

AS A **COAL-UTILITY** EXECUTIVE WHO IS ALSO A CHAMPION OF **CARBON CONTROL** LEGISLATION, DUKE ENERGY CHAIRMAN **JAMES ROGERS** IS SOMETHING OF A **PARADOX**.

Meet the **MAVERICK**



BY **BEN THOMPSON**

DUKE ENERGY is one of the largest electric suppliers in North and South America, with more than 40,000 megawatts of capacity. The company is the third-largest coal generator in the United States, and the fourth-largest nuclear generator. It is also one of the largest emitters of CO₂ around the world, pumping out more than 100 million tons of CO₂ each year.

Fortunately, in James Rogers – its outspoken Chairman and CEO – Duke has someone with the strength of character to acknowledge the challenges facing his company and the leadership skills to try to force through change. A tireless lobbyist for better environmental legislation and clearer guidelines for carbon control, Rogers has made a career of being ahead of the game when it comes to going green. Over the years he has consistently tried to shape regulatory ground rules instead of instinctively resisting regulation – just what you would expect from someone whose pre-Duke days included two terms on the Federal Energy Regulatory Commission. “We have a special responsibility to address this issue,” he says.

He’s right. His company has a huge stake in global warming policy, with almost 70 percent of its power coming from coal-fired plants, and it’s clear Rogers has a powerful reason for trying to shape the carbon-control legislation that is expected to be up for consideration in the next couple of years. The outcome will determine whether Duke can make gradual investments in carbon-cleanup technologies and alternative energy sources at a steady pace, or if it will be forced to undergo a much more rapid (read traumatic) transformation.

And while Rogers recognizes the importance of cleaner, greener technologies and campaigns fearlessly for their implementation, he’s also acutely aware of his role as advocate for the tens of millions of electricity customers in the 25 states where more than 50 percent of electricity is generated using coal. It’s a paradox he’s comfortable with. “To address climate change, we must have a bridge to a low-carbon economy,” he argues. “To cross that bridge, I have advocated for many years that we need an economy-wide cap and trade program for CO₂. A cap and trade program with appropriate allocation of allowances will protect consumers as we develop technologies to reduce carbon dioxide emissions.”

Following precedent

In 1990, Congress provided a similar bridge when it passed the Clean Air Act Amendments – legislation that has dramatically reduced sulfur dioxide emissions – and as CEO of a legacy Duke company in Indiana in 1989, Rogers advocated for SO₂ cap and trade legislation. “I can tell you from first hand experience, it is delivering extraordinary results,” he says. “By 2010, Duke Energy and its predecessor companies will have invested \$5 billion to retrofit our plants to reduce SO₂ and NO_x by more than 70 percent. All of this was done at a much lower cost than we predicted in 1990.”

Rogers explains how the company was given permission to emit SO₂ from its existing generation fleet in order to produce electricity while advanced emissions technology was developed and installed. While cus-

tomers bore the cost of buying these allowances and paying for SO₂ retrofits, the cap and trade program protected them from major rate shock and unnecessary economic harm. He believes a similar approach should be used to address greenhouse gas emissions. “A cap and trade program would set a price for greenhouse gases, establishing necessary economic signals to the marketplace,” he says. “It would also provide clear financial incentives for more aggressive development of technologies to reduce greenhouse gases.”

It is clear that energy and environmental policy are inextricably linked, and Rogers’ view is that Congress cannot pass effective legislation addressing climate change until it harmonizes the two policies. The difficulty is that there is no single approach or silver bullet available to fix the problem. Indeed, Rogers has talked of the need for a “silver buckshot” approach that harnesses the best of the many different ideas and solutions being proposed. Those who believe that renewable energy and energy efficiency alone can address the energy challenge are, he says, indulging in wishful thinking. “Having a duty to provide electricity to a growing customer base, we do not have the luxury of detaching ourselves from reality,” he argues. “Instead, we must meet our customers’ growing demand for power with real electrons our customers can depend on.”

And while Rogers maintains that renewables do have an important role to play, existing methods of power generation cannot be ignored. “We believe that renewables will be an increasingly large portion of our energy mix,” he says. “But we must also recognize their limits. Electricity is not stored; we must make it as demand occurs, whether or not the wind is blowing or the sun is shining.”

