## ELEVEN

## Unicorns, Leprechauns, Clean Coal

**EVERYTHING IS BIGGER** in Texas. In March 2008 I went to Houston to attend a Coal Moratorium Now! demonstration and conference along with activists from about twenty states. After two days spent meeting with one another and listening to presentations at a Methodist church in the liberal Montrose neighborhood, we joined other activists from Houston and across Texas in a demonstration outside the massive George R. Brown Convention Center, where the Greater Houston Partnership was holding its second annual America's Energy Futures Forum.

We were on the Avenida de las Americas, and across the street the convention center loomed and stretched out in both directions, making us feel like passengers in a rowboat next to the *Titanic*. Hillary Clinton had come to town, the only candidate to appear before the audience of energy bigwigs. John Edwards had already dropped out of the race. Barack Obama apparently had other fish to fry. We gamely shook our signs and tried to make ourselves heard over the din from the river of cars that separated us from the convention center. A handful of reporters, flipping their steno pads, interviewed protesters. A single TV camera scanned the protest. We'd make it onto the local evening news—maybe.

As I often do at such moments, I felt the futility of it all. I'd seen protests even a thousand times larger disappear through the shrinking magic of the media into a brief story on page 8 of the daily newspaper. Did our comparatively modest turnout amount to more than a blip? How could we be a threat to anyone?

I recalled Gandhi's reassurance: "First they ignore you, then they laugh at you, then they fight you, then you win." That sounded nice, but were we really on the right track? How long would it take?

And yet, there was that number: fifty-nine coal plants canceled, abandoned, or placed on hold during 2007, plus five more in January and February of 2008: a total of sixty-four coal plants canceled in just fourteen months.

Of course, the anti-coal movement could not claim to be the only reason these plants had been stopped. Typically it was a combination: bad economics plus a good shove by activists. But the progress was undeniable. Like an overweight football player huffing and sweating his way through summer training camp, the American economy was trying to shed its fossil fuel addiction and switch to cleaner technologies. Change was happening, even in hydrocarbon-happy Texas. After passing a renewable portfolio standard in 1999, the state's wind power capacity had quadrupled, and Texas now led the nation in wind. It also boasted the largest assembly of wind turbines in the world, the Horse Hollow Wind Energy Center, with 421 massive GE and Siemens turbines spread across forty-seven thousand acres near Abilene. If that could happen here in the citadel of fossil energy, then anything was possible. Change works in mysterious ways. Maybe our prospects weren't so bad. King Coal's planned expansion, despite all the money and political clout that had been poured into moving it forward, was spinning its wheels in the mud of bad economics and mounting opposition. General sentiment appeared to be on our side, as evidenced by a poll released the previous October that showed 75 percent of the public supporting a five-year moratorium on coal plants and increased investment in alternatives like solar, wind, and efficiency measures.

Of course, the political strategists at the National Mining Association and other lobbying groups were neither fools nor quitters. I thought of Bob Henrie, one of the coal industry's senior flacks and political strategists. As the chief of staff for the House Mining and Mines Subcommittee, he'd been at the center of national policy making. He'd also been on the front lines during the worst kind of PR disaster a spokesman ever has to deal with: one in which the company is accused of negligently killing its own employees. In 1984 Henrie had been the flack for the Emery Mining Corporation in Utah following the Wilberg Mine fire, where twenty-seven miners lost their lives in a mine shaft so deep that it took rescuers over a year to dig their way down to the victims' bodies. Through all that time, Henrie had gamely represented Emery, denying charges by workers in the relief-and-rescue effort that at the time of the deadly accident the company had been pushing crews to set a new twenty-four-hour production record for longwall mining. Recently, Henrie had been in the news again, this time after a collapse in the Crandall Canyon mine in Utah buried six miners, and after three rescuers were killed ten days later.

Coal executives obviously trusted Henrie to handle a crisis, and now newspapers reported that the National Mining Association had hired him to develop a new pro-coal advertising and media campaign. Henrie seemed to relish the prospect of helping an unpopular client fight its way out of a corner. He told the *Tribune*, "The advocates of coal haven't had a lot to advocate for. People have a mindset to build a case against coal, rather than for coal. It's our job to keep coal at the table. It's not there now."

