

COVER STORY

The World In Microcosm

The all-out war between power companies and EPA has become the symbol—and the center—of the national debate over the role of government.

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Spring and summer 2009 was a great stretch for President Obama's energy and environment team. That May, the president struck a historic deal with the nation's auto industry; after decades of fighting, companies like GM and Ford agreed to dramatically ramp up their mileage standards, slashing tailpipe pollution and paving the way for a new generation of hybrid and fuel-efficient cars. In June, the House passed a historic cap-and-trade bill to slow climate change, cutting a slew of deals to get the grudging buy-in of coal-state lawmakers and of power companies. Its eventual passage in the Senate seemed all but assured.

Meanwhile, the head of the Environmental Protection Agency, Lisa Jackson, was preparing to roll out an unprecedented number of major new pollution-control regulations for the nation's 600 coal-fired power plants—many of which had for decades been spewing unregulated toxins linked to lung disease, birth defects, cancer, asthma, and other major illnesses. The new rules weren't Jackson's or Obama's idea. Most had been piling up at EPA for nearly 20 years, and they would soon hit court-ordered deadlines.

But Jackson and Gina McCarthy, the assistant administrator for clean air—both veterans of federal and state environmental work in the Northeast—knew what political fury polluting industries can unleash when confronted with new regulations. The two women wanted to preempt a revolt if they could. So they invited top executives from the biggest power companies in the country—among them Duke Energy, Constellation Energy, American Electric Power, Southern Co., Exelon, NRG Energy, Dominion, and Progress Energy—to informal roundtable meetings at EPA's Washington headquarters to let them know what to expect and maybe even to reach some kind of grand bargain, similar to the deal with automakers.

McCarthy, a straight-talker with a crop of steel-colored hair, a thick South Boston accent, and a ready sense of humor, quickly won the respect of the industry titans—even as some of them cringed at what they heard. “She did her best to tell us what was coming,” said Mike Morris, CEO of American Electric Power. “That was fair. She said, ‘We’ve got court orders, and we’ve got to comply with them.’ She said, ‘This is going to happen. It’s coming. Don’t think it isn’t happening.’ And it was clear that they intended to be aggressive. More aggressive than the EPA had ever been.”

McCarthy showed the CEOs a timeline of the upcoming rules. By the end of 2009, EPA would propose tough standards on coal-plant emissions of ozone, a smog-causing pollutant directly linked to asthma. In the first half of 2010, the agency would restrict emissions of sulfur dioxide and nitrogen oxide, toxic coal byproducts linked to asthma and lung disease. The following year, it would implement a “Good Neighbor” rule, forcing coal plants to cut pollution that contributes to health and environmental damage across state lines. It would follow, in November 2011, with an order for coal-fired power plants to discharge 91 percent less mercury. A 2012 rule would limit blasts of particulate matter, the microscopic chunks of soot that spew from coal plants’ smokestacks; the soot can lodge in the lungs and contribute to respiratory sickness and premature death.

Slowly, said Morris, “we were finally beginning to grasp the magnitude of what they were going to do.”

Instead of galvanizing the companies to ink a collective deal with EPA, the coming regulations split the industry. The rules would hit owners of old coal-powered fleets hardest, so utilities that relied on cleaner sources of energy—such as nuclear power and natural gas, which together generate nearly 40 percent of the nation’s electricity but no dangerous pollutants—thought the new rules would give them a competitive edge. Meanwhile, plenty of coal-burning companies had already invested in the technology to clean up their pollution (some because of state law, some because they knew the federal rules would be coming some day). Why reward the stragglers? By the end of 2009, it was clear that there would be no deal. Jackson and McCarthy prepared to roll out the rules without the cooperation of the coal companies.

At the same time EPA was cranking up its regulatory regime, Republicans were readying their own antiregulatory agenda. By the middle of 2010, a tea party-fueled charge against government regulation was roaring toward Washington—on a headlong collision course with the agency that would become the poster child for expanded government control. The resulting clash reverberated throughout Washington and the nation—and the aftershocks won’t stop for years to come.

Once they determined to fight the new rules, coal companies banded together with the Republican Party to strategize, and the 2010 midterm elections offered the perfect battleground. The companies invested heavily in campaigns to elect tea party candidates crusading against the role of Big Government. Industry groups (like the U.S. Chamber of Commerce), tea party groups with deep ties to polluters (like Americans for Prosperity), and so-called super PACs (like Karl Rove’s American Crossroads) spent record amounts to help elect the new House Republican majority.

