

Electricity Prices Going Up!

Why and What Can You Do?

(Editor's note: Following is the third in a series of articles being published over several months in an effort to address the reasons behind the extremely large increases in energy rates that have recently been experienced. The goal of these articles is to provide informational and educational material for readers to be able to better understand the historical background of energy issues in the Tennessee Valley, take a look at energy supply and demand issues and anticipate to the best of our ability the potential impact of the environmental issues and proposed legislation being considered by Congress. The articles will also assess the latest technology advancements, and give you suggestions and recommendations on what action you can take to lower your energy use and have an impact on "our energy future.")

Third In A Series

Environmental Issues and the Legislative Debate

It seems that just a few months ago the primary topic for discussion among electric utilities all across the nation and the United States Congress was global warming and the environmental impact of producing electricity. Of course, that was before Wall Street saw one of the worst downturns in recent history and the economic viability of our nation took center stage. All of this was at the forefront during the election of a new President and the seating of many new faces in Congress.

But the fact remains that concern for the environment remains a primary topic of public and political interest. In addition, the demand for electricity is outpacing the current supply and new power plants will have to be built to meet the growing use of energy. This issue was discussed at length in the previous article published in the December issue of *The Tennessee Magazine*. Add to this dilemma discussions about what can be economically accomplished as far as reducing greenhouse gas emissions from new power plants as well as those already in existence and one can readily see

that the new President and Congress face an enormous task in debating and adopting a new national Energy Policy that achieves acceptable environmental goals at a cost consumers can afford.

In order to meet the objectives of reducing greenhouse gases while meeting the future demand for electricity at an affordable cost, the National Rural Electric Cooperative Association (NRECA), the national organization for electric cooperatives across the United States, suggests we must:

- Restrain the rate of electricity demand growth through energy efficiency
- Increase energy generation from renewable energy sources
- Increase reliance on nuclear energy
- Make current coal-fired generating plants more efficient
- Research and develop methods to capture and store carbon dioxide from coal-fired power plants
- Bring plug-in hybrid electric vehicles to market
- Improve the viability of consumer-generated energy

Without question, the need for legislation mandating control of greenhouse gas emissions is politically charged and generates mixed emotions among the consuming public as well as legislators. On the one hand are those that see greenhouse gases from power plants as solely responsible for global warming, while those on the other side view the entire issue as being “overblown.”

President-elect Barack Obama endorsed a “cap-and-trade” system of allowances to reduce greenhouse gas emissions during his recent campaign. Coupled with an increase in the Democratic majority in the Senate, the likelihood of passage of some type of climate change legislation seems probable.

Speaking recently to Electric Cooperative board members and key employees from across Tennessee, Tony Ahern, President and CEO of Buckeye Power, Inc. and the Ohio association of electric cooperatives, expressed strong skepticism as to whether or not a pure “cap and trade” system without a safety valve to put a ceiling on the price of

“allowances” to emit carbon dioxide will work. He suggests that more workable alternatives to the “pure” cap and trade approach would be some type of carbon tax or a cap and trade system with a safety valve whereby the government “prints” more allowances that are for sale at a stated price.

“Significant changes in the world’s energy infrastructure will require a ‘transformational technological breakthrough’” in energy production, he noted, showing how historically such changes have taken 30 to 50 years or even longer. “Those expecting significant greenhouse reductions in the short-term will be disappointed,” Ahern concluded.

Political resistance from climate change legislation skeptics and concern regarding the impact of such legislation on the recovery of the economy will likely add to the debate. “The current economic crisis only reinforces the public’s wariness about any climate bill that attempts to increase the costs of energy and jeopardizes jobs,” Oklahoma Sen. James Inhofe, the senior Republican on the Senate Environment and Public Works Committee, said recently.

