# California Water and Infrastructure Report

**Formerly, the "California Drought (and Flood) Update"**

## For October 31, 2019

## by Patrick Ruckert

**Published weekly since July, 2014**

**An archive of all these weekly reports can be found at both links below:**

http://www.californiadroughtupdate.org

https://www.facebook.com/CaliforniaDroughtUpdate

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"*With wildfires raging across California on Wednesday—and with portions of the state living under an unprecedented "Extreme Red Flag Warning" issued by the National Weather Service due to the severe conditions—some climate experts are openly wondering if this kind of harrowing "new normal" brought on by the climate crisis could make vast regions of the country entirely uninhabitable.*

*Fears grow of an 'uninhabitable' California as climate crisis-fueled fires rage"*

*https://www.alternet.org/2019/10/fears-grow-of-an-uninhabitable-california-as-climate-crisis-fueled-fires-rage/*

## A Note To Readers

The quote above from another Chicken Little, of course, typifies the culture of pessimism that has come to dominate large sections of the so-called "political class" and much of the media in recent decades. That is not the outlook that built the Transcontinental Railroad, the Tennessee Valley Authority, Hoover Dam, the Central Valley Project and put a man on the Moon. And only a return to "the can do anything" idea that did accomplish what many said then, and now, was "impossible," will fix the catastrophe that is now California and much of the rest of the country.

This week we look at more background to the present crisis in California, including how PG&E is the marker for decades of turning this once production driven nation into, increasingly, a failed state.

The story presents the challenge to us all to, finally, grasp with both hands, the solution presented by Lyndon LaRouche for the past 50 years-- and encapsulated in his “Four Laws of Economic Recovery.” I present those immediately below, once again.

Then our report on PG&E, the electrical shutdown to millions of Californians which has been going on for near three weeks now, and the fires, includes a short report I wrote earlier this week, “Bankrupt and Carrion for the Vultures, PG&E Turns Off the Lights While California Burns.”

This is not (yet) the new California state flag

This is followed by a longer background report on the history of PG&E, deregulation of electricity and the shift by PG&E (like much of the U.S. corporate sector) beginning especially in the 1980s, to being completely focused on “share holder value,” and allowing the electrical grid to become the deadly danger it is today. I title this section, “An Autopsy of California and Pacific Gas and Electric Company (PG&E),” since there is no question that PG&E will not continue to exist in its present form.

The report concludes with a video from my associate Jason Ross, “$CO_2$ Reduction is Costly, Deadly, and Unnecessary.” I am sure it will delight some and enrage others. Have fun.

# LaRouche’s Four Laws for Economic Recovery and the Four Powers Agreement

http://media.larouchepac.com/larouche/documents/20180503-LPAC-2018-Campaign-web.pdf

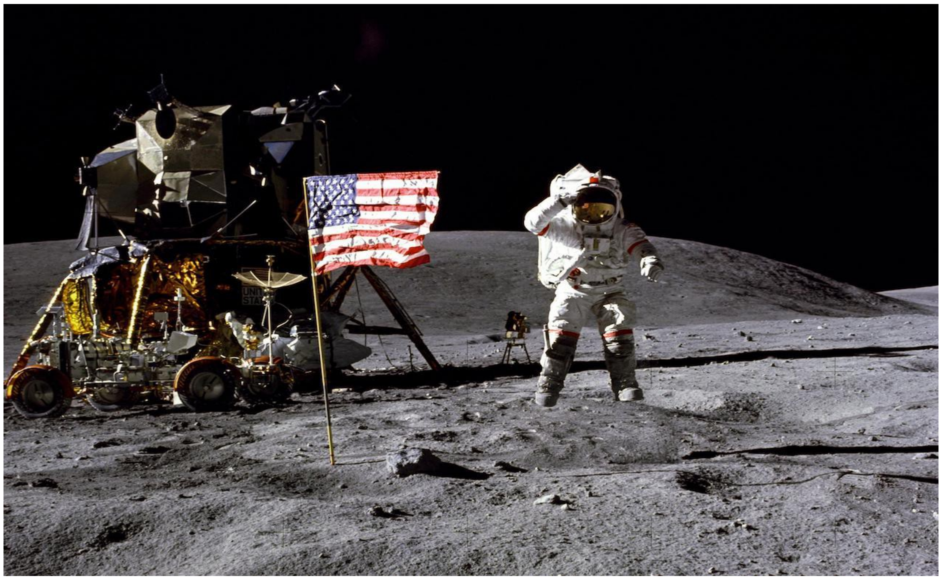
https://larouchepub.com/eiw/public/2016/eirv43n46-20161111/06-11_4346.pdf