The House freshmen, the influential super PACs, and now the 2012 presidential candidates have all put EPA's "job killing" regulations in their sights as part of an all-out political and legislative offensive against the agency. "We have got to get regulations in Washington under control. And EPA has become the standard-bearer for the [business] impediment that Washington has put in place," House Majority Leader Eric Cantor told *National Journal* in an interview.

The once-sleepy EPA was blasted to the front lines of the most partisan political war in recent memory. Cantor has assembled a fall agenda that brings a new bill attacking an EPA regulation to the House floor almost every week—supplying perfect fodder for campaign-ad sound bites and town-hall events. "Now you get applause lines at home when you say you want to stop the EPA," Cantor said. Meanwhile, Republican presidential candidates are playing offense. Front-runner Rick Perry slammed EPA as a "rogue agency" with an "activist mind-set." Michele Bachmann famously said she wants to lock up the agency and turn the lights out. In a *Washington Times* op-ed last week, Sen. Rand Paul of Kentucky flayed EPA as an "out-of-control agency" that "violate[s] constitutional rights" and "turns everyday life into a federal crime."

For better or for worse, the standoff between EPA and the coal-burning power companies has become a symbol of the fight between the government and industry—at a time when the political stakes couldn't be higher for either. EPA says these are long-overdue rules that will clean up the environment, save the lives of American children, and generate many more economic benefits than costs. The industry, its Republican allies, and even some uneasy Democrats say that the agency has committed massive regulatory overreach that will boost energy prices, kill jobs, and threaten reliable electricity, tipping a stagnant economy into a free fall. Both messages are powerful, especially in Midwestern states—Indiana, Ohio, Pennsylvania, Missouri—where coal is crucial to the economy. As it happens, these states are also crucial to the 2012 elections.

THE BOTTLENECK

When Lisa Jackson arrived on the job in early 2009, she knew she would meet a massive backlog of paperwork—and she couldn't have been happier about it. Waiting for Obama's new administrator was a stack of court-ordered environmental regulations, some dating back 20 years. Many were stuck in legal limbo through the administrations of George H.W. Bush, Bill Clinton, and George W. Bush.

Most people would groan at having to plow through an in-box like that. But Jackson saw the pile of ready-to-go rules as the opportunity of a lifetime.

It's not hard to see why her predecessors delayed rolling out the regulations: Unleashing such a blitz of antipollution rules would subject politically powerful cornerstones of industry—first and foremost, operators of coal-fired power plants, which provide half the nation's electricity—to tough new operating standards. The rules would dramatically clean up toxic coal emissions that cause a host of illnesses. But they would do it by forcing the nation's biggest utilities to install expensive pollution-control technology on their oldest and dirtiest coal plants—and to take the very foulest of them off-line entirely.

Still, Jackson felt more than ready: Coming off the heady 2008 victory, it seemed like Obama's environmental regulator could revitalize the mission of an agency that had languished on the back burner for at least a decade. And big, serious, national-level steps to save the environment and improve public health appealed especially to Jackson, whose 14-year-old son Brian suffers from asthma, a disease directly linked to exposure to coal pollution.

"Right now, we have greater opportunities to protect public health and the environment than any other time in the history of the EPA," she said in a speech to regional environmental administrators, soon after taking office. "That message is that the EPA is back on the job.... We have much to do in restoring the country's faith in our ability to protect the air, water, and land—now and for future generations." Jackson noted that Obama's first budget request to Congress gave EPA its highest level of funding in the agency's 39-year history. "That also means that we have the highest level of expectation that we have seen in our 39-year history," she said. Jackson and her team stuck to that vision, pushing EPA to the most muscular exercise of regulatory activity in decades, possibly since it was created.

EFFECTS AND CAUSES

Today's Republican resistance is plenty ironic. After all, a GOP president, Richard Nixon, created EPA, and many of this year's big rules were born during Republican administrations. Most of them date back to the landmark 1990 Clean Air Act amendments, which President George H.W. Bush hailed as a huge accomplishment when he signed them into law.

The chief aim of the 1990 amendments was to clean up the toxic pollution that had been spewing from the nation's fleet of coal-fired power plants with almost no regulation for more than 50 years. Burning coal produces a potent toxic stew; it is the leading discharger of chemicals like arsenic, mercury, and sulfur dioxide.

Studies from the Centers for Disease Control and Prevention, National Institutes of Health, and Harvard Medical School have tied coal emissions to heart disease, premature death, lung disease, birth defects, and asthma—especially among the young, whose lungs are not fully developed until they reach the age of 5, and the elderly.