During his campaign, President-elect Obama expressed support for:

- A federal renewable portfolio standard (RPS) of 10 percent by 2012
- Extension of energy tax credits for five years to mitigate cost impacts of the RPS

On the other hand, however, 10 Democratic Senators from manufacturing states recently sent a strongly worded letter to Majority Leader Harry Reid, D-NV, and Sen. Barbara Boxer, Environment and Public Works Committee chairman, stating they would not support a climate change bill that did not address:

- Cost containment and prevention of harm to the U.S. economy
- Treating states equitably
- Investing aggressively in new technologies
- Protecting U.S. jobs

And although President-elect Obama has indicated his support for nuclear power generation, he opposes the controversial Yucca Mountain permanent storage facility in Nevada and favors keeping spent fuel at reactor sites until an alternative long-term plan is developed. Regarding energy efficiency, Mr. Obama has said he would strive to reduce electricity demand in the U.S. by 15 percent from the levels projected by the Department of Energy for the year 2020. To achieve this goal he proposes:

- Improving new building energy efficiency by 50 percent
- Improving existing building energy efficiency by 25 percent
- Change the way private utilities are rewarded for investments in energy efficiency and conservation

“Politically, scientifically, legally and morally, the question has been settled: regulation of greenhouse gases in the United States is coming. The only remaining question is what form that regulation will take,” Rep. John Dingell, chairman of the House Energy and Commerce Committee, and Rep. Rick Boucher, chairman of the Energy and Air Quality Subcommittee, wrote to fellow Congressmen recently as they unveiled a 461 page draft bill that will likely be the basis for upcoming climate change discussions in the next Congress. “We do not pretend or guarantee that a successful climate change policy will be without cost or adjustment,” they wrote. “Our task as legislators is to see that it is accomplished in the most effective and minimally disruptive fashion.”

Of course, the eventual costs to the American public will only be determinable once the specifics of any new legislation are settled. But if recent estimates are any example, meeting climate change goals will not be cheap. The Electric Power Research Institute (EPRI) has made the following estimates of costs by 2050, which are given in terms of “real” dollars (does not include the impacts of inflation – assumes a dollar in 2050 is worth exactly the same in terms of purchasing power as it is today):

- If Congress and the American public leave open all new generation options (e.g. a large expansion of the number of nuclear power plants) and if future research provides a technological solution to the large scale

deployment of carbon capture and storage from coal-fired generation stations, the increases in consumers' electric bills would rise a minimum of 45% from today's levels.

- If all options are not available (e.g. Congress or the American public do not permit the building of many new nuclear power plants, future research does not lead to a technological solution to the large scale deployment of carbon capture and storage at coal plants, etc.) and as a result our nation must rely almost exclusively on the expansion of renewable (solar, wind, etc.) resources and natural gas for our growing energy needs, consumers' electric bills could rise as much as 260% from today's levels.

In other words, climate change compliance would result in increasing a home or business electric bill anywhere from nearly one-half to nearly triple its current levels. Clearly, this will not be an inexpensive endeavor.

So, without question, it appears climate change legislation will be considered in the coming months and, if passed, you will be directly impacted. Cooperative members are encouraged to read and study about the issues being debated and become actively involved in expressing your interests and concerns with legislators.

NRECA has launched an aggressive grassroots campaign to allow cooperative members to weigh in on the issues, entitled "Our Energy, Our Future: A Dialogue With America." To date, almost 1.5 million e-mail messages and letters have been sent to members of Congress, attempting to encourage legislators to consider ways America can achieve energy solutions that are both economically and politically sustainable over the long term.

Jack Wolfe, Jr., president of NRECA, perhaps summarized the issues best when he recently wrote in a commentary message, "We have many tough issues in play, and they all require attention: building new generation to keep the lights on, dealing with high cost of fuel and materials, improving consumer energy efficiency, and coping with carbon constraints. And all of these wrap into upcoming energy debates. We must make

sure lawmakers strike the right balance, one that meets environmental objectives while limiting the impact on electric bills.”

Duck River Electric encourages its members to visit the Internet Web site: www.ourenergy.coop to learn more about the campaign and take the time to send your legislators a message about your feelings on the issues. Doing so will extend the grassroots efforts by cooperative members all across America to have input into “Our Energy, Our Future.”

The next article in this series will deal with technology advancements in the electric power industry and a review of how well these technologies can meet the challenges of increased generating capacity and environmental restraints in the future. This article will appear in the February issue of The Tennessee Magazine.