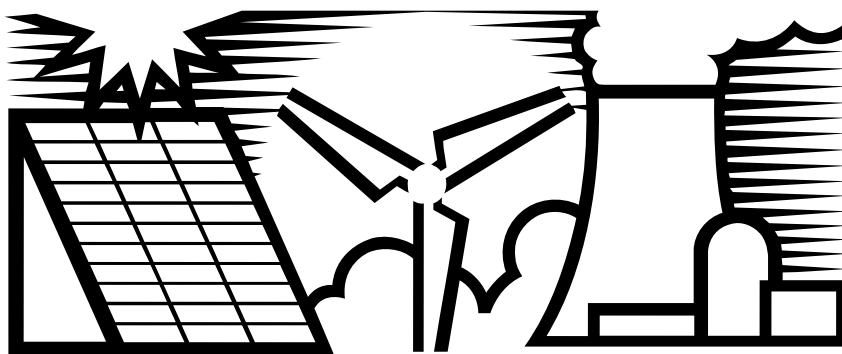


Satisfying our Energy Appetite Requires a Diverse Menu

We're in the middle of a green revolution in America, with towering wind turbines and bright solar arrays dominating headlines as the future of electric generation. No doubt, those technologies will certainly take on a bigger role in "keeping the lights on." But despite media hype, they won't totally replace "conventional" sources for producing electricity, such as coal, natural gas, and nuclear power, any time soon.

To meet growing demand for electricity, electric co-ops will continue to mix and match generation resources, finding the best way to balance environmental concerns while ensuring delivery of affordable and reliable power. And because federal climate change legislation will likely boost the price for every kilowatt generated by fuels that emit carbon dioxide – notably coal and natural gas – nuclear power may very well become an attractive option once again.

For starters, nuclear power doesn't release carbon dioxide in the air. It's also reliable (available 24/7), unlike other renewable energy options that are dependent on breezes or daylight. In the past, nuclear power has faced opposition because of waste and safety concerns. However, commercial nuclear reactors have been operating since the 1950s, and most problems have been worked out. In addition, other countries have jumped on the nuclear bandwagon in a big way, and perfected the



technology. Over the past 40 years, for example, France built enough nuclear power stations to provide two-thirds of the nation's energy, and in the process recycled the radioactive waste created – using it over and over again as fuel.

In the United States, largely because of added construction costs imposed on nuclear plants following the Three Mile Island accident in 1979, no new nuclear facilities have been ordered and built from scratch since 1973. That's a long drought. However, utilities are ready to break ground on 26 nuclear reactors in 16 states, while another 11 reactors are in the planning stages. These new reactors, if built, will run much more efficiently, generate more power, and boast lots of new safety features.

Even with a nuclear renaissance, coal will remain a keystone of electric power in the U.S. More than half of the nation's electricity is generated by coal; the goal is to burn it as cleanly as possible. One of the most promising options involves carbon capture and storage (CCS), where

carbon dioxide emissions are pulled out before they're released up a power plant smokestack. The collected gas is then pumped thousands of feet down into geological formations where it will be entombed forever.

Large-scale CCS technology is just now being tested, and won't be commercially viable for at least a decade, if not longer. But CCS may become a cost-effective option as co-ops focus on research and development to lower costs.

So the next time you hear someone talk about nuclear power or clean coal, remember both of these fuels are key to keeping power affordable and reliable. We will have to mix and match our resources if we want to find a balanced, sustainable solution for our energy future!

This energy perspective is brought to you by Eastern Illini Electric Cooperative. Your connection to energy wise living and a Touchstone Energy cooperative. For more information visit our Web site at: www.eiec.coop.