When human lungs are exposed to the mix of nitrogen, ozone, and particulate matter from combusting coal, "it causes direct inflammation to your airways," according to Dr. Mark R. Windt, a pulmonologist at the University of New Hampshire who sits on the American Thoracic Society's committee on environmental health policy. (He also asked to be identified as a Republican.) "This produces swelling, making it difficult to breathe. If you really want to know what it feels like, try breathing for a minute through a straw. Then you know what it feels like for those kids. It causes a change in the physical construction to the lungs, called remodeling. The actual lung structure changes, with the growth of thick membranes of new cells, scarring the lungs. It makes it difficult for oxygen to pass through and get to the blood."

Sulfur dioxide, Windt explains, is even worse: "Think of it as sunburn inside your lungs. When you inhale it, there's redness, swelling, and mucus is being produced in your lungs because it's

reacting to the inflammation. Lung cells start peeling off and block up your bronchial tubes. This causes blockage and difficulty in breathing.”

Exposure to mercury, meanwhile, lowers an affected population’s IQ and is linked to attention and behavioral problems. Mercury accumulated in fish is toxic to the developing brains of fetuses and young children; it can also lead to blindness, deafness, and seizures.

Bush’s 1990 clean-air law took big steps to reduce many of those emissions. Using a cap-and-trade program, it put a limit on sulfur-dioxide emissions. (Environmentalists and economists have since hailed this as a major success. The first senator to push a major climate-change bill, Republican John McCain, hoped in 2005 to reproduce it in efforts to cut greenhouse gases.) The law required EPA to control other pollutants, too. But in 21 years, many of those rules have still not been implemented. A good example is the regulation for mercury emissions, which was mandated by the 1990 law but worked its way through a purgatory of impact studies and legal delays until finally, in 2008, the D.C. Circuit Court of Appeals found that EPA had to require that plants meet “maximum achievable control technology” standards for lowering mercury emissions. The federal court said that EPA must issue the rule by Nov. 16, 2011.

Another good example is a regulation sometimes known as the Good Neighbor rule. That one was born during the administration of George W. Bush. In the decade after the Clean Air Act amendments, scientific research showed that sulfur dioxide was far more harmful to human health than had previously been understood, and scientists and economists urged Bush to revisit his father’s rules. During his administration, EPA said that power plants that emit sulfur dioxide and other pollution in one state but cause health and environmental damage downwind in another state must clean up their act.

Federal courts found fault with the technical language and later ordered EPA to reissue it this year. But when Jackson did so this summer, she met with a fusillade of attacks. The coal giant American Electric Power announced that it would have to close three power plants, putting hundreds of workers out of jobs. Critics of Obama said that the rule threatened electricity reliability.

To be sure, Jackson took the mandate for a cross-state rule and ran with it. George W. Bush’s original regulation, for instance, had excluded coal power plants in Texas (the nation’s biggest burner of coal) from the standards. Obama’s version roped Texas back into the fold. On Sept. 20, Luminant, the biggest power producer in Texas, said that the rule was forcing it to shut down two coal boilers and three coal mines, cutting 500 jobs and possibly leading to rolling blackouts. The announcement has poured kerosene on Gov. Rick Perry’s attacks on Obama’s EPA.

ANATOMY OF A REVOLT

Privately, coal chiefs and Republicans say they understand that Jackson inherited a stack of obligations and had to act (a distinction that certainly doesn’t come across in their campaign ads or fiery floor speeches). But they also say that she brought an environmentalist’s zeal to the job—and that it seemed clear, even in the first meetings, that Jackson and McCarthy intended to push the most aggressive interpretation of the rules at the fastest possible speed. They appealed

to their friends on Capitol Hill—and on political action committees—for help. “We went to everyone and said, ‘These timelines are unacceptable,’ ” said American Electric Power’s Morris.

To sell their message, they re-created a colorful diagram based on the calendar Gina McCarthy had described to them. It shows the rollout of regulations color-coded by pollutant and rule—black for ozone, red for sulfur dioxide, pink for the cross-state air rule, blue for sooty particulate matter, and orange for carbon dioxide—with 35 marks for points in the schedule between 2008 and 2016. The crowded, rainbow-colored timeline creates a sense that EPA is unleashing a nonstop barrage of regulatory obligations.

