States Step Up to Limit CO$_2$ Emissions in Absence of Federal Rule

By Tim Weldon
Several states—including Kansas, California, Florida, Washington and Minnesota—are taking action to limit CO\textsubscript{2} emissions from coal-fired power plants in the absence of action on the federal level.

On the surface, Kansas seems an unlikely battleground over energy and environmental regulations.

After all, it relies on coal for nearly three-fourths of its electricity needs, and has no smog-filled, traffic-congested metropolitan areas. And unlike coastal states, leaders in Kansas don’t have to worry about the threat of increased tropical storms or rising ocean levels, which some scientists predict will result from global warming. Arguably, Kansas would seem as close to a safe haven from the rancorous debate over climate change as one could find in this country.

Nevertheless, the state has become the epicenter of a landmark political showdown over state powers to limit carbon emissions from coal-fired power plants and to deny those plants operating permits based on concerns over carbon dioxide, or CO\textsubscript{2}, which some scientists have linked to climate change.

With the stroke of a pen in October 2007, the Kansas Department of Health and Environment became the first government agency in the United States to deny a permit to an electricity-generating plant due to concerns over CO\textsubscript{2} emissions. That action—and the resulting legislative battles pitting Kansas Democratic Gov. Kathleen Sebelius against the Republican-controlled legislature—have led environmentalists, industry officials and policymakers from other states to watch closely. They’re waiting to see if the action in Kansas is an isolated instance of a state halting construction of coal-fired power plants, or if it is part of what could be an emerging trend toward states blocking coal-fired power plants to limit CO\textsubscript{2} emissions.

Sunflower Blocked

The dispute in Kansas began when Rod Bremby, the secretary of the Department of Health and Environment, denied an air quality permit to Sunflower Electric Power Corp., to build two coal-fired power plants in southwestern Kansas. The plants would have had a combined generating capacity of 1,400 megawatts, enough to provide electricity to 700,000 households in Kansas and eastern Colorado.

In denying the permit, Bremby cited the plant’s potential to produce 11 million tons of CO\textsubscript{2} per year. “I believe it would be irresponsible to ignore emerging information about the contribution of carbon dioxide and other greenhouse gases to climate change and the potential harm to our environment and health if we do nothing,” said Bremby. He supported his decision with a 2007 U.S. Supreme Court decision that CO\textsubscript{2} must be considered a pollutant under the federal Clean Air Act.

The Kansas legislature quickly responded to Bremby’s action. Two separate bills to allow construction of the Sunflower power plants, which also would have stripped Bremby of his power to deny the permits, cleared both chambers of the legislature only to be vetoed by Sebelius. In vetoing the first bill, Sebelius said, “Building additional coal plants now is likely to create a significant economic liability for Kansas in the future.” While the Kansas Senate voted overwhelmingly to override both vetoes, the House votes fell short of the two-thirds majority needed.

Senate President Stephen Morris called Bremby’s decision arbitrary and said Bremby lacked the authority to deny the permits to Sunflower. Morris also expressed concern that denying the permits to Sunflower may lead to emissions restrictions at the state’s other coal power plants.

“We have eight plants in the eastern part of the state that will have permits up for renewal in the next year or two, and if the department is consistent and denies those permits, then that puts us in a serious situation as far as power for this state,” Morris said.

Other States Tighten Reins on CO\textsubscript{2}

Kansas is not alone in taking on powerful electric utility interests. Since 2006, leaders in several other states have taken similar action to regulate CO\textsubscript{2} emissions from coal-fired power plants.

- California legislators in 2006 approved Assembly Bill 32, which requires a 25 percent reduction in CO\textsubscript{2} pollution by 2020 and further reductions by 2050. The California legislation, signed into law by Gov. Arnold Schwarzenegger, also creates a so-called cap and trade system, under which energy companies exceeding the new limits can buy credits from companies that emit less CO\textsubscript{2} than the caps allow, rather than having to spend money on new and cleaner technologies in order to meet the limits.

- Florida Gov. Charlie Crist in 2007 signed a series of executive orders that gave the secretary of the Department of Environmental Protection new powers over utility permitting decisions. In August 2007, Secretary Michael Cole denied a permit to the Seminole Electric Cooperative even though the project had already successfully passed through much of the permitting process under a previous administration.
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—Dan Reidinger, spokesman
Edison Electric Institute