Duke’s strategic plan

In order to tackle this soaring demand, Duke has unveiled a number of strategies for increasing capacity and addressing demand for peak power. One approach is the company’s proposed modernization of its Cliffside facility in North Carolina. “Our plan is a sensible attack on helping to reduce greenhouse gases,” he says. “By modernizing Cliffside and implementing more energy efficiency, our emissions will be less by 2012 than if we did not modernize.” The company

is also committed to retiring its 50-60 year old, less efficient coal plants as it ramps up its proposed energy efficiency program. “We have started with a commitment of \$50 million a year in new programs and technologies to help our customers reduce their energy use, and our goal is to have the nation’s leading energy efficiency program,” he continues. “Achieving this goal will also require that customers make decisions to use less power.”



As Co-Chair of the National Alliance to Save Energy, Rogers is personally committed to helping make this happen. Earlier this year, Duke Energy filed a far-reaching energy efficiency plan with the North Carolina Utilities Commission that makes energy efficiency the company's 'fifth fuel' in meeting customer demand, along with advanced nuclear, clean coal, natural gas and renewable energy. According to the company, the energy efficiency programs will cost customers approximately 10 percent less than the cost of building and operating new power plants. Similar plans have now been filed in Indiana and South Carolina. Indeed, as a condi-

tion of its Cliffside Power Plant Modernization Project, Duke Energy has committed to invest one percent of its annual retail revenues from North Carolina electricity sales in energy efficiency programs – currently around \$35 million annually. As the results from new energy efficiency programs are realized, the company will retire up to 800 megawatts of older coal plants, significantly re-

“We do not have the luxury of detaching ourselves from reality; we must meet our customers’ growing demand for power with real electrons they can depend on”

ducing emissions.

Indeed, Duke was one of eight utilities – representing nearly 20 million customers in 22 states – that, earlier this year, committed to seek regulatory reforms and approvals to increase their investment in energy efficiency to about \$1.5 billion annually. This increased level of investment in energy efficiency, when fully implemented in 10 years, will reduce car-



One of the largest electric power companies in the United States, Duke supplies and delivers energy to approximately four million US customers. The company has nearly **37,000 megawatts** of electric generating capacity in the Midwest and the Carolinas, and natural gas distribution services in Ohio and Kentucky. In addition, Duke Energy has more than **4000 megawatts** of electric generation in Latin America.

bon dioxide emissions by about 30 million tons – the equivalent of removing nearly six million cars from the road. It will also avoid the need for 50 500-megawatt peaking power plants. “There has been a chronic underinvestment in energy efficiency in our country,” concedes Rogers. “We are determined to fix that by creating innovative regulatory frameworks that leverage technology to address climate change, reduce power demand and keep our customers’ power bills as low as possible.”

A diverse portfolio

In addition, Duke is also pursuing nuclear energy as a key generation strategy. The company recently announced its interest in purchasing Southern Company's 500-megawatt stake in the proposed William States Lee III nuclear power project, giving Duke 100 percent ownership of the output. The two-unit Lee Nuclear plant proposed for Cherokee County in South Carolina could come

into service by 2016, with a capacity of more than 2200 megawatts. As well as being crucial for meeting growing demand, adding a new nuclear plant in the Carolinas will be important to the company's efforts to reduce its greenhouse gas emissions. “It is important for us to acknowledge that if we are not serious about building more nuclear generation in this country, then we are not serious about climate change,” asserts Rogers. “Nuclear energy has a demonstrated safety record, it is efficient and economical, and the basic technology is available today. There is no way that we can realistically attain significant levels of carbon reduction and achieve our economic goals without expanding its use. Nuclear energy is the best commercially available technology today to produce large amounts of electricity with no greenhouse gases.”

It's this focus on building a diverse and environmentally friendly portfolio of generation capacity that really excites Rogers. “At Duke Energy, we

\$50 MILLION

DUKE'S ANNUAL COMMITMENT TO ENERGY EFFICIENCY PROGRAMS

NEW COAL GENERATION

More than half of the power produced in the United States is generated using coal. The continued use of coal is fundamental to Duke Energy as it plans for new power plants to economically

and reliably meet the growing need for electricity.

Duke Energy is pursuing two types of coal plants to meet its customers' needs. In the Carolinas, the company is pursuing a modern and highly

efficient 800-megawatt advanced clean coal unit that incorporates an array of emissions control technologies to reduce emissions. This is a proven technology that can be brought on-line to meet the

CURRICULUM VITAE

Jim Rogers is Chairman, President and Chief Executive Officer of Duke Energy. He was named to his current position in January 2007, following the separation of Duke Energy's natural gas businesses into a new publicly traded company, Spectra Energy.

