the Pacific Gas and Electric (PG&E) and Southern California Edison (SCE) territories have made national headlines. Facts and opinions enjoy a blender ride of epic proportions regarding the effects, necessity and efficacy of this practice by these utilities⁷.

As of the date of this writing, AEC has NEVER de-energized service as a PSPS preventative measure.

Anza Electric Cooperative Wildfire Mitigation and Resiliency Efforts

The fundamental difference between the cooperative business model and the “for-profit” utilities is motive- profit motive. IOUs are owned by their shareholders, and their overarching goal is to maximize the rate of return on the investment made by those shareholders.

Cooperatives, on the other hand, are owned and operated by the people that receive their service; the Members of the cooperative have a direct say in the governance of their utility by exercising their right to run for and vote for representation on the cooperative’s Board of Directors. This Board is given governance authority via its by-laws by the Members over the operation of the utility. This distribution of control is executed by the cooperative as a not-for-profit 501(c)12 entity, which totally removes the profit motive from the equation.

While it’s impossible to completely know what motivates an IOU, it’s reasonable to assume that the bottom-line directive is a persuasive element in their planning. It’s also deceptively easy to assume that

⁶ De-Energization (PSPS). (n.d.). Retrieved from <https://www.cpuc.ca.gov/deenergization/>.

⁷ Morris. (2019, November 19). PG&E outages: 800,000 people could be blacked out Wednesday, Thursday. Retrieved from <https://www.sfchronicle.com/california-wildfires/article/PG-E-says-Wednesday-Thursday-blackouts-more-14843768.php>.

the IOUs have thrown caution to the wind (literally), don't maintain their systems, and shut off power for fun. I don't believe that this assumption carries any merit; however, I can only speak for Anza Electric with certainty.

Our utility has maintained a Wildfire Mitigation Plan for nearly 2 years. We have engaged in major and costly efforts to reduce the possibility of wildfire on our system in several ways, including upgrading our wood poles to steel, updating critical fault protection systems, installing protective cover on critical poles and conductors, and implementing aggressive vegetation management within our rights-of-way.

The term "resilience" simply refers to the ability to recover quickly from difficulties. As I have previously shared, 2018 was the worst year on record for system-wide outages for our cooperative; this included the 10-day marathon during the Cranston Wildfire. However, we proved how resilient our cooperative- and our community- truly is. I am still in awe of how we all worked together to not only get electric service back up as quickly as possible, but also of the support and cooperation that was demonstrated by everyone in the face of that adversity. This was one of the most inspiring experiences of my life, and I thank you all.

This year we have been much more fortunate, experiencing very little down time. This is due to several factors: milder weather, fewer severe wind and weather events (to date), and a renewed commitment of cooperation and communication between us, Arizona Electric Power Cooperative (AEP), and Southern California Edison (SCE). This is perhaps the single most important toolset we have: communication and cooperation. I applaud our upstream providers for their commitment to working closer with us to better serve our Members.

As we begin the next phase of our exciting SunAnza solar and battery storage project, I will continue to provide you with information and updates describing how we will utilize this leading-edge technology to help us maintain service during outages, mitigate wildfire exposure, and keep costs under control.

Thank you, as always, for your support of our cooperative.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Short", with a long horizontal flourish extending to the right.

Kevin Short
General Manager