

[Databases selected:](#) ProQuest Newspapers, ProQuest Research Library

# TIME

## Is Coal Golden?

Cathy Booth Thomas. **Time**. New York: Oct 9, 2006. Vol. 168, Iss. 15; pg. A.1

Subjects: Coal, Environmental impact, Energy policy, Emission standards

Companies: Department of Energy (NAICS: 926130 )

Author(s): Cathy Booth Thomas

Document types: Feature

Section: *TIME Bonus Section November 2006: Inside Business*

Publication title: Time. New York: Oct 9, 2006. Vol. 168, Iss. 15; pg. A.1

Source type: Periodical

ISSN: 0040781X

ProQuest document ID: 1138643801

Text Word Count 2506

Document URL: <http://proquest.umi.com/pqdweb?did=1138643801&sid=8&Fmt=3&clientId=11417&RQT=309&VName=PQD>

### Abstract (Document Summary)

Over the next 25 years, the Department of Energy predicts the use of coal will provide an increasing portion of our power--up to nearly 60%, from 52%. King Coal's new popularity, however, is like a runaway mine train heading for a collision with states and cities struggling to meet pollution standards.

### Full Text (2506 words)

*Copyright (c) Time inc.,2006. All rights reserved. No part of this material may be duplicated or disseminated without permission.*

### A TEXAS PLAN FOR COAL-FIRED PLANTS ELECTRIFIES THE CARBON ISSUE.

Mike McCall knew at age 14 he wanted to work in the mines. Chalk it up to a fascination with those "big Tonka toys" used to haul away coal, he says. He wasn't afraid to be underground, either. One of his first engineering jobs was in Peabody's famous Mine No. 10, a massive seam running beneath Illinois. Today, old enough to have a teenage son of his own, he still mines coal, but for a different boss. He is spearheading the largest expansion of coal-fired electric plants in Texas history for energy giant TXU. "With 6 million people pouring into Texas over the next decade, this state needs about two of these big power plants a year just to keep up with demand," reckons McCall, as he lays out plans to spend about \$10 billion by 2011 for 11 of them--every single one using coal to stoke the fires.

Over the next 25 years, the Department of Energy predicts the use of coal will provide an increasing portion of our power--up to nearly 60%, from 52%. Convened by the Secretary of Energy, the National Coal Council (McCall is a member) has laid out an aggressive energy plan using coal over the next two decades. Coal production is expected to soar from 1.1 billion tons a year to 1.8 billion--mostly from the West, especially Wyoming's Powder River Basin. New transmission lines, like the \$6 billion Frontier Line, will carry electricity from the coalfields of Wyoming to consumers in California. Peabody Energy, the nation's largest coal company, with 2005 sales of \$4.6 billion, up 28%, and earnings of \$423 million, up 140%, is in acquisition mode worldwide. The Bush Administration has put down its own \$2 billion bet, largely by pursuing FutureGen, a next-generation coal-fired plant promising near zero pollution emissions--all in the hope of making the nation less oil dependent.

The U.S. is, after all, the Saudi Arabia of coal. We have more than 200 years of coal reserves at our current burn rate. There are 440 coal-fired plants across the nation, with proposals to build 153 more in 42 states over the next decade, at a cost of \$137 billion, to provide electricity to 93 million homes and support our energy-guzzling lifestyles.

King Coal's new popularity, however, is like a runaway mine train heading for a collision with states and cities struggling to

meet pollution standards. Environmental controls on electric plants have cut emissions of six principal air pollutants by half since 1970, despite a 42% increase in energy consumption. But even with mandated controls, old-fashioned pulverized-coal plants still spew nitrogen oxide and sulfur dioxide (think acid rain) as well as toxic mercury. Carbon dioxide emissions, blamed for global warming, would soar. Shareholder activists are increasingly aggressive about demanding an accounting when companies like TXU, which had 2005 earnings of \$1.7 billion, stick to old coal methods. "TXU," says Leslie Lowe, program director of the Interfaith Center on Corporate Responsibility, "is looking through the rearview mirror."

