



Jacobson and Stave

Striking the right balance on climate change

by Jay Jacobson and Lowell Stave

North Dakota's electric cooperative leaders have been lifelong stewards of the environment. Our grass-roots leaders, from local directors to those representing us on the boards of our

cooperatively owned generating plants, have strived to generate, transmit and distribute electric power in the most environmentally friendly ways possible, while at the same time balancing that stewardship with the price we must charge for electricity.

This year, much attention is focused on the question of global climate change, and what can be done to lower levels of man-made carbon dioxide (CO₂) emissions.

This attention is primarily focused on the U.S. Congress, where the debate this summer will center on proposed legislation which has made its way to the floor of the Senate. As Congress considers this legislation and other approaches to dealing with climate change, lawmakers are already hearing from various sectors of their constituency—some with narrow, special interests.

Congress clearly needs to see the broader picture. Most Americans will want legislation which not only achieves reasonable carbon reductions but which also at the same time preserves our economy and enables the best use of resources.

True leadership on climate change will require balancing competing goals that all serve the public interest. Ensuring there will be needed supplies of affordable power is in the public interest, as is the need to address climate change concern. It is possible to do both, and legislators will benefit by hearing from ordinary Americans urging this comprehensive approach.

In this debate, there are people of good will on both sides. The issue is about protecting the environment; no one is against that. Yet, enacting legislation will require a serious consideration of the status of technology development and cost of carbon mitigation in order to avoid impacts which could have serious electric reliability and economic consequences.

Lawmakers must not only examine all the consequences, lawmakers should engage in an honest conversation about those consequences before taking action. We need a climate change plan that people can live with today, even as they deal with the climate change problem of tomorrow. To be successful, the plan must be developed with the input of all parties, and it must offer a balanced solution to climate change issues.

Each of us has a role to play in making sure our elected representatives remember their obligations to protect the public's interest in maintaining affordable, reliable electricity. That's where you, as co-op members—and electricity consumers—come in.

We ask you to contact your U.S. congressional delegation and your state governor to let them know of your concerns. You can do that by visiting this site on the Internet: www.ourenergy.coop. Please visit this Web site, log on, and weigh in on carbon emissions (climate change) legislation, or you can stop by our offices in Milnor and Edgeley to sign a petition expressing your concerns.

Our energy,



WITH COAL IN QUESTION

Where will tomorrow's

TRUE OR FALSE: *While efficiency improvements have had a major impact in meeting U.S. electricity needs relative to new supply, the demand for electricity is at an all-time high.*

True.

TRUE OR FALSE: *Projections indicate the U.S. rate of electric consumption will go down in the next 25 years.*

Here's a hint about the answer to that last question:

According to the U.S. Department of Energy's Energy Information Administration, 347 gigawatts (GW) of new capacity will be needed in the U.S. by 2030. That makes the second statement a definite "false," because projections indicate U.S. electricity consumption is expected to increase 45 percent by 2030.

So, where is all that power coming from?

If the electric generation of the future is anything like generation of the past, we will need at least 50 percent of it to come from coal. With a 250-year supply of coal in this country, the future of our electrical generation may seem secured. But nothing could be farther from the truth.

JUST SAY NO

During the past two years, over half (54 percent) of all coal-based power plants ordered in the United States were canceled. At least 16 coal-based power plant proposals and more than three dozen were delayed in 2007 alone. And just this spring, the federal government suspended a major loan program that financed coal-based power plants.

What is happening in the coal-based electric generation industry? Concern over emission of carbon dioxide (carbon)—resulting in climate change legislation

our future



electricity come from?

proposals—is stunting coal-based generation development. According to energy development expert Richard Lehfeldt, development of fossil-fired plant development will “continue to lurch forward in a zone somewhere between the difficult and impossible.” (Excerpt from March/April 2008 issue of *Electric Power Today*.)

Environmentalists say part of the answer to this carbon conundrum is available in advanced power plants: IGCC (integrated gasification combined cycle) or APC (advanced pulverized coal)—all with carbon sequestration. In more simple terms, these are new types of clean coal technology. But, while it may sound simple, these types of plants are not perfected and are, right now, unaffordable. Today’s projections indicate that if the law requires coal-based power plants to employ these technologies, it could add 50 to 80 percent to the cost of generating a kilowatt hour of electricity.

So who/what will meet the growing demand for electricity in this country? As you can see, this is not a “true or false” question. And the answer, as of yet, has not been answered.



How will your government address climate change?

It is difficult to predict what legislation Congress will ultimately pass to address climate change. Several bills have been proposed. Central in the debate, however, is the Liberman-Warner bill, which has worked its way through committees and onto the floor of the Senate.

This proposed legislation is lengthy and complex, but basically proposes to reduce carbon emissions by 2012 down to 2005 levels, and then, by 2050, further decreasing levels to 70 percent below 2005 levels.

Briefly, the legislation includes:

- ◆ Emission allowance will begin in 2012 with a declining cap on greenhouse gasses (GHGs) to 2050.
- ◆ Emission allowance will initially be given to load-serving entities that deliver electricity to retail consumers.
- ◆ A “Climate Change Credit Corporation” will auction emission allowances. Auction proceeds will be used for several programs including one for zero- or low-carbon energy technologies and one for advanced coal and sequestration technologies.
- ◆ Allowances can be traded. A board will oversee the national GHG emission market and can provide cost relief measures if it determines that “the market poses significant harm to the U.S. economy.”
- ◆ Support of carbon capture and sequestration by permitting commercial-scale underground injection of carbon, and establishing a task force to study the cost implications of potential federal assumption of liability for closed geological storage sites.
- ◆ The Securities and Exchange Commission (SEC) will be required to direct securities issuers to inform investors of material risks related to climate change. An interagency group will be set up to determine whether foreign countries have addressed GHGs.