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Winter 2022

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An Informative Newsletter for Delta Liquid Energy Customers

Will Wind and Solar Generation Save California?

Find Out Why We Need a Diverse Energy Mix



We live in a fantastical world where many Californians feel a carbon-free, wind and solar generated electrical grid is not only possible but in our near future. Many of us don't realize, however, that our current electricity mix consists of only minimal amounts of wind and solar generated electricity. As of the latest data published in 2019, nearly 28% of California's electricity was imported from other states. California's total electricity mix included 34% produced by natural gas-powered plants and 22% produced through wind and solar generation. These numbers include imports. California still utilizes electricity generated from non-renewable sources to the tune of 68%.

As California continues to attempt to harness the wind and sun for 100% of our power generation, the price for our electricity will only increase. Recently in Europe ratepayers saw increases in electricity prices because the sun and wind were not cooperating. Instead, grid-operators had to rush to purchase fuel and fire up old gas- and coal-powered plants. The same can be seen in California. The electric grid operator in California (CAISO) sought an emergency order from the Biden Administration in early September to allow our state to operate natural gas power plants to produce electricity without restrictions for 60 days. This is because we are facing a shortfall of electricity equivalent to powering 2.6 million homes during peak hours. This is already happening when wind/solar generated electricity is one quarter of California's energy mix, including what we've brought in from other states. In addition, ratepayers will be on the hook for the financial cost of building the necessary infrastructure. According to an article by Mark Mills, an author with experience in the energy and technology space, it will take billions of dollars to construct the facilities needed to generate and store enough electricity to power California with only wind and solar.

Think of how these changes will affect our electricity prices in California. Already in 2021 rates increased by 7.5% over 2020 prices.

There are sustainable, clean energy sources available now that can not only bridge the gap but can continue to supply reliable energy beyond our wind and solar future. Propane technologies are available to power your entire home without being reliant on the electric grid. In This Issue:

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Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986

To comply with Proposition 65 & the Safe Drinking Water and Toxic Enforcement Act of 1986, we are obliged to issue the following warning:

PROPANE contains chemicals known to the State of California to cause cancer, birth defects, or reproductive harm. State law requires us to warn you of the presence of these chemicals. Benzene, soot and formaldehyde are such chemicals. A trace amount of benzene may occur in propane, but will normally be consumed during combustion. Exposure can occur in and around oil fields, refineries, chemical plants, transport and storage operations, such as pipelines, marine terminals, tank trucks, and other facilities or equipment.

Exposure through leaking gas is possible. Soot and formaldehyde, byproducts of burning gas, are minimized by proper combustion. Delta Liquid Energy encourages all its customers to use propane safely. You should read and follow all use, care, and manufacturer instructions for propane appliances and equipment. Proper ventilation and frequent inspection of propane appliances and equipment are highly recommended.

Our service technicians are available to check and adjust your propane gas appliances. A warning odor is added to propane so that leaks of unburned gas can be quickly detected. If gas odor is detected, call us immediately.

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Combine Your Heat and Power Generation with Propane

Reducing Emissions and Improving Resilence

s the electrical grid becomes increasingly less stable, wildfires rage, and we are continually subject to public safety power shut offs, many are looking to alternatives to power their homes independently. Combined heat and power systems (CHP) are a solution. Below we discuss what these systems are, how they work, and the benefits of installing a propane powered, all-in-one home generation system.



What is CHP?

CHPs, also known as cogeneration systems, work like a boiler. These systems can heat your home, heat your water, and produce electricity - all in one. Traditionally, these systems are used in large operations, like hotels, that require mass amounts of hot water. Micro-CHP are smaller versions intended for residential and small commercial use. These systems produce at maximum 50 kilowatts (kW) of electricity. Most single-family homes can run on a unit producing just one to three kilowatts.

How CHP Systems Work

Here is a simplified explanation provided by the Propane Education and Research Council of how these systems produce power and heat for your home:

- Propane powers an engine or turbine.
- The fuel is powering the mechanical system of a generator. That generator is creating electricity.
- Electricity is funneled into the building/home much like it would be from the electric grid.
- Waste heat from the generator heats water via a heat exchanger.
- Hot water is then available for domestic use.
- Excess hot water is stored in a buffer tank.

There are many benefits to powering your home with a propane CHP. The first is that these units are more efficient than receiving your heat and electricity from separate sources. To that end, because they capture heat waste and reuse it, CHPs use 50% less fuel than a power generation site would to produce an equivalent amount of the grid's electricity. This also means greenhouse gas emissions are cut in half. Second. they help your home or commercial building move away from grid connection thus decreasing your subjectivity to public safety power shut offs and line losses from electricity transmission. Did you know the electricity from the grid that powers your home is only 60% efficient by the time it reaches you? Propane CHP units are 85% efficient because the power is being generated closer to where it is needed. Third, just as with solar panels, you may have the opportunity to sell your excess generated electricity back to the utility company.

