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CALIFORNIA FOLLOWING DANGEROUS ENERGY PATH

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On a sweltering June day, the California Independent System Operator (CalISO), the group that oversees the state's electricity grid, issued the first "flex alert" of the year. That same week, a major California utility announced it had reached an agreement with the environmental community to close down a large nuclear power plant in the state. It was an ominous combination for California's future.

A flex alert is a warning that certain areas need to conserve energy or face blackouts, which are normally the province of third-world countries rather than wealthy states such as California.

Blackouts, forewarned or not, leave businesses idled, unable to serve customers, make widgets, or do whatever else they are doing to create wealth. For a state like California, with an already miserable business climate, an unreliable power grid is a 20-penny nail pounded into its economic coffin.

Now, imagine the state's energy system as a business. Think of a flex alert as a bankruptcy warning, telling everyone that the day's liabilities (energy demand) might exceed the day's assets (energy supply). Then imagine that business announcing revenues were going down nine-percent, but they would make up the loss by employing less reliable, more expensive equipment. That stock would tank!

That brings us to Diablo Canyon, the state's last remaining, active nuclear power plant, which has been churning out dependable, carbon-emission-free energy since the 1980s. By itself, it is responsible for a whopping nine-percent of the state's electricity production.

After three decades of incident-free operation, the plant is now considered too risky and is being shuttered twenty years early, ceasing operation in 2025. There is your nine-percent haircut on the struggling business's revenues. The plant's operating utility, and the environmental groups who orchestrated the shutdown after decades of protest, announced that the massive hole they were punching in the state's energy supply would be

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patched over with a mix of wind, solar, and conservation. That sounds great, and it may be true someday, but even if it is, it comes with great cost.

Germany, a global icon for renewable energy proponents, illustrates California's future. Under the "Energiewende" program, Germany is attempting to slash carbon emissions from electricity production 80-percent by 2050, and their transition to solar and wind is costing them a fortune.

American residential energy costs are about 12.5 cents per kilowatt hour. Residential electricity costs in Germany are expected to increase by 13 cents per kilowatt hour *just this year* – an increase of roughly \$700 dollars per family.

The costs of subsidizing the country's green power have risen to such heights that their energy minister proclaimed them to be at the end of their ability to pay, and warned that unless they change their policy they run the risk of deindustrialization. That would certainly cut down emissions.

Energiewende is a policy success only to those who fetishize the benefits of wind and solar but are blind to their drawbacks. But with that experience in plain sight, California is marching ahead with its own policy to reduce greenhouse gas emissions 80-percent by 2050. That goal risks crippling the California economy and driving families out of the state.

California already has an average retail electricity price about 50-percent higher than the rest of the country. More than a million households in the state live in "energy poverty," where they pay more than 10-percent of their incomes for energy (and that excludes gasoline).

With Diablo Canyon shutting down, and unreliable, expensive wind and solar supposedly filling the gap, expect to see more energy poverty.

There are other paths. The United States is leading an energy revolution in affordable, reliable natural gas and oil. Advancements in mapping, hydraulic fracturing and horizontal drilling have propelled our country into energy superpower status and smashed the price-fixing power of the OPEC cartel. It's a stunning turnaround from the doom-and-gloom predictions of the peak oil catastrophists, and it offers hope for some policies that could save California from Germany's politically-induced fate.

California must ensure that there are no barriers to exploiting the Monterey Shale, which is the largest shale oil deposit in the United States and is buried under the California soil. The Monterey Shale might hold as many as 15.4 billion barrels of oil, which could be a trillion-dollar

shot in the arm to California and create tens – or possibly hundreds – of thousands of jobs in the state. Economically, tapping into the Monterey Shale would have the opposite effect from implementing a California Energiewende.

But that will never happen unless the state lowers its guard a little when it comes to hydrocarbons. The Pacific Research Institute recently released a study, *Regulating the Upstream Energy Industry*, that detailed some of California's self-imposed barriers to unlocking the Monterey Shale riches. Not surprisingly, it noted how the state's tax regimen, burdensome labor regulations, and 47th-worst lawsuit climate damage the state's oil and gas business, just as they impede every business there.

But it also elaborated on some industry-specific problems unique to the state that stifle oil and gas development. The study found that the state's permitting process drags out far too long, providing uncertainty and adding costs to companies hoping to drill. Short of an outright ban, California imposes the strictest regulations on fracking anywhere in the country. Combine all that with the state's tight land use laws, and California becomes a state that is more hostile to hydrocarbon production than even the Obama administration. *Regulating the Upstream Energy Industry* points out that California is one of the few states whose laws are so anti-oil that most of its drilling takes place on federal and private lands.

Even with an iron grip on the industry, the state's powerful environmental groups and some legislators are not satisfied, and call for an outright ban on fracking. The Monterey Shale is worthless if government stops everyone from developing it.

California also needs to modify, overhaul or eliminate electricity regulations that drive up costs for already tapped out businesses and families, including its Germany-like targets for emissions. Electricity has been an almost magical boon to prosperity, delivered quietly, affordably and dependably to everyone. We take for granted that when we flip the light switch, or turn on the assembly line, or power up the massive data center, that electricity will not fail us. Regulating it into a luxury good would be a huge policy failure for the state.

The Pacific Research Institute strives to keep California on the path to a cleaner environment. But it's also guided by a desire to knock down California barriers to economic success. It's not always easy to find the right balance between the twin goals, but when California policy is shutting down wealth creation and pushing the state towards blackouts and sky-high electricity costs, it's time to change course.