https://larouchepac.com/20170225/four-laws-pamphlet

Lyndon LaRouche has provided us with the Four Laws which can produce the economic recovery of the United States:

1. Re-enactment of the Glass Steagall Act separating commercial from speculative banking and ending public bailouts of Wall Street gambling debts;
2. A new national bank or other credit-issuing mechanism, such as Lincoln’s Greenbacks, capable of producing massive amounts of credit for long-term economic projects;
3. Use of this national banking mechanism to fund only such projects as will raise national

productivity and create high-paying jobs in productive sectors of the economy; and
4. A crash program to develop fusion power, the energy source of the future, the energy flux density and power of which allows us to transform raw materials, power entire continents, and power space exploration and colonization.



Astronaut John W. Young, commander of the Apollo 16 lunar landing mission, leaps from the lunar surface as he salutes the United States flag at the Descartes landing site during the first Apollo 16 extravehicular activity. Credit: NASA

The most obvious place to invest the financing available through this long-term credit mechanism and participating private banks is in building a modern infrastructure platform for the U.S. economy, while also creating crash programs to develop fusion and explore near space and the Moon. Since we have damaged our physical economy, and savaged our labor force in the last decades, a crash effort in this respect is urgent if we are to raise productivity and ensure long term growth. New programs in classical education and the sciences and programs drawing our youth into rebuilding the country, akin to the CCC, are necessary elements of this economic thrust. The optimism generated by such a national mission is the best antidote to the drug epidemic and mental instability presently haunting our country, although major rehabilitative and interdiction efforts must also be urgently and ruthlessly undertaken in this regard.

None of this is possible, however, if the present financial system is allowed to continue and suffers its inevitable crash. An uncontrolled collapse will mean the certain unnecessary death and suffering of millions throughout the world. Just like we know how to prevent the fires in California, we know what type of stable financial system will allow for a world-wide economic renaissance, namely, a revived Bretton Woods system among sovereign nation states trading between themselves to massively advance each and every economy and human being in the world.

# Bankrupt and Carrion for the Vultures, PG&E Turns Off the Lights While California Burns

By Patrick Ruckert
October 28, 2019

With world-wide, non-stop news coverage of the catastrophe now engulfing the state of California, there is no need here to provide a lot of detail of the unprecedented fires, electricity cut-offs and general mayhem that millions of people are now experiencing.

To summarize, each Fall in northern California what are called the Diablo Winds, and in southern California the Santa Ana winds, come off of the Rockies and the Sierra Nevada range, creating very dangerous conditions for fires.

This year, the winds are at record strength, with the Diablo Wind yesterday hitting over 90 mph (well beyond the wind speed ever previously recorded), driving the major northern California fire's growth (the Kincaid Fire, about 60 miles north of San Francisco) to go from 30,000 acres to about 60,000 acres in one day. The city of Santa Rosa (population 175,000) is being partially evacuated. That city had a significant section burn in a 2017 fire that killed 22 people.

More than 180,000 people have been evacuated from the fire area. As a fire prevention measure the major northern California utility--- Pacific Gas and Electric (PG&E), for the third time in two weeks, has shut off the electricity for most of California north of San Jose, leaving 2.7 million people, this time, in the dark, and who will remain in darkness at least until Wednesday. All schools and businesses are closed, water pumping for urban and agricultural areas is mostly shut down, some sewage treatment plants have their own generators, but those that do not are not functioning.