People in the coal lobby began calling the slide “the train wreck.” The name stuck, and the slide became a hit. By the middle of 2010, it was being shown all over town. The train wreck was e-mailed to staffers, journalists, and lobbyists. It also went to the U.S. Chamber of Commerce; to tea party groups like Americans for Prosperity, which has close links to Koch Industries; and to super PACs gearing up for the 2010 elections.

In a rush of media buys, Web campaigns, and town-hall events, those groups began to spread the word to voters angry about too much government: EPA’s new rules could soon drive up their electricity prices and close down their power plants. The super PACs also began calling attention to forthcoming EPA rules outside the power sector—capping emissions from industrial boilers and cement plants, for instance. Industry groups dominated the messaging; the chamber alone spent \$33 million on ads and campaigns before the midterm election. Suddenly, average voters knew all about obscure pending EPA rules. “At a Labor Day parade last year, there were signs about boiler MACT,” recalls House freshman Morgan Griffith, R-Va., using the acronym for a rule that deals with industrial boilers.

As soon as they got to Washington in January 2011, the tea party-backed freshmen took the message to the GOP leadership. “In the caucus meetings, prior to raising their hands and taking the oath, the freshmen made it clear they were here to do three things,” said Michael McKenna, a Republican energy strategist with close ties to House leadership. “We’re here to blow up ‘Obamacare,’ we’re here to do something about the budget, and we’re here to make sure EPA doesn’t kill jobs. The energy right before the election was about the budget and the EPA. And they took all that energy with them.”

The House leaders listened. House Government Oversight Chairman Darryl Issa sent letters to executives asking them to list the government regulations that would most harm job growth. EPA regulations topped most lists. Planning their agenda, Speaker John Boehner and Cantor decided that bills defunding and reversing EPA’s regulatory authority would hit the floor early and often. Even if few of them had a chance to become law, thanks to a Democratic-controlled Senate, they would be political winners.

House Republicans worked closely with the U.S. Chamber of Commerce. In a January speech, chamber Chairman Tom Donohue said that EPA regulations were hampering growth and put their repeal at the top of his annual wish list. “Literally from two days before [the freshmen] took their oath, we’ve been very active on this,” said Bill Kovacs, who directs the chamber’s

environmental and regulatory-affairs program. “You name it, I can’t think of any piece of legislation that would roll back all of this that we haven’t been involved with.”

In February, a conservative free-market group called the American Legislative Exchange Council, whose “private enterprise board” includes major coal and oil companies, turned McCarthy’s infamous slide into a snappy booklet called “EPA’s Regulatory Train Wreck: Strategies for State Legislators.” It said that the agency threatened local economies, and it gave a handy blueprint for state legislators who might want to introduce bills handcuffing the rules. In March, as the government nearly shut down over the must-pass continuing resolution, House Republicans introduced over a dozen amendments trying to slash EPA funding and gut its regulatory authority. Throughout the spring and summer, they used every legislative opportunity to attack EPA—not least when the agency’s annual funding bill was on the floor. Last month, Cantor circulated a week-by-week fall agenda of bills aimed at “job-killing” regulations. Seven of 10 targeted EPA. The first of those, which is expected to pass on Sept. 23, cited the “train wreck” in its name: It was the Transparency in Regulatory Analysis of Impacts on the Nation (TRAIN) Act.

And while all the attacks keep coming, EPA keeps issuing more rules—including those to tackle the most controversial pollutant of all: the greenhouse gases that cause global warming. Until this year, the federal government had never regulated carbon dioxide and other gases produced by burning coal and oil. But among the tasks waiting for Jackson when she arrived on the job was a 2007 Supreme Court decision, in *Massachusetts v. EPA*, which said that the agency was obligated by the Clean Air Act to regulate greenhouse gases if they qualified as pollutants that endanger human health. The Court had hugely expanded EPA’s authority.

EPA duly concluded that greenhouse gases are pollutants that endanger human health, and Jackson made the announcement in December 2009, at the start of the U.N. climate-change summit in Copenhagen. Now her agency was required to regulate carbon dioxide. Strategically, Obama and Jackson hoped that this would prompt Congress, fearing EPA overreach, to finally pass the cap-and-trade climate-change bill, preempting their need to issue rules. But in 2010, after Republicans declared a war on what they called “cap and tax,” the bill died in the Senate.

So this January, just before members of the new Congress took their oaths of office, EPA began introducing rules that could ultimately affect every corner of the fossil-fuel industry. Once again, the new rules coincided with a powerful opposing political force—the resurgence of climate-change denialism. As if they hadn’t already been determined enough, conservative Republicans doubled down to fight for the long haul.

