

The lack of direction from Washington on controlling greenhouse gases has power companies uncertain about the future.

Why Utilities Are Frozen in Place

■ By Margaret Kriz Hobson

America's electric utilities are looking for a map to guide them through the multitude of environmental mandates coming out of Washington while they work to keep their customers' air conditioners and computers humming. Industry officials say they need to replace the nation's aging energy production infrastructure with clean, efficient power plants. They are calling for clear regulatory signals to help them plan for those costly assets, some of which will remain on line for decades to come. The unresolved debate over federal action to curb climate change and pollution emissions leaves utilities in limbo about how to plan for the future.

"We have to retire and replace every electric generating plant by 2050," Duke Energy CEO James Rogers said. "But we have total uncertainty with respect to what the regulations are going to be on our coal plants. We are going to need certainty to make smart decisions."

In an effort to get clear environmental ground rules, electric-industry leaders united last summer to support House legislation

that would limit global-warming pollution from electric power plants, manufacturers, transportation fuels, and other sources. That measure, which passed by a close 219-212 vote, would create a carbon cap-and-trade program, allowing businesses to buy and sell pollution credits while lowering their emissions.

The Senate, however, is still struggling to craft a climate-change package that can win 60 votes. And in the absence of congress-



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sional action, the Environmental Protection Agency is moving forward with regulations to control greenhouse-gas emissions under the Clean Air Act.

Now Rogers and a handful of other utility executives are lobbying for legislation that would impose carbon restrictions on electricity providers first, with other industries coming under the mandates later. Edison Electric Institute lobbyists have been meeting with key senators to develop climate-change language that could win broad utility industry support.

Early this week, Senate Majority Leader Harry Reid of Nevada announced plans to send energy legislation to the Senate floor during the week of July 26. Reid wants that measure to address global warming, the oil spill, clean-energy production, and energy efficiency. As a result, a variety of energy and climate plans are popping up on Capitol Hill. Sens. John Kerry, D-Mass., and Joe Lieberman, ID-Conn., have released a scaled-back climate-change proposal that would focus on the electricity industry. Energy and Natural Resources Committee Chairman Jeff Bingaman, D-N.M., is floating an alternative bill that would primarily impact the utility industry.

Electric-industry officials say that the Democratic-led Senate has a rare opportunity to pass climate-change legislation this year. Political analysts are predicting that Democrats will lose seats in both the House and the Senate in November's midterm elections, meaning that next year's more conservative Congress would be less likely to embrace a climate bill.

"We know that there is going to be carbon regulation," Rogers said. "The only issue is when. This might be the best opportunity we will have for the next five years or more to get climate-change

■ **KING COAL:** About 45 percent of the nation's electricity came from coal in 2009. Georgia Power's Bowen generating plant in Euharlee, Ga., is coal-fired.

legislation that offers the best deal for our customers and the greatest clarity for our investors."

Rogers is urging Congress to establish a cap-and-trade program for controlling greenhouse gases from utility companies. He

also wants lawmakers to set up separate trading plans for reducing emissions of mercury, sulfur dioxide, and nitrogen oxides—pollutants that EPA is in the process of regulating under the Clean Air Act. Electric utilities have experience with cap-and-trade programs. The 1990 amendments to the Clean Air Act included an acid-rain reduction program that allowed utilities to buy and sell emissions credits as they reduced their sulfur dioxide pollution.

Edison Electric Institute President Thomas Kuhn wants Congress to mimic the acid-rain law by providing electric utilities with free pollution credits rather than putting a price on them. "Our companies would still have to pay the additional expense of cutting their emissions," Kuhn said. "But much like the clean air bill, free allowances would reduce the cost of the bill to consumers."

The EEI, which represents the nation's investor-owned utilities, has not taken a stand on a utility-only measure to reduce carbon emissions, but several of its members are echoing Rogers's call for Washington to issue clear environmental direction. "Regulatory certainty is important enough to the industry that we need to seriously consider a utility-only or utility-first bill—if congressional leaders say that's where the votes are," said David Brown, Exelon's senior vice president of federal government affairs and public policy. "Given today's uncertainty, we are seeing a kind of carbon purgatory, for lack of a better term, where people are just frozen," waiting to discern what kind of power plants to build.