The Kincade Fire

My report of October 12 provides substantial background that people can read, which the summary just below encapsulates:
[http://www.californiadroughtupdate.org/20191012-PG%26E-Turns-Off-the-Lights-in-California.pdf?_t=1570935202](http://www.californiadroughtupdate.org/20191012-PG%26E-Turns-Off-the-Lights-in-California.pdf?_t=1570935202)

In 2017 and 2018 it was PG&E equipment that provided the spark for some of the fires that burned thousands of homes and killed more than 100 people. Found responsible for the tragedy, PG&E was liable for about $30 billion in damages and thus filed for bankruptcy in January of this year.

Shutting down the power grid as precautionary measure to prevent the company's equipment from starting more fires this year is nothing but a measure of self-protection by PG&E, but also one mandated by the court as part of the parole conditions imposed on the company. More below on that.

Being the largest private utility in the country, with tens of billions of assets in facilities, equipment and the power providing infrastructure that delivers natural gas and electricity to eight million customers, PG&E in bankruptcy began looking like an easy prey for the vulture funds like Elliott Management, run by the notorious predator Paul Singer. Singer and his hedge fund partners swoop in on debt plagued companies (and countries like Argentina), buy up the debt for pennies on the dollar then sell off assets or sue and sue until they receive full face value of the debt. Added to the list of vultures circling the company, Governor Gavin Newsom on Sunday invited Warren Buffett's Berkshire Hathaway to make a takeover bid.

So, we have two stories here. First how in the hell can California, supposedly the most modern and advanced state in the nation, be thrown back to existing as we did more than a century ago-- without electricity? The second story is actually a continuation of story that bankrupted PG&E (and Southern California Edison) in 2001. Again, another story of predators. That time the name was Enron.

After more than 40 years of the post-industrial policy of shifting the U.S. economy from a production-based, science and industry driven, infrastructure building foundation, the collapse of the real physical economy has been made manifest in Hurricane Harvey, the Northeast hurricane, the floods this year in the mid-west, and now the entire electrical grid and accompanying fires in California.

Part of that breakdown process, as seen especially with PG&E, has been the 30 year shift to putting "share holder value" above all else. Thus, PG&E has not only cut-back on maintenance of its lines and equipment, not invested in hardening its equipment and clearing trees and branches near its lines, but, especially in its natural gas side, falsified maintenance records and lied about it in court. Thus the San Bruno (suburb of San Francisco) gas explosion in 2010 resulted in felony convictions of the company.

As my October 12 report highlights, PG&E has more than 100,000 miles of overhead lines in its service area and is putting underground only 100 miles of those lines per year. Trimming the trees for that system, at the present rate, will take a century, even if there were enough experienced and trained trimmers to do so.

As for what needs to be done, or can be done, in regard to the fire danger and incidents: For now, not much.

There is no question that the climate has changed and makes the fires more dangerous and destructive. While it is not just drought and dryness of the fuel, that is a significant factor in recent years record breaking size and destruction of the fires, decades of environmenalist policy of allowing fuel buildup in the forests and not allowing the harvesting of the 130 million dead trees (those numbers are from just the last few years) obviously increases the intensity of the fires.

President Trump's attacks on California policy, while in the right direction, leaves out the fact that only 40% of the forest land is state owed, while 60% is federal in national forests and national parks. So, it is not just a state forest policy that has made the West generally a fire trap.

Proposals from the Mayor of San Jose and others to make PG&E a public utility owned by the state or broken-up and owned by cities are being floated now.

For now, a couple of ideas come to mind that can be immediately implemented. Of course, to understate it, the adoption of Lyndon LaRouche's Four Laws would be more than helpful.

Since the governor declared a state of emergency on October 27 for all of California (fires are burning and new ones starting daily throughout the state), Newsom could order an army of electricians and others to move in on PG&E and fix the equipment, hardening it and repairing potentially loose connections and other tasks.

Secondly, the state and/or the federal government can establish a CCC-type program to hire and train 5,000-10,000 youth as a "Tree Trimming Army." An apprentice-type program, with both classroom and on the ground skill learning, would obviously have multiple benefits. It should be noted that tree trimming and logging are the second most dangerous profession in the U.S. today. At least a couple of years of training with experienced trimmers and loggers will be necessary for these youth to become professionals.

# An Autopsy of California and Pacific Gas and Electric Company (PG&E)

Yes, an autopsy, for PG&E will not survive in its present form.