New limits on CO<sub>2</sub> are already springing up piecemeal outside Washington. California will require all major industries to reduce greenhouse emissions, including CO<sub>2</sub>, 25%--to 1990 levels--before 2020. Seven Northeastern and mid-Atlantic states, including New York and New Jersey, have agreed to impose a cap-and-trade system on emissions, starting with the electric-power industry. Seattle; Austin, Texas; and other "Birkenstock" cities are abuzz with speculation about a carbon tax. Even on Capitol Hill there are rumblings that the days of limiting carbon emissions may be nigh. Lowe notes a sea change in four years of talking to utility companies: "I think it's almost an embarrassment to be a climate-change denier."

With all that controversy, what's a boom-boom place like Texas supposed to do? Texas, which operates on an electric grid all its own, is just two years shy of running low on reserve power, the stuff that gets the state through energy peaks during its 100° summers. Governor Rick Perry, a Republican up for re-election in November, got a fresh lesson in the unreliability of natural gas, which provides a whopping 72% of the state's generating capacity, when Hurricanes Katrina and Rita disrupted supply lines in 2005. So late last year, after a closed-door meeting in Austin with TXU, the Governor announced that he was streamlining the permitting process for new coal plants.

Perry, who helped turn Texas into the nation's No. 1 wind-energy producer, has become coal's cheerleader in chief, defying calls to copy California on emissions. Texas already emits 10% of the nation's greenhouse gases, placing it ahead of countries like Britain or Canada in terms of output. Its power plants top the nation in toxic mercury emissions. But Perry has said, in effect, don't mess with Texas. "I, for one, don't want to tell Texans to ration air-conditioning," he wrote recently in a Dallas Morning News editorial that rejected the idea of stricter sanctions on CO<sub>2</sub> emissions. Coal is a campaign issue, dividing Republicans in a state that is firmly red.

"Clean coal" technology certainly exists. Tampa Electric Co. in Florida has churned out electricity reliably for 10 years with a coal-to-gas system that takes out pollutants before combustion, reducing the smog factor. Ohio-based American Electric Power, the largest utility in the U.S., is working with General Electric and Bechtel to emulate Tampa and build two of the nation's first commercial-scale integrated coal gasification plants. These plants aren't free of emissions. They still spit CO<sub>2</sub>, but they can be retrofitted more cheaply to capture the carbon gas. Carbon capture and sequestration, in fact, is a hot new field. Shell Oil, as part of its foray into sequestration, feeds carbon dioxide emitted by Rotterdam's refineries into tomato and pepper-plant greenhouses.

But McCall, as TXU's head of wholesale operations, says he needs a low-cost, reliable supply of electricity fast. Plans for nuclear facilities will take nearly a decade to develop. Coal is quicker. Using the company's new "lean academy" philosophy (based on Toyota's manufacturing system), TXU can build all 11 coal-fired plants, cookie-cutter style, with the first online in 2009. Coal gasification simply isn't in TXU's plans, primarily because of problems with the high moisture content of the cheaper Texas and Wyoming coal it buys. Waiting until the next decade, when new technologies are proved, would be "devastating" for supply, warns McCall.

In Dallas, Mayor Laura Miller, a feisty former journalist, isn't buying that argument. The goal of the coalition she helped form with major muscle from Houston--Texas Citizens for Climate Protection--is not to stop the plants, she says, but to make TXU adopt cleaner technologies like gasification. Tampa, she points out with irritation, buys its clean-coal-compatible coke in Houston, after all. So far, she has won over 17 cities and hopes to raise nearly \$500,000 to hire the best air-modeling experts and lawyers for the battle. She has no other choice than to fight. The city is already a "non-attainment zone" for smog.