The plan that Henrie and the other coal industry strategists developed in early 2008 was a clever one: focus on the presidential primaries. The strategy made sense because it not only gave King Coal the chance to ride the media road show that moved across the country with the candidates—from New Hampshire to Iowa to South Carolina and on—but it also allowed coal supporters to put the candidates on the spot about coal in key states where the sensitive issue of coal worker jobs could make or break an election.

A press release from the industry group American Coalition for Clean Coal Electricity (ACCCE) summed up the strategy: "Presidential Race Runs through the Heart of Coal County, and the Candidates Recognize That Political Reality."

A year after the coal industry strategy began to unfold, memos leaked to the press confirmed numerous details of the plan. But none of it had ever been particularly secret. One key component was the funding of primary debates, especially in states such as Nevada and Florida where numerous coal plant proposals were under consideration. A second piece of the strategy was the "I believe" media campaign that touted "clean coal" through ads on TV, radio, billboards, and the Web. Lavishly produced by R&R Partners, the ad agency behind the "What Goes On in Vegas Stays in Vegas" campaign, the ads displayed a soft-focus vision of coal as a benign and beneficial mainstay of modern life, conveniently ducking any specifics. Was "clean coal" a current reality, a near-term prospect, or a rosy-hued vision of the future? Somehow the ads implied that the answer could be: "All three."

According to Gristmill blogger David Roberts, the entire "clean coal" notion rested on a deliberate use of ambiguity:

The "clean coal" PR people are running a scam. Thing is, it's an obvious scam—easily exposed, easily debunked. Just because it's obvious, though, doesn't mean the media won't fall for it. Indeed, the entire "clean coal" propaganda push is premised on the media's gullibility.

Here's the scam: They leave the definition of "clean coal" deliberately ambiguous. As ACCCE spokesman Joe Lucas said on NPR the other day, "clean coal is an evolutionary term." By "evolutionary," of course, he means, "whatever we need it to mean at the moment." If one meaning is attacked, they subtly shift to another meaning.

Certainly the vision of coal plants that could economically bury all their pollutants safely and permanently far beneath the ground was an attractive idea, but according to a detailed report released by Greenpeace, "the earliest possible deployment of carbon capture and storage at utility scale is not expected before 2030." In addition to the high projected costs of the process, numerous technical, legal, and institutional problems remained unsolved. One nagging issue had to do with enforcement. Given that running carbon capture equipment would require at least a quarter of a plant's output, what was to prevent plant operators—especially in countries with poor regulatory standards—from cheating in order to maximize power output? Even if such issues could be dealt with, costs for producing electricity from "clean coal" were projected to be significantly higher than costs of cleaner alternatives such as efficiency measures, solar thermal power, and wind power. But if the cleaner alternatives were also cheaper, why bother with coal at all?

As for the notion that clean coal—or even relatively clean coal—was already becoming a reality for new coal plants, here's a tally of what one proposed coal plant, the 250-megawatt Highwood Power Project in Montana, characterized by its sponsor as the "cleanest in the country," would release each year, according to its draft air quality permit:

- Three million tons of carbon dioxide, the most important greenhouse gas, an amount equivalent to chopping down 130 million trees.
- 443 tons of sulfur dioxide, which causes acid rain and forms small airborne particles that produce lung damage, heart disease, and other illnesses. Fine particulates from power plants (both emitted directly and formed from sulfur dioxide) are responsible for 550,000 asthma attacks, 38,000 nonfatal heart attacks, and other cardiopulmonary disorders. They also cause 24,000 premature deaths each year in the United States, the average mortality resulting in fourteen years of lost life.
- 944 tons of nitrogen oxide (NOx), equivalent to 50,000 latemodel cars. NOx leads to formation of smog, which inflames lung tissue and increases susceptibility to respiratory illness.
- 44 tons of hydrocarbons, which contribute to smog formation.
- 1,177 tons of carbon monoxide, which causes headaches and places additional stress on people with heart disease.
- 40 pounds of mercury. One-seventieth of a teaspoon of mercury deposited in a twenty-five-acre lake can make the fish unsafe to eat. Over 600,000 babies are born annually

to women with unsafe levels of mercury in their bodies, leading to learning disabilities, brain damage, neurological disorders, and other health effects.

