

Ferguson: Energy Matters

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Keeping Energy Options Open

“Do I have to decide right now?” my wife often hears me ask.

Faced with important decisions, most of us will procrastinate as long as possible, but options can disappear if we’re not paying attention. We expert procrastinators keep our options open.

California has been pondering its limited electric energy options for several years. For all practical purposes, the choice is between gas-fired power and renewable energy, as described in last week’s column. To keep the renewable option open, however, the state must begin quickly to provide transmission access for renewable energy resource areas.

Access to energy from gas is available nearly everywhere (although not here in Boonville) so new gas-fired power plants often can be located close to existing power lines.

Renewable energy is available only where Mother Nature puts it—where the wind blows heartily, the sun shines brightly, and where geothermal fluids are close to the surface of Earth. Unfortunately, these places are often remote from urban areas the need electricity. For the renewable energy option to remain viable, transmission access to what are known as “locationally constrained resources” is essential.

As readers know, it takes a long time to build new electric transmission lines. Planning, permitting, and construction can take a decade or more. The energy options available to California in the year 2020 will be limited by transmission projects that are—or aren’t—begun today.

RETI, the Renewable Energy Transmission Initiative, has been given the thankless task of identifying transmission projects needed to access the best renewable energy resource areas. A recommendation from RETI is expected around the end of this year.

The decision to proceed with transmission planning and construction is not up to RETI, which has no authority—except perhaps a bit of moral authority. The California Public Utilities Commission, the grid operator, and the publicly owned utilities will decide what will be built and when.

As readers are aware, I am an advocate of aggressive policies to increase the use of renewable energy. As an expert procrastinator myself, however, I am somewhat sympathetic to hand-wringing worries about the cost of renewables relative to gas.

The choice between gas and renewables depends largely on expectations for the future price of natural gas. If California thinks natural gas will be cheap in the future, it will invest more in gas and less in renewable energy.

Alas, we have no way of knowing now what the price of gas will be. The price has tripled in the last decade, but, by some miracle in the marketplace, this trend may stop and even reverse itself.

The trouble is, if we simply wait to find out and gas prices continue to rise, as I expect, the renewable option will have disappeared. California will be stuck with more high-priced gas-fired electricity.

To keep the renewable energy option viable, California must proceed immediately to provide transmission access to renewable resource areas.

There is some risk associated with this strategy, of course. What if California builds transmission to renewable resource areas, and gas does turn out to be cheap?

In my opinion, the investment in transmission for renewables—a small fraction of the investment required for renewable generation—would not be wasted. It appears highly likely that sources of non-fossil energy will be tapped in the not-too-distant future to address climate change.

Moreover, the transmission system must be upgraded to meet increasing loads regardless of how the additional electricity is generated.

Furthermore, construction of renewable transmission can be done in phases and the schedules adjusted if market conditions warrant.

I don't know how much longer California will continue to dither over the choice between gas and renewable energy.

I do know that failure to begin immediately to provide transmission access for renewables will take the renewable option off the table in the 2020 timeframe. Think of renewable transmission as a flexible insurance policy to guard against the very real possibility that the price of gas will continue to rise.

A decision to delay renewable transmission investment is tantamount to a bet that gas will be cheap in the future. Who wants to make that bet?

—Dr. Rich Ferguson, Research Director, CEERT, rich@ceert.org.

Opinions expressed by DrF are not necessarily those of any organization with which he is affiliated.