

What Does the Future Hold for Electricity?

With the recent concern over climate change and carbon dioxide emissions from power plants, Arkansas' electric cooperatives and other electric utilities are facing some of the biggest challenges in their history.

In light of these issues, Arkansas Electric Cooperative Corporation (AECC), the wholesale electricity provider for Petit Jean Electric Cooperative, must make some difficult choices in the near future related to how the cooperatives will continue to meet their members' growing demand for electricity. With some organizations demanding a moratorium on new coal-fired plants, as well as with proposed legislation that would place caps on carbon emissions, the decisions will not be easy.

For the organizations seeking an end to new coal-fired generation, their answer is to replace that generation with power from renewable energy, such as wind, solar and biomass. While the cooperatives support the development of such resources when feasible, they cannot meet the electricity demands of members now or in the foreseeable future. Simply put, these energy sources cannot replace coal-fired generation.

Why is renewable energy not the sole answer? First of all, most renewable sources, such as wind, solar and even hydropower, are intermittent in nature. That means that they are not always available to meet the demand for power. In other words, the wind does not always blow, the sun does not always shine and water does not always flow at levels needed to generate power. The demand for power, however, is constant and is primarily met through what is known as base-load generation. Only three types of fuel sources are now economically and technologically feasible to provide base-load generation. Those are coal, nuclear and natural gas.

AECC and Petit Jean Electric Cooperative will soon need more base-load generation to meet the needs of members. AECC is considering whether to build new plants, either alone or with partners; buy existing plants; or to continue to buy from the wholesale electricity market.

At a time when Arkansas and the rest of the nation need additional electricity generation, AECC, Petit Jean Electric Cooperative and the nation's electric utilities cannot afford to eliminate coal-fired generation, which currently supplies 51 percent of the United States' electricity, as an option. The resources to make up the difference are not available. In fact, the electric utility industry is going to need multiple resources – coal, natural gas, nuclear, renewable energy and energy efficiency efforts – to meet the country's energy needs.

Although AECC and Petit Jean Electric Cooperative support coal-fired generation, the organizations are mindful of concerns over carbon dioxide emissions and the potential impact on the climate. And because the cooperatives take their role as environmental stewards seriously, they support the development of clean coal technologies that will allow coal to be utilized even more cleanly and efficiently than today. Because developing such technologies will be expensive, the cooperatives support the creation of a national fund to help pay for research and development of such initiatives.

The cooperatives also support development of additional nuclear generation in the United States, as well as research that would allow renewable energy to be stored. Additionally, the cooperatives support increasing energy efficiency efforts and the development of cost-effective renewable energy options. However, AECC and Petit Jean Electric Cooperative do not support a cap and trade program for carbon emissions, such as proposed in the Lieberman-Warner bill, because studies show it would have a devastating impact on the economies of Arkansas and the nation.

In the coming months and years, AECC's management and board of directors will make tough decisions about future energy generation resources. Based on careful evaluations of the options, they will choose what they believe are the best options available. As the cooperatives plan for the future, Petit Jean Electric Cooperative and the other electric cooperatives in Arkansas will continue to educate lawmakers and cooperative members about the challenges the electric industry is facing in hopes that the best decisions will be made.

These are indeed challenging times for the United States and several business sectors. But as these daunting issues are faced, the cooperatives will not forget that the cooperative movement has a history of overcoming difficulties.

Petit Jean Electric Cooperative is confident that the cooperatives, once again, will prevail and continue to fulfill their basic mission, which is to provide reliable, low-cost power to members.