 366 tons of particulate matter, a catch-all category that includes metals such as arsenic, beryllium, cadmium, manganese, and 560 pounds of lead. These toxic metals can accumulate in human and animal tissue and cause serious health problems, including mental retardation, developmental disorders, and damage to the nervous system. Arsenic leads to cancer in 1 out of 100 people who drink water containing a mere 50 parts per billion.

It's one thing to read such a list. It's another to experience the actual pollution on the ground, and the No New Coal Plants listserve provided occasional reminders of that reality, such as the following report by Elisa Young, who lived near several coal plants in Meigs County, Ohio: "Three out of three guests staying at my farm this week suffered from breathing problems—all three wheezing, one who had no history of asthma, and I found it very hard to breathe, feeling lethargic when it was nice outside and should have been a good day to get work done."

For those wrestling with the possibility that a large power plant may be sited in their community, one challenge is to get others in the community merely to begin imagining how much such a facility will change the fabric of daily life. On a trip to meet with activists in upstate New York, I visited the bucolic town of Jamesville, where City Councilwoman Vicki Baker showed me the location that had been selected by a New York City–based entrepreneur, Adam Victor, to build one of the world's largest coal gasification plants. We walked along a little-used railroad spur line, strewn with lumps of bituminous coal. Next to the tracks was a fence partially overgrown with brambles, and close at hand were a number of houses with well-tended yards. It was hard to believe that this small town had been considered an appropriate site for a facility the size of an oil refinery.

Vicki recalled the intense local organizing that had followed the announcement, led by her group Jamesville Positive Action Committee (JAM-PAC). At public meetings, residents questioned how such a megafacility could operate without endangering an elementary school located a stone's throw away. The sheer size of the plant, designed to turn one hundred train cars of Pennsylvania or West Virginia coal into methane gas every day, was hard for people to grasp.

Liz Curly, parent of a seven-year-old boy, told one meeting, "My concern is the fact that refineries have accidents all the time. We're dealing with methane gas, which is explosive. Evacuation would be troublesome. Where my son plays and learns should be the safest place."

Although the developers insisted that the project would be safe, residents already had experience with a coal ash storage facility on the same site, and they had experienced frequent releases of ash despite company assurances to the contrary. They also lived close to a hazardous waste incinerator and had become disillusioned with that project's insistence that it, too, was safely operated.

As we left lunch at a diner in Jamesville, Vicki suddenly pointed at a sudden puff of what looked like smoke rising from the coal ash storage facility.

"Is that normal?" I asked.

"It's not allowed under the permit," she said. "But it happens."

Vicki pulled out her cell phone, called an enforcement officer with the New York environmental quality department, and reported the release. From the familiar tone of the conversation, it sounded like the two had spoken many times. Since she was a member of the local city government, her call could not easily be ignored.

It's likely that when Adam Victor drew up his plans to site a giant gasification plant in Jamesville, he failed to foresee the sort of organized opposition that Vicki Baker and others in the town would put together. Developers typically benefit from the inherent boosterism of small towns. Local politicians tend to seize on promises of jobs—any jobs—to the exclusion of all other concerns. By the time opposition to a large project such as a coal plant begins to find its feet, city officials have already formed relationships with company officials, and the wheels of various permitting processes are turning. Local activists then face the twin challenges of trying to gain access to information while at the same time slowing a train that has already begun to pull out of the station.

Here in Jamesville, Vicki Baker and other opponents of the gasification project had managed to scramble fast enough to get traction before it was too late to make a difference. The group was politically experienced, and within short order a slate of anti-project candidates had ousted pro-project members of the town council. "Stop the Coal Plant" lawn signs sprouted throughout the town, especially after it was revealed that the project would include train cars containing sulfuric acid and mercury, that the plant would include a 110-foot flare tower, and that noise from the plant would be significant. As the bare facts of the project ewaporated.

Vicki told me that we didn't have time to wait for the state enforcement officer to arrive, because she had scheduled a meeting with residents in the town of Scriba, near the Lake Ontario resort city of Oswego. That was the fallback location selected by Adam Victor for the coal gasification plant after noting the level of community opposition in Jamesville. Now the wheels of local organizing were beginning to turn at the new site, this time under the leadership of engineering professor Dr. Kestas Bendinskas.