- In Minnesota, the legislature in 2007 adopted Senate File 145, the Next Generation Energy Act, which was signed into law by Gov. Ted Pawlenty. The law includes a provision to reduce the state’s greenhouse gas emissions 15 percent below 2005 levels by 2015, with additional cuts required by 2025 and 2050. In addition, the law prohibits construction of any power plants that would produce a net increase in carbon emissions after Aug. 1, 2009.
- Washington state legislators in 2007 approved a bill modeled after California’s that also sets limits for carbon emissions from new electricity generating plants. In order to meet emission standards in Washington, new power plants cannot exceed the amount of CO₂ emitted by natural gas-fired power plants. Gov. Christine Gregoire also issued an executive order early in 2007 that established state goals for reducing greenhouse gas emissions. Since those actions, Washington’s Energy Facility Site Evaluation Council unanimously denied a permit for a new 800-megawatt power plant in southwestern Washington.
Washington faced fewer barriers regulating CO₂ emissions than many other states face, according to Janice Adair, special assistant to the director of the state Department of Ecology. She believes because Washington relies on renewable energy sources, such as hydroelectric power, has only one coal-fired power plant and a political climate that is generally pro-environment, policymakers in Washington could restrict carbon emissions with little risk of political fallout. She believes states have advantages over the federal government in creating energy policies that include limits on greenhouse gases.

“It’s the state’s environment,” Adair explained. “It is difficult for the federal government to be as innovative and push the envelope in a way that an individual state can. That is our role.”

Adair also points to regional energy initiatives, such as the Western Climate Initiative, as holding promise to develop solutions to energy and environmental issues across state lines. Adair said the Western Climate Initiative enables Washington state to work with coal-producing states, such as Utah, to find common solutions to address CO₂ emissions.

“It’s very good for both (states) to sit down in a room together and talk about that and to consider how we might be able to design something that could work for a coal state and could also work for a state that’s primarily a renewable resource state,” she said.

Awaiting Federal Action

The U.S. Senate is considering the Lieberman-Warner Climate Security Bill of 2007 (S.2191), which is designed to reduce greenhouse gas emissions in the U.S. by 70 percent by 2050. The bill would also create a nationwide cap and trade system for emissions similar to that in California. The Senate Environment and Public Works Committee approved the bill, mostly along party lines, in December 2007.

However, Tony Kriendler, spokesman for the Environmental Defense Fund, contends that states should not wait to see what happens to the Lieberman-Warner bill. “At this time there is very much an absence of leadership from the Congress and the White House. And so in that absence the states really need to step up and do what they can,” he said.

Joe Blubaugh, a spokesman for the Kansas Department of Health and Environment, agrees. “I don’t think there’s any doubt that the state has to play a role of some kind in the absence of a federal regulation,” he said. “I think across the board almost everyone would agree that some kind of federal regulation would be the best way to address this. But in the absence of those regulations, each individual state is going to have to look at what’s best, not only for their state but for the nation as well.”

However, Dan Reidinger, a spokesman for Edison Electric Institute, which represents energy companies, said a solution on CO₂ emissions should come on the national rather than the state level.

“Unlike pollutants regulated under the federal Clean Air Act, which have largely local and regional impacts, carbon dioxide and other greenhouse gas emissions aren’t constrained by state or even national boundaries,” Reidinger explained. “States certainly have helped to frame the climate change debate and will have a role to play under a federal program, but we believe that a reasonable, national approach devised by Congress makes the most sense from a regulatory perspective.”

But states and other interested parties aren’t waiting for Congress to act.

Environmental groups in Michigan recently launched a campaign to persuade Gov. Jennifer Granholm to order state regulators to limit CO₂ emissions from coal-fired power plants. The groups want Granholm to issue an executive order directing the Michigan Department of Environmental Quality to regulate carbon emissions and consider the emissions when making decisions about permits for coal plants.

The rising tide of uncertainty among energy companies over stricter limits for carbon emissions is already having an impact on new construction of power plants far beyond the handful of states that have begun clamping down on carbon emissions. In 2007, more than 50 power plants in more than 20 states were cancelled or put on hold by the energy companies that proposed them. Rising construction costs and uncertainty over climate change regulations were frequently cited as the reason for their actions.

But industry officials say coal is an energy source for the United States and necessitates any legislative action to consider that role. Approximately half the country’s electric consumption is produced at coal-fired power plants, and industry officials say coal has two advantages over other energy sources. The U.S. has an abundant supply of coal, and it can generate electricity more inexpensively than gas or other traditional energy sources can. Concerns over greenhouse gas emissions, however, are leading many state policymakers to balance their state’s energy needs with a push to protect the environment.

“Realistically, (coal) is going to remain a fairly large chunk of the energy portfolio,” Kriendler said. “That means the challenge is to figure out a way to continue to have coal be part of the energy mix while protecting the environment.”

Morris, the Kansas Senate president, believes it is premature to write coal’s obituary as a dominant energy source for the United States.

“You cannot do what these (environmentalists) are saying with coal. It has to be part of the mix,” Morris asserts. “It’s going to take every megawatt from every source that we can develop over the next 10 years, 20, 30 years to feed the energy appetite in this country.”

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