PG&E headquarters in San Francisco

PG&E is the largest U.S. privately owned utility with publicly traded stock. PG&E provides natural gas and electricity to most of the northern two-thirds of California. The California Public Utilities Commission regulates the company.

With its roots in the 1852 founding of the San Francisco Gas Company and Electric Company, which merged with the California Electric Light company in 1905-- the new company became PG&E. For the next two decades the company merged with or bought out dozens of electric and gas companies, and by 1927 it had nearly one million customers in more than 300 northern California communities. Mergers and acquisitions continued through the 1930s and by the end of the decade PG&E dominated all of northern California.

Up until the late 1960s, PG&E was the pride of the state and its employees enjoyed not only high wages but an environment that made the company almost like their family.

That all began to change with the rise of the environmentalist movement in the late 1960s and the shift nationally from an economy based on production to one based on financier speculation. PG&E's nuclear power plants were the target of the environmentalists and began creating financial problems for the company as law suits delayed construction of the plants, sometimes for years, doubling or tripling the costs.

**Then came electricity deregulation.**

The following is from an October 6, 1995 article in *Executive Intelligence Review* by Marsha Freeman, “Deregulating U.S. electric utilities: the 'kill factor.'”

https://larouchepub.com/eiw/public/1995/eirv22n40-19951006/eirv22n40-19951006_014-deregulating_us_electric_utiliti.pdf

*“The first push for deregulation, in the mid-1970s, had nothing to do with lowering prices; actually, it did just the opposite. The Public Utility Regulatory Policies Act (PURPA), signed into law by President Jimmy Carter, mandated that the utilities carry out the administration's agenda to force the introduction of small-scale "renewable" energy sources, such as solar, wind, and biomass, to "compete" with fossil-fuel-and nuclear-based electric utility generation. This was sold to the public as a necessary response to the purported "energy crisis," resulting from the 1973-74 Middle East "oil" war.*

*“PURPA stated that the electric utilities must purchase power from new, non-regulated plants, called "qualifying facilities," which used renewable energy, whether they needed the electricity or not. The price the utilities would have to pay for this power was calculated by projecting the so-called "avoided cost" of the utility. The non-utility producers could force the utility to buy the electricity over a long-term contract, for what it was projected that the utility's power would cost a decade later-costs that would supposedly be "avoided" if the utility bought this power, instead of producing it.*

*“What was this "avoided cost?" At the time PURPA was passed, there were projections from James Schlesinger'S Department of Energy that oil would skyrocket to $100 per barrel over the decade of the 1980s, so the cost of new utility baseload capacity was expected to be very high. When the 1990s rolled around, however, and oil was one-fifth the price of what had been projected, utilities found themselves bound to long-term contracts forcing them to buy electric power that they did not need at double or triple the cost of what it would cost them to generate it themselves. This was very effective in driving up electric rates.*

*“The National Energy Policy Act of 1992 (NEPA) continued subsidizing already-disc edited 'alternative energy' sources, by providing a 10% investment tax credit for solar and geothermal power system.*

*“Domestically, the 1992 Act created yet another class of nonregulated electricity producers, known as exempt wholesale generators, and broadened the authority of the Federal Energy Regulatory Commission (FERC) to order the utilities to provide transmission services. This meant that virtually any business could generate electricity and sell it wholesale, with guaranteed access to the highly complex transmission grid. While regulated investdr-owned utility companies, which have a legal mandate to serve, were increasingly being encroached upon by independent power producers who have no such mandate, irldustries being driven out of business by the industrial collapse put the squeeze on the utilities.*

*“In 1993, independent power producers generated only 7% of the total electricity used in the United States. But the price utilities had to pay for it was truly fantastic. A study by the Resource Data Institute in Boulder, Coloradoin 1995 revealed that the hundreds of independents can be considered a $37 billion tax on the utilities and their customers, because that is what they will receive from utilities, by law, above the market price by the year 2000. For specifics, Southern California Edison, in 1995, was paying 15 cents per kilowatt-hour for solar generated electricity, or five times wholesale market price (what it could buy the power for), costing the utility and its customers an extra $800 million per year.*