If you go to TXU's granddaddy of coal plants, Big Brown, built in the early 1970s in the rolling hills of east Texas, the sky is a pristine blue above two big smokestacks. That's illusory, since the plant pumps out a steady stream of can't-see-'em pollutants like nitrogen oxide, sulfur dioxide and mercury. Inside, giant HEPA filters (which look just like a nest of vacuum bags) grab most of the solids from the coal fire. You wouldn't want to eat off the floor, but the place is clean. Even the open-pit-mining operation nearby--which has scoured 15,000 acres of Texas for lignite coal over the decades--is a reclamation model, boasting ponds with bass and new woods with baby deer. "The coal plants of today are clearly not like the coal plant of yesteryear," boasts McCall.

Miller, of course, went on a Big Brown tour too and promptly popped open a canister of coal, she says, to shriek of "No, it's filthy!" from the TXU staff. "They don't see the irony," she says. "'Why would you want to touch the coal?' they asked. My response? 'Why would I want to breathe it?'" TXU estimates the plant emits 82,000 tons of sulfur dioxide, 6,700 tons of nitrogen oxide and 1,180 lbs. of mercury a year--not to mention 10 million tons of unregulated carbon dioxide. Now it wants to add a third smokestack.

McCall is unapologetic about TXU's plans--and so far, the regulators are on his side. McCall wonders how anybody could

oppose a plan to build 11 new plants--and retrofit old ones--while lowering overall emissions 20% (that's right, 20% below their current level). TXU would also beat by five years emissions-cap guidelines for the second phase of a federal program to reduce nitrogen oxide by 2010 "I'm worried I'm not being an effective communicator here," he says in frustration during an interview at the company's Dallas headquarters. Although it's the state's biggest buyer of renewable capacity, TXU is now heavily reliant on natural gas, which is subject to wide price swings. A cheaper coal supply would bring down the price of electricity, McCall says, eventually saving customers \$1.7 billion a year.

Tampa Electric president Chuck Black sympathizes--to a point. When the company opened Polk Power Station in 1996, the clean-coal technology known as IGCC--integrated coal gasification combined-cycle--was new, unproved and pricey. Situated about 40 miles southeast of Tampa on a former phosphate mine, the plant was the first of its kind, built concurrently with another in Indiana. The Department of Energy helped the Florida utility with a \$150 million grant, but the total cost of more than \$600 million made it risky, especially since operating costs for an IGCC plant can run 20% higher than those of a traditional plant. Unlike old coal plants that try to remove pollutants from the flue, IGCC plants turn coal into gas (using pure oxygen) and remove the messy stuff first, which results in 20% less nitrogen oxide than a conventional coal-fired plant. "It's our least cost-generating resource, so we count on it and use it every day as part of our system," Black says.

Washington's centerpiece in the clean-coal R&D effort is FutureGen, a test facility to generate affordable electricity from coal, spinning off hydrogen for a new generation of hybrid cars, while eliminating all pollutants and siphoning off carbon dioxide to store it deep underground. As a nonprofit public-private collaboration, the feds are kicking in \$700 million, and companies like AEP, Peabody and even the new world champ of coal--the China Huaneng Group--are anteing up another \$300 million to get the facility built in Texas or Illinois by 2012

Companies, smelling profit, are beginning to pile on. GE Energy, which pioneered coal gasification 30 years ago, decided in 2004 that IGCC was a moneymaker--if only someone could "guarantee" that the technology worked. That year GE acquired Chevron-Texaco's coal-gasification business, and now it offers turnkey coal-gasification plants--with warranties. "Before, companies would give you a book 1 1/2-in. thick, describing gas flows in the system so you'd build your own and, if it didn't work, you were liable," says Edward Lowe, GE's Houston-based general manager of gasification. Now GE offers to take on responsibility for everything "from coal off the coal pile to electrons on the grid." AEP and Duke Energy are in the process of design work on three new IGCC plants in Ohio, West Virginia and Indiana, with GE and Bechtel.

No clean-coal revolution is going to happen, however, unless Washington tips the balance with funding and tax incentives for private industry, says Peabody Energy president and CEO Gregory Boyce. The coal company is already a partner with the feds in the FutureGen coal-to-gas power plant. And Boyce is pushing coal-to-liquid technology to provide low-sulfur diesel fuel for truckers and jet fuel for airlines and the military. "Coal," says Boyce, "is our only opportunity to get to energy security and energy independence."