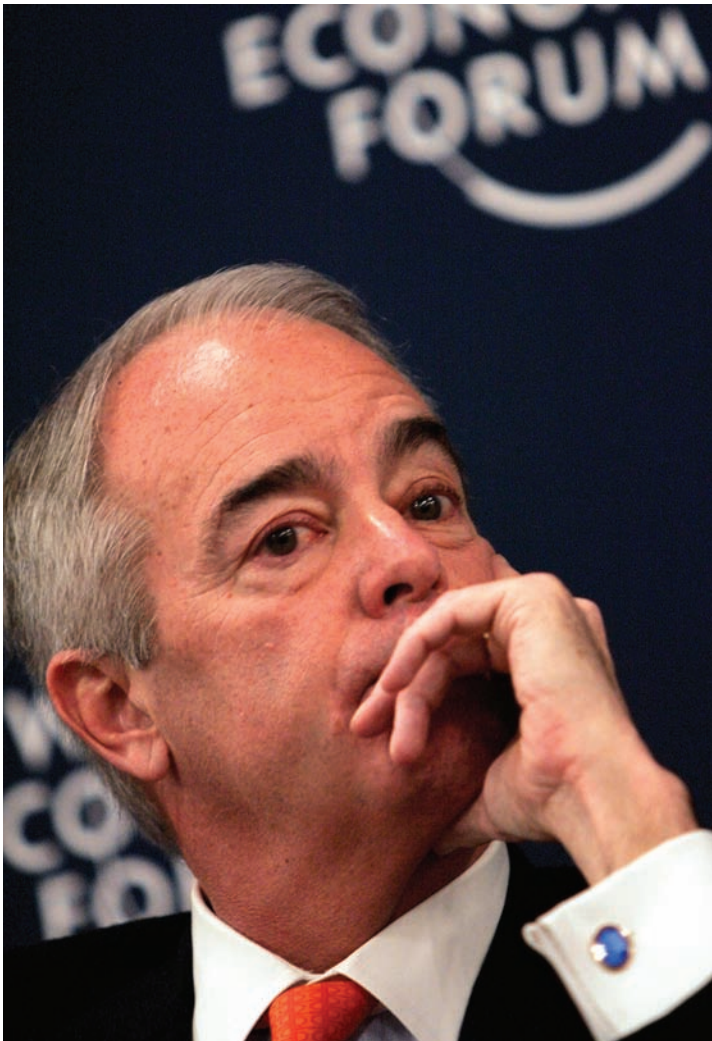
Rogers has more than 18 years of experience as a CEO in the electric utility industry, and was named President and CEO of Duke Energy following the merger of Duke Energy and Cinergy in April 2006. Before the merger, Rogers served as Cinergy Chairman and CEO for more than 11 years. Prior to this, he joined PSI Energy in 1988 as the company's Chairman, President and Chief

"We are moving ahead on all fronts – energy efficiency, renewable energy, advanced nuclear power, advanced clean coal plants and retiring older less efficient power plants"

Executive. He also served as EVP of Interstate Pipelines for the Enron Gas Pipeline Group. Before joining the Enron Corp., Rogers was a partner in the Washington, DC, office of Akin, Gump, Strauss, Hauer & Feld.

Immediately before joining that firm, Rogers was Deputy General Counsel for Litigation and Enforcement for the Federal Energy Regulatory Commission (FERC).

In addition to his role at Duke Energy, Rogers was Chairman of Edison Electric Institute from 2006-2007 and remains on the Executive Committee. He is a member of the board of directors and the Executive Committee of the Nuclear Energy Institute, and an incoming member of the board of directors of the Institute of Nuclear Power Operations. He also serves on the boards of the American Gas Association, US Chamber of Commerce, Business Roundtable and the National Coal Council. In 2006, he was named to the board of directors of the Alliance to Save Energy.



"There has been a chronic underinvestment in energy efficiency in our country"

are adding approximately 60,000 new customers annually to our customer base of four million in the Carolinas and the Midwest and making long-term decisions for how best to meet our customers' growing demand for electricity," he con-

cludes. "We are moving ahead on all fronts – energy efficiency, renewable energy, advanced nuclear power, advanced clean coal plants and retiring older less efficient power plants – while also minimizing the environmental footprint of our operations, but we need more regulatory clarity regarding climate change as we make these investment decisions, often

need for new base load generation by 2012. This project is taking place at the Cliffside Steam Station and also involves the retirement of four existing coal units. In Indiana, Duke is conducting

preliminary engineering and design work for a 630-megawatt integrated gasification combined cycle (IGCC) power plant that converts coal to a synthetic gas used to produce power.

60,000

NEW CUSTOMERS DUKE EXPECTS TO ADD EACH YEAR