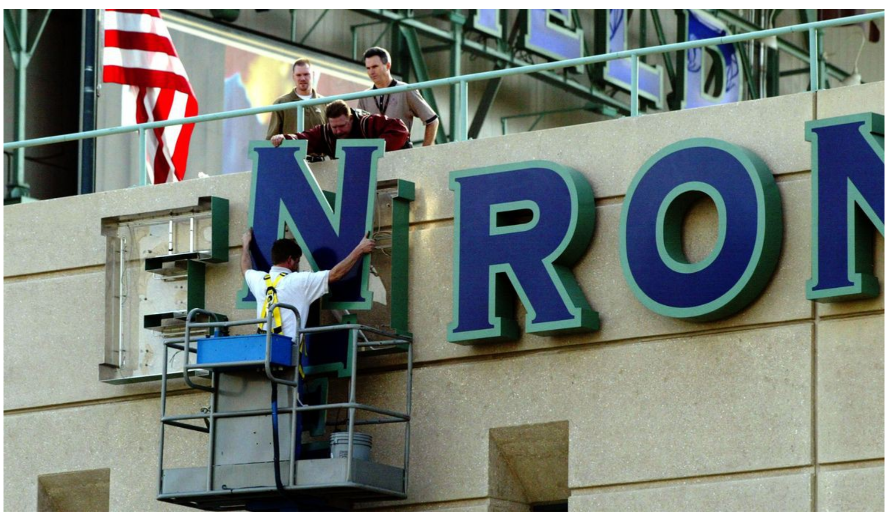
*“Generating capacity that is not spoken for through long-term contracts, was to be available through a spot market. Under some scenarios, the market price for electricity will be calculated on an hourly basis. A central, or "pool" dispatch organization would have to match customers to available capacity. In between, there would be brokers, merchants, and other middlemen, who would try to drum up business for utilities, and find available capacity for consumers, for a fee. Analysts expect to see price*

*hedging, futures markets, and a place for electricity on the Mercantile Exchange. But it was to stop this kind of financial manipulation that the industry was regulated to begin with. At the time the 1935 Public Utilities Holding Company Act (PUCA) was signed into law, there were 16 interstate holding companies that controlled 76% of all power generation. Three accounted for nearly half. As described in the Wisconsin study, "During the 1920s, the electric utility industry was plagued by the [sic] questionable financial manipulations, trusts, stock fraud and pyramiding schemes, and inflated estimates of the value of utility plant or 'padded rate base.' " Why bring back the bad old days?*

*"More bankruptcies When surveyed last year by Fitch Investors Service, Inc., 38% of the nation's state public utility commissioners believed that competition will lead to bankruptcies in their state.* ***In the 60 years since the industry was regulated, there have been only two bankruptices. One was due to the 17-year battle to obtain an operating license for the Seabrook nuclear plant, and the other from bad savings and loan and real estate investments made by the EI Paso Electric company."***

**What deregulation did to PG&E**

With electricity market deregulation in the late 1990s, PG&E sold off most of its natural gas plants, while retaining its hydroelectric plants and its Diablo Canyon nuclear plant, thus stripping itself of much of its generating capacity. Thus, PG&E and other electrical companies were then forced to buy power from private companies generating power at fluctuating prices, while still forced to sell the power to its customers at a fixed cost-- fixed by state regulators. (All electrical power providers, public and private, of course, have been regulated since the 1930s.)




Enron being dismantled

The market which PG&E and others bought from was dominated by the Enron Corporation, which "gamed" the market, shutting down generating plants to create an artificial shortage and thus raising prices that PG&E had to pay by as much as thousands of percent. Thus the California electricity crisis of 2000 began, with rolling blackouts in the state starting on January 17, 2001. The crisis intensified in the spring of that year, Enron intensified its manipulation of the market, and PG&E began sinking financially. PG&E declared bankruptcy on April 6, 2001. The state then acted to ensure the electrical supply to PG&E's 5.1 million customers, but was trapped in the same Enron-dominated market being "gamed." And until Enron was brought down with criminal indictments, between PG&E and the state, more that $50 billion was paid out in virtual blackmail to these criminals. From then on, the residents of California have been paying the highest electricity rates in the country, partially that is to pay off the $50 billion of "Enron debt."