Electric power companies want clear direction from Washington on carbon emissions. Duke Energy, the third largest emitter of CO2 among the nation's electric plants, faces a Supreme Court hearing this fall over its failure to install up-to-date pollution controls during refurbishment of coal-fired plants. But at the same time, chief executive Jim Rogers has been vocal in calling for "mandatory, market-based and economy-wide legislation at the federal level to address the carbon issue" sooner rather than later. "What we need now is to understand what the rules are going to be. Only then will we know how to invest in the right solutions."

Utility investors, including the powerful California and New York public employee-retirement funds, are pressing TXU, whose stock is up about 20% this year, about its aggressive coal strategies. In a letter last May, the two retirement funds, which manage \$400 billion in assets, expressed worries about the company "exposing itself to unprecedented compliance costs" should it be forced to retrofit its new coal-fired plants for possible greenhouse-gas limits.

"To see a company propose conventional coal plants on the scale of TXU is pretty disturbing for shareholders," says Dan Bakal, director of Electric Power Programs at Ceres, a coalition of investors, environmentalists and public-interest groups. Miner-tough Mike McCall is having none of that argument. Asked if he's worried about the increasingly coal-fired environment his son, a high school freshman, will grow up in, he answers quickly, "No, because we are reducing emissions too. That's the beauty of what we're doing." The coal debate, it seems, is just getting fired up.

[PULLQUOTE]

"WHY WOULD YOU WANT TO TOUCH THE COAL?' THEY ASKED. 'WHY WOULD I WANT TO BREATHE IT?'"  
--DALLAS MAYOR LAURA MILLER

"I, FOR ONE, DON'T WANT TO TELL TEXANS TO RATION AIR-CONDITIONING."  
--GOVERNOR RICK PERRY, EXPLAINING IN AN EDITORIAL WHY HE SUPPORTS COAL-FIRED POWER PLANTS

"WHAT WE NEED NOW IS TO UNDERSTAND WHAT THE RULES ARE GOING TO BE."  
--JIM ROGERS, DUKE ENERGY CEO

[Author Affiliation]

Cathy Booth Thomas

With reporting by Hilary Hylton/Austin

Paul Cuadros/Raleigh

Wendy Malloy/Tampa

**[Illustration]**

[PEABODY ENERGY]; This 80-ft.-thick wall of coal at Powder River Basin mines testifies to the huge U.S. supply ; PHOTO

[PHOTOGRAPH FOR TIME BY ROBERT NICKELSBURG--GETTY]; Newly blasted coal is piled at Wyoming's Buckskin Mine for transport to Eastern cities ; PHOTO

[ U.S. Energy Consumption  
In quadrillions of British thermal units  
\* Petroleum  
\* Natural Gas  
\* Renewable energy  
\* Nuclear  
]; CHART

[DANNY TURNER FOR TIME]; Mike McCall, TXU Wholesale CEO, holds scrubbers that will reduce pollutants at 11 new coal plants. Critics say that isn't enough; PHOTO

[ROBERT NICKELSBURG--GETTY FOR TIME ]; A 133-car coal train that can carry 15,960 tons loads up at the Buckskin Mine before heading to Midwest cities ; PHOTO

[ROBERT NICKELSBURG--GETTY FOR TIME ]; A KFx plant manager in Gillette, Wyo., oversees K-Fuel production, trans-forming low-grade coal into cleaner fuel ; PHOTO

[DOE]; An artist's rendering of the billion-dollar FutureGen project, the world's first zero-emissions coal-fueled power plant; PHOTO

[ U.S. Coal Production  
In millions of short tons  
\* East of the Mississippi  
\* West of the Mississippi]; CHART

---

Copyright © 2007 ProQuest Information and Learning Company. All rights reserved. [Terms and Conditions](#)

[Text-only interface](#)