The dismissive term for the sort of meetings-in-the-livingroom activism that generally confronts developers is NIMBY: Not in My Back Yard. The process often plays out like a game of whack-a-mole. When citizens in one community turn out to be excessively feisty, developers pick up stakes and find a more amenable location. If Kestas and others were sufficiently tough, resourceful, and organized, perhaps they could send Adam Victor down the road to yet a third town, one where people were less empowered. In the end the project might land in a poorer, less cohesive community.

Whatever the realities of coal at the local community level, the coal industry was looking at buying its way to acceptance on a vastly larger scale. According to the *Washington Post*, ACCCE made a \$35 million commitment to the "clean coal" advertising campaign aimed at key primary and caucus states in the 2008 presidential campaign. The same newspaper reported that the National Mining Association had increased its 2008 lobbying budget by 20 percent from the previous year.

On top of its advertising artillery, the coal industry deployed paid outreach workers to attend rallies and debates throughout the primary states. With their "clean coal" hats, shirts, and signs, the outreach workers were never far from view as the candidates made their stump speeches. A goal of the campaign was to get the candidates on record in support of governmental investments in "clean coal" technology, and soon both the Obama and the McCain campaigns were swearing fealty to the clean coal message. In one widely quoted remark, Barack Obama told a crowd in West Virginia: "This is America. We figured out how to put a man on the moon in ten years. You can't tell me we can't figure out how to burn coal that we mine right here in the United States of America and make it work."

Whether the coal industry expenditure would ultimately pay off was more debatable. Early in the primary season, Obama met with editors at the *San Francisco Chronicle*, and coal and climate change was a major point of discussion. Obama's remarks were blunt, revealing a more complex viewpoint than the one he had expressed in West Virginia. Obama said:

Let me sort of describe my overall policy.

What I've said is that we would put a cap-and-trade system in place that is as aggressive, if not more aggressive, than anybody else's out there.

I was the first to call for a 100 percent auction on the cap-and-trade system, which means that every unit of carbon or greenhouse gases emitted would be charged to the polluter. That will create a market in which whatever technologies are out there that are being presented, whatever power plants that are being built, that they would have to meet the rigors of that market and the ratcheted down caps that are being placed, imposed every year.

So if somebody wants to build a coal-powered plant, they can; it's just that it will bankrupt them because they're going to be charged a huge sum for all that greenhouse gas that's being emitted.

That will also generate billions of dollars that we can invest in solar, wind, biodiesel and other alternative energy approaches.

The only thing I've said with respect to coal, I haven't been some coal booster. What I have said is that [it's wrong] for us to take coal off the table as an ideological matter as opposed to saying if technology allows us to use coal in a clean way, we should pursue it.

The interview was not released until several days before the election. The McCain campaign immediately began broadcasting it in coal states such as West Virginia, Illinois, and Ohio, but the last-minute push to paint Obama as an enemy of coal failed to change the ultimate outcome in any of the states.

Overall, the coal industry's "clean coal" campaign and its focus on the presidential campaign revealed the industry's strengths and weaknesses. In key mining states, such as West Virginia, Wyoming, and North Dakota, the industry had always enjoyed tremendous clout. Senators such as Jay Rockefeller of West Virginia had long played the role of pitchmen for coal. Through his chairmanship of the Commerce, Science, and Transportation Committee, Rockefeller in particular was able to bring home large subsidies for coal projects in West Virginia.

Outside the frontline coal states, the industry lacked a strong base, and in numerous other states—Florida, California, Maine, Washington, Montana, Kansas, Colorado, Texas, and Minnesota—coal's opponents were winning an increasing number of skirmishes. Moreover, the movement was attracting increasing support as nationally based efforts like Al Gore's We Campaign, Working Assets and CREDO Mobile, Coop America, Citizens Lead for Energy Action Now (CLEAN), the National Parks Conservation Association, and scores of others recruited thousands of people to lobby against coal plants and mountaintop removal mining.

Against its growing array of foes, King Coal continued spending heavily to promote its "clean coal" message. But that strategy was not without its risks. Having taken such strenuous measures to brand itself in the public mind as "clean," what would happen if uncomfortable realities intruded on that spanking-clean image, such as massive coal waste spills or other environmental mishaps? It was a question being answered on a daily basis in the mountains and valleys of Appalachia, if only the rest of the country could be persuaded to take a look.