Henry Thompson

Short Circuits in the Energy Markets: California and Competition

California utilities have been paying 25 cents per kWh and more for electricity this winter that by law they have to sell for 7 cents, not exactly the way to stay in business. The same California lawmakers who created this ridiculous situation want to confiscate property of the utilities as collateral for paying their $12 billion debt with taxes. The electric industry in California has not been "deregulated," but is held captive by the state government.

Halfway around the world, OPEC leaders meet and decide to tighten the world oil supply. When the price of oil jumps, people demand other types of energy and all energy prices jump. What is the connection and where does this leave the United States? Welcome to the future of energy markets, where there are only two certainties: Someone will have to pay the bill and nothing will be like it used to be.

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For the past 75 years, states have granted monopoly status to utility companies. No other firms could generate, transmit, distribute, or sell electricity inside a

state. State public service commissions regulated the monopolies, aiming to make them behave like efficient competitive firms. The utilities might be somewhat inefficient, but with abundant energy sources the price of electricity was low and supplies reliable. Now energy scarcity is increasing, energy prices are rising, and lawmakers who had little idea about the industry in the first place are passing sweeping laws to deregulate or restructure it.

Part of the proposed restructuring is "retail competition" that allows electricity customers to choose their supplier. Customers in high-price states like California are pushing for the right to buy from suppliers in other states. With retail competition, electricity producers will also be free to choose their customers. Suppliers in low-cost states will choose to sell to customers in high-price states. With increasing export demand for cheap electricity, the price of electricity inside these states will rise.

California effectively imports about all of the electricity exported by Washington, Oregon, Utah, Arizona, Montana, Wyoming, and New Mexico, not to mention substantial imports from Canada and Mexico. This interconnected region has been forced to increase exports to California this past winter, causing higher prices for local customers. States in the Northeast and Florida are other large importers.

The push to restructure arises from increasing energy scarcity and rising prices. Energy comes in various raw forms. Oil and coal remain the basic energy sources

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but they cause pollution, a costly local problem. There are ample supplies of coal, the main fuel for electricity generation, but pollution concerns may limit coal burning or require very expensive scrubbing. Either way, get ready for higher electricity bills. As oil is depleted over the coming decades, its price will rise exponentially. It may sound crazy, but oil prices of $150/barrel and gasoline priced at $10/gallon are on the horizon.

Natural gas is a popular fossil fuel because it burns with fewer pollutants. Natural gas from the Gulf Coast comes up the slowly expanding pipeline system to a new generation of efficient gas turbine generators. But the pipeline system is expanding much more slowly than demand and natural gas prices will climb steadily with increasing scarcity. To complicate matters, all fossil fuels release carbon dioxide that may be limited by international agreements on global warming.

Nuclear reactors run on cheap uranium but radioactive waste disposal is a problem. Nuclear generators are getting old and no new ones are being built or even planned. Hydroelectricity has been an energy source but now the only talk is about which dams to tear down.

What are the solutions to this dismal energy picture? Nobody knows, but be wary of any proposed government solution. Any energy "plan" would be doomed to failure. Consider, for instance, the oil tariffs of the 1950s, designed to keep domestic oil fields in operation but amounting to a policy of "Drain America first." Remember also the price caps on gasoline during the OPEC oil embargoes of the 1970s and the long lines at the gas pump. Markets have to be allowed to work freely. Faced with higher prices for electricity and other sources of energy, consumers will economize and firms will innovate.

There are thousands of people working in the increasingly competitive energy industries

trying to innovate, improve technology, and develop cheaper and more efficient energy systems. When the energy markets are allowed to become competitive, innovation will lead to efficiency and alternative energy sources.

Competition will work in the energy markets but markets have to be allowed to send price signals. The shortage of electricity in California would disappear tomorrow without a regulated retail price. There would be no shortages or blackouts if consumers had to pay the market price. Faced with higher prices, consumers would economize. Electricity prices in California will ultimately depend on the path of restructuring and investment in the state. If the state government plays a bigger role in the energy markets, there will be limited incentives for investment.

Competition in the energy markets is on the way. Competition has begun in the wholesale electricity market and interstate transmission has been increasing. During the transition to competition, low-cost states should let all the risks be taken by high-price states like California with more to gain. Projections from the Department of Energy and various economic models suggest that retail competition would result in higher electricity prices over the next 10 years than in some states now. There is no need for low-cost states to rush into retail competition as long as their prices remain low.

One principle to remember for the future is that prices for raw energy will rise as sources are depleted. Final consumers have to pay these higher prices or the market system of production and distribution will collapse. Economics and history very clearly teach that there is no other system of production and distribution that works. California's present energy collapse is another example of failed market intervention by government. ■