Yet, even before deregulation, PG&E had been more and more focused on enhancing "share holder value," ie. paying out to stock holders as much as possible, while cutting its workforce, skimping on tree trimming and not maintaining and upgrading its equipment and facilities.

In 1997, PG&E was found guilty of 739 counts of negligence and fined $2 million. The company had been cutting its budget for tree trimming and lying about it.

By the time of the San Bruno natural gas explosion in 2010, which killed eight people and for which PG&E was found guilty of multiple felonies, we must conclude that the company had become a criminal enterprise.

Continuing its neglect of maintenance, tree trimming and lies about it all, by 2017 and 2018, near forty of the 315 wildfires in the PG&E service area were probably caused by PG&E equipment. The largest and most deadly fire (85 people dead), the Camp Fire in 2018 was determined to have been caused by PG&E equipment.

In addition, after having been convicted and on probation after the San Bruno gas explosion of 2010, PG&E was charged again of having falsified gas pipeline records between 2012 and 2017. That case is still in progress.

**The 2019 bankruptcy**

Since California state law follows the principle of "inverse condemnation" for wildfire liability, utilities are responsible for damages from any fire caused by the company's equipment, even if tree trimming and maintenance of equipment has been done to standards.

Thus, the 2017 and 2018 fires found to be from PG&E equipment put a $30 billion liability on PG&E, driving it into bankruptcy, filed in January, 2019.

**Fixing the problem**

Not just PG&E, but the other major utility companies in the state also face the same set of conditions. San Diego Gas and Electric for ten years has been hardening and upgrading its equipment, has an aggressive tree trimming policy and even has a fleet of helicopters monitoring its thousands of miles of lines. It began that after having been held responsible for fires in its service area.

But that company and Southern California Edison in the Los Angeles and Orange County area are, like PG&E, shutting down electricity during high wind conditions.

There are no short-term fixes possible, since the problem has been the result of decades of neglect, wrong and even criminal policies. Only a national change, like that outlined in LaRouche's Four Laws can really begin what must be done.

One gets a sense of the enormous task that is required to make PG&E's system safe when you understand what that system includes. PG&E, has 107,000 miles of distribution lines, 81,000 miles of which are overhead. The cost to put PG&E's overhead distribution lines underground (at an estimated $3 million per mile) would be $240 billion. This does not include the higher voltage transmission lines.

Putting PG&E and the other private electrical companies under seriously strict regulation, or having the state take over the company, or all of them, as some are proposing now, must be done. But, it must be emphasized, that just as President Franklin Roosevelt made clear in his 1933 inauguration speech, action and action now, is demanded.

As I wrote in my October 28 report (see above) a couple of ideas presented there set the climate for the kinds of actions to be taken. I repeat them here.

*"Since the governor declared a state of emergency on October 27 for all of California (fires are*

*burning and new ones starting daily throughout the state), Newsom could order an army of electricians and others to move in on PG&E and fix the equipment, hardening it and repairing potentially loose connections and other tasks.*

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CCC crew members in Cook County take a break from tree planting for a photo/image courtesy of the Cook County Historical Society

# A Video to Conclude This Week's Report

## $CO_2$ Reduction is Costly, Deadly, and Unnecessary

https://www.youtube.com/watch?v=LUJYzhsnu6k&feature=share&fbclid=IwAR1emFby4NVL0MexoTo_tPS7ywnwyOcNYuUmBDmo6LNqffxGhF3p_U5D27M

Oct 31, 2019

LaRouchePAC Videos

Rather than eliminating poverty, going to space, and making life better for generations in the future, some people seek instead to direct trillions of dollars of investment towards reducing $CO_2$ emissions! (http://lpac.co/co2) Jason Ross explains why such green investment would result in tens of millions of deaths through lack of development caused by energy poverty. A review of the "science" behind global warming reveals that it is from the "political science" department, and is full of misleading generalizations, uncertain models, and a rush to achieve a political aim: the reduction of the world's population. This presentation is part of an Oct 5 2019 Schiller Institute event.