Sources: propane.com; chpalliance.org; Linkedin article "Ever Wonder What States Have the Best Economics & Are Friendly to CHP?"

DELTA LIOUID **ENERGY**®

Service Locations

San Luis Obispo County 1960 Ramada Drive Paso Robles, CA 93446 (805) 239-0616

Santa Barbara County 755 S. Blosser Road Santa Maria, CA 93458 (805) 925-6050

Ventura County 1620 Lemonwood Drive Santa Paula, CA 93060 (805) 525-3311

Antelope Valley 42165 North Sierra Hwv.

Lancaster, CA 93535 (661) 940-3120

> Kern County - Bakersfield 3400 Buck Owens Blvd. Bakersfield, CA 93308 (661) 323-2700

Kern County - Lake Isabella 5100 Lake Isabella Blvd. Lake Isabella, CA 93240 (760) 379-2050

Kern County - Tehachapi 1582 Goodrick Drive #6B Tehachapi, CA 93561 (661) 771-0101

North Las Vegas 13995 Grand Valley Pkwy. North Las Vegas, NV 89124 (702) 333-2502

Tulare County 321 E. Noble Ave., Bldg. A Farmersville, CA 93223 (559) 592-9681

Don't Get Caught By The Silent Killer How To Stay Safe From Carbon Monoxide Poisoning

According to the Occupational Safety and Health Administration, carbon monoxide (CO) is a common industrial hazard resulting from the incomplete burning of material containing carbon such as natural gas, gasoline, kerosene, oil, coal, wood, or propane. It is a colorless, odorless gas that can be deadly if inhaled. It can be present when operating vehicles, small engines, stoves, furnaces, fireplaces, or grills. Proper CO safety is important for yours and your family's health. We've lined out some important points to remember here:

How to Prevent CO Inhalation and Poisoning

1. First and foremost, all homes should have CO detectors installed.

2. Have a qualified DLE technician check your venting system and propane powered appliances annually. Likewise, have your chimneys cleaned and checked on a vearly basis.

3. Never use portable heaters, grills, or generators inside your home.

4. Never use your stove or oven for heating your home.

5. Never leave a vehicle running in a closed or partially closed garage.

6. Never patch a vent pipe with tape, gum, or something similar. This can trap CO in your home.

Sources: Centers for Disease Control and Prevention; Occupational Safety and Health Administration

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What Can You Do to Ensure Your Use of Propane in the Future?

It may seem difficult to solicit change when those in positions of power seem to have already counted out any other energy source aside from electricity. When many voices shout the same message though, it can turn tides. Having the ability to choose what clean energy source we use allows us to make the right decision for our families. Rather than allowing others to decide our energy future, there are ways we can advocate for energy independence.

Protectmypropane.com is a resource for propane consumers. This website allows you to become involved with securing your choice to use propane in your home or business. You will find petitions to sign that will be sent directly to decision makers indicating you would like to preserve your right to energy independence with propane.

There are rebates available through the Western Propane Gas Association for both commercial and residential propane use; utilize these funds! When consumers use up the money designated for propane appliances and equipment it signals to decision makers that there is a want and need for other energy sources aside from electricity. Find out more about these rebate programs by contacting your local DLE branch or by visiting WPERC's website: www.usecaliforniapropane.com and click on Incentives.

Talk to your neighbors - spread the word about how an all-electric future could impact Californians. Astronomical energy prices, a consistently unreliable electric grid, and the inability to choose how you power your home or business are all potential risks to keeping with the status guo.

Sources: Casio.com; energy.gov; propane.com; protectmypropane.com; usecaliforniapropane.com; realclearenergy.org; City Journal article "Transition to Nowhere"

Dependable Propane Service Since 1936





Signs and Symptoms of CO Inhalation

- You feel like you may have the flu headache. dizziness, weakness, upset stomach, vomiting, chest pain, confusion.
- Blurred vision and/or loss of consciousness, difficulty breathing.
- Those more susceptible to symptoms are: infants, the elderly, and/or those with chronic heart disease, anemia, or breathing problems.
- Acute poisoning can result in permanent damage to parts of your body that require a lot of oxygen. For example, your heart or brain.

If you suspect Carbon Monoxide is present, go outside immediately and call emergency services.

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Reduce your Carbon Footprint! Request to receive these newsletters electronically by submitting your email at deltaliquidenergy.com

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