To be sure, not everyone in the electric industry is eager to

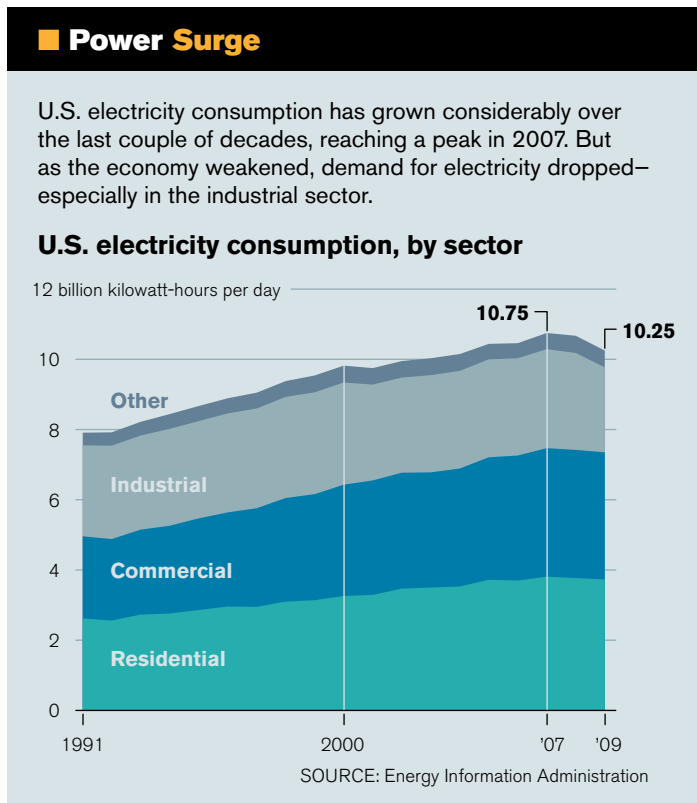
have utility companies go first. David Ratcliffe, president, chairman, and CEO of Southern Co., argues that a utility-only cap-and-trade program would be more expensive than an economy-wide regime that would let electric companies buy and sell pollution credits along with all other U.S. businesses. Ratcliffe also questioned Rogers's suggestion that other industries would willingly join a pollution-reduction program in later years. "People would see that this is an extraordinarily expensive and cumbersome regulatory process," he said.

Ratcliffe dismissed the notion that a climate bill would guarantee business certainty. "We are planning for assets that have 50-to-60-year lives, and nobody knows what will happen in 50 or 60 years," he said. "So I worry that we have whipped ourselves up into this notion that certainty is achievable. I am not sure that it is. I think one of our jobs is to manage the risks associated with the uncertainty."

While the legislative debate drags on, some utility-industry leaders want Congress to block EPA from regulating greenhouse gases. Ratcliffe and Michael Morris, the chairman, president, and CEO of American Electric Power, support legislation proposed by Sen. Jay Rockefeller, D-W.Va., that would impose a two-year moratorium on EPA's greenhouse-gas controls. "I think the Rockefeller delay may well get a hearing yet this summer," Morris said.

Supply and Demand

Americans increased their power consumption over the past decade, hitting a demand peak during the high-flying 2007 economy. An early-2008 study by the Brattle Group predicted that to keep the lights on in the U.S., the utility industry would need to invest \$1.5 trillion in generation and infrastructure improvements by 2030.



When the economy slumped, however, demand for electricity plummeted, particularly in the industrial sector. The decline was a mixed blessing for the power industry, which had been scrambling to meet customers' needs. "Every single plant that could run was running" in 2007, Morris said. Although the downturn has hurt company bottom lines, he added, "it's giving all of us a moment to breathe."

Today, the economy, though still fragile, is beginning to strengthen, and utility executives say that electricity usage is increasing in some regions. Duke's Rogers said that his company doesn't anticipate its electricity demand to return to 2007 levels until 2015. Over the long term, however, the Energy Department's Energy Information Administration paints an optimistic picture of U.S. electricity needs, predicting that the nation will consume 30 percent more power in 2035 than it does today.

As electric companies look for ways to meet future demand, environmental mandates will push them toward a new mix of energy sources. In 2009, about 45 percent of the nation's electricity came from coal, 23 percent from natural gas, 20 percent from nuclear power, 6 percent from hydropower, and 4 percent from a combination of wind, biofuels, and other alternative fuels. The EIA says that in the years ahead, most of the new electricity will come from natural-gas-fired plants and renewable sources.

Climate-change controls won't be the only factors shaping the industry's power choices. EPA is churning out a steady stream of rules aimed at tightening pollution restrictions on coal-fired power plants and toughening health standards for ozone and soot in urban regions. "All those EPA controls are on the regulatory track, completely independent of whether or not Congress does anything on climate," noted Christine Tezak, a senior energy and environment policy analyst at Baird, a consulting firm.

Faced with myriad new air- and water-pollution mandates aimed at curbing emissions from coal-fired power plants, the electric companies are taking some coal plants off their drawing boards. Many utilities are shutting down their oldest coal-fired plants, AEP's Morris said, and trying to extend the lives of middle-aged plants by installing expensive pollution-control equipment.

With pollution crackdowns pushing coal out of favor, power companies are increasingly turning to natural gas. Gas-fired power plants are cheaper to build than coal or nuclear facilities, and burning natural gas produces only half the greenhouse-gas emissions that burning coal does. In addition, the natural-gas industry touts massive reserves newly discovered in underground shale formations in the Northeast.

Nevertheless, some electric-company officials are wary of the industry's increasing dependence on natural gas. "For the last 15 years, almost 90 percent of the plants that we built in this country have been gas," Rogers said. He pointed out that environmentalists are raising concerns about the safety of the hydraulic fracturing technology being used to extract natural gas from shale rock. The controversial, but potentially lucrative, extraction process involves shooting chemically laced liquids into rock formations miles underground.

Critics warn that the technology could taint drinking water supplies, and they are calling on Washington to police the hydraulic fracturing industry. As environmental concerns grow, utility officials worry that new regulations could slow investment in natural-gas extraction and thus tighten supplies. "This huge shale gas find is giving some people some comfort that there will be

a robust natural-gas supply for a while,” Exelon’s Brown said. “But we’ve seen the volatility that comes with low gas prices, because everybody makes a dash for gas and you get a spike.”

Other companies are staking their future on renewable electricity. Minneapolis-based Xcel Energy is focusing on wind and solar, in large part because state laws where it operates require power providers to use renewable sources of electricity. Richard Kelly, Xcel’s chairman and CEO, said that the company plans to meet most of its future increases in energy demand through renewable energy, primarily wind power backed up with small natural-gas plants that can operate when the wind dies down. Wind power is cost-competitive with other sources of energy in Minnesota, North Dakota, and Texas, where strong winds steadily blow, Kelly said.

But utilities in regions outside the windy Great Plains and the sunbaked Southeast say that wind and solar power are uneconomical without federal or state government subsidies. To carry renewable power from those wind and solar centers, utilities would have to build thousands of miles of high-power transmission lines. Despite congressional attempts to give the Federal Energy Regulatory Commission the final say on permitting new transmission systems, in many cases, states or local landowners have blocked construction. In addition, utilities disagree among themselves on whether the new lines represent a public good that should be financed by a broad national cross section of electricity users, or whether the customers who use the electricity should bear the cost.

Meanwhile, nuclear power is enjoying a resurgence in the United States for the first time since Pennsylvania’s Three Mile Island nuclear power plant suffered a partial meltdown in 1979. This time around, the states are leading the way to a nuclear future. Georgia, for example, has decided to allow Southern Co. to bill its customers for two nuclear power plants while construction is under way, rather than waiting until the facilities begin generating electricity. The company has filed an application with the Nuclear Regulatory Commission to build the plants at its Vogtle nuclear power site near Waynesboro, Ga. If the NRC signs off on the facilities, the plants could begin operating in 2016.

Ratcliffe said that by paying for construction as it progresses, the company will shave \$2 billion in financing charges from the project’s \$14 billion price tag. “The controversy is that you’re obviously paying for something before it’s operational, and you’re asking current customers to pay for a future asset,” Ratcliffe said. “That’s always the push-back from the customer base. But when the regulators see the economic benefit, it’s really hard [for them] to turn down that kind of potential savings.”

Only half of the states still have utility commissions that regulate retail electricity rates; the other states allow customers to choose their power providers. Because regulators in competitive states can’t force consumers to pay higher electricity rates while a plant is under construction, utilities are unlikely to build nuclear facilities in those states.

Southern Co. received conditional approval of an \$8.3 billion



BLOOMBERG VIA GETTY IMAGES/FC CARTER SMITH

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—Southern Co. CEO David Ratcliffe

loan guarantee from the Energy Department to help finance construction of its plants, contingent on the project’s winning NRC approval. Several other companies are seeking similar loan guarantees, and the Obama administration is asking Congress to provide \$54 billion in funding authority.

AEP’s Morris warned, however, that new nuclear plants are likely to hit some additional potholes on the road to production. Groups opposed to nuclear power are waiting in the wings to challenge Southern Co., he said. “I think there will still be a lawsuit when the NRC finally issues a certificate to go forward” with construction of a nuclear plant. “I can’t imagine the anti-nuclear crowd, which is well funded and lawyered to the hilt, is not going to take the issue to the [U.S. Court of Appeals for the] D.C. Circuit. And you know the D.C. Circuit doesn’t do anything in two days. And that loser clearly will take [the case] to the Supreme Court.”

Power Politics

As the utility industry weighs its options for meeting projected electricity demands, EPA plans to issue a variety of climate-change regulations, starting early next year with mandates to curb greenhouse-gas emissions from cars and trucks. The Supreme Court ruled in 2007 that EPA has the power under the Clean Air Act to regulate global-warming pollutants.

Some industry officials say privately that they’d just as soon see EPA tackle the climate-change issue, because they anticipate that the agency will quickly become entangled in legal challenges that will postpone any serious action. Rogers argues, though, that a federal cap-and-trade program would allow companies to cut their greenhouse gases in the least costly way.

Reid has not signaled how he’ll address climate change in the energy bill he promises to bring to the Senate floor later this month. But some Washington insiders question his timing. They argue that a climate bill has little chance of passing in July, because too many moderate senators are facing tough primary election contests. They suggest that Reid would have a better chance of gathering the necessary 60 votes if he brought a bill to the floor in September or even after the November general election.

Ratcliffe warns that a lame-duck Congress could produce climate and energy legislation that the electric industry might find hard to swallow. “It’s really fraught with all kinds of mischief,” he said. “You’d have folks who are not going to be back in the Congress perhaps try to marry a variety of bills that really shouldn’t go together at all.”

Baird’s Tezak said that if Democratic leaders are able to push an energy and climate-change bill through the Senate, chances are good that the House would accept it. She said that many environmentalists, liberal lawmakers, and even some business leaders don’t want to squander the opportunity to pass climate-change legislation in this Congress. ■

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