COSTS AND BENEFITS

In the trenches of the EPA wars, both sides agree on some things: These rules are long overdue, and they will have a big impact. They will dramatically reduce pollution, improve public health, and help the environment. They will also cost the companies that have to implement them a lot of money.

In coal-burning plants, the pricey process of following the rules involves fitting smokestacks with giant filters—described by one expert as “an enormous vacuum-cleaner bag made out of Teflon-level fabrics” over the plant’s ducts—to trap mercury, particulate matter, ozone, and acidic gases. Plants will also need to install what are known as “wet scrubbers”: slurry walls of water and limestone that, when the coal smoke travels through them, pull out the sulfur dioxide. (The resulting sulfur-dioxide and limestone mix is then turned into drywall.)

In the case of the utilities that own the nation’s 600 coal plants, many will have to invest between \$200 million and \$1 billion per plant to retrofit the machinery. Construction will take two to five years, although the plants will be able to operate during most of that time.

Not every company has to do all this. According to EPA, just over half of the nation’s coal plants already have the mercury filters, and a growing number have already installed wet scrubbers, either because state law requires it or because they saw the rules coming. Jim Rogers is CEO of one of those companies. Duke Energy provides electricity from coal and nuclear plants to consumers in five states. By following their progress through Congress and the courts, Rogers knew that stringent new emissions caps would hit him sooner or later, so he has spent the last decade investing \$5 billion to install screens and scrubbers. “We have not engaged like others have on costs and complaining about EPA—our point is that we have been preparing for many of these regs for years,” wrote Tom Williams, Duke’s spokesman, in an e-mail.

But when it comes to the nation’s oldest coal power plants—such as Virginia’s Potomac River Generating Station, built in 1946, or Pennsylvania’s Mitchell Plant, built in 1948—that kind of investment makes no economic sense. The cost of updating them would be too high, and companies will probably have to close dozens of plants, cutting power generation and jobs.

Energy economists say that it’s not hard to replace the plants going off-line with ones generating power from the nation’s abundance of clean, cheap natural gas. Studies show that a newly discovered supply of shale gas from the Northeast would likely have led to the retirement of many old coal plants anyway. Moreover, companies that spend money to install screens and scrubbers will actually be job *creators*. A typical power-plant retrofit can employ, at the peak of the work, up to 1,000 engineers, construction workers, and other laborers.

But there is no question that the new rules will force some companies to spend money, raise electricity rates, and lay off workers. A 2010 study by the North American Electric Reliability Corp., which works with the government to protect the nation’s electric grid, warned that the retirement of old coal-burning plants could jeopardize 10 percent to 20 percent of the nation’s coal-fired power. Philip Moeller, an Obama appointee to the Federal Energy Regulatory Commission, also told the [House Energy and Commerce Committee](#) that the rules made him worry about the grid’s reliability. “I remain concerned that the timeline for electric-utility planning and implementation is not compatible with the EPA timelines for its new regulations,” he said.

Industry groups make even stronger claims. A study commissioned by the American Coalition for Clean Coal Electricity, a coal-lobby group, concluded that the Good Neighbor rule and

mercury regulation alone would increase electricity costs by 12 percent to 24 percent annually, while costing 1.4 million jobs between 2013 and 2020.

At the same time, economic benefits to society writ large could offset the cost to companies. Peer-reviewed studies show that reducing pollution improves public health. In March, EPA released a cost-benefit analysis of President Bush's 1990 Clean Air Act amendments. Polluters will have paid some \$65 billion annually by 2020, but the corresponding reduction in premature death and illness (not to mention the rise in worker productivity tied to that boon) will have saved \$2 trillion annually.

EPA has similar estimates for the other new rules. The Good Neighbor regulation will cost \$2.4 billion per year but save \$280 billion in health costs by preventing up to 34,000 premature deaths; 15,000 nonfatal heart attacks; 19,000 cases of acute bronchitis; 400,000 cases of aggravated asthma; and 1.8 million sick days a year beginning in 2014. The mercury rule will cost up to \$11 billion annually through 2013 (mostly for the installation of scrubbers and filters), but it will yield \$59 billion to \$140 billion in annual benefits, mostly by avoiding 6,800 to 17,000 premature deaths each year. Other benefits of the mercury rule—not all of which were given dollar values in the analysis—include cutting 11,000 nonfatal heart attacks and 120,000 cases of aggravated asthma, as well as improving development for young children by boosting IQ, learning, and memory. The sulfur-dioxide rules are expected to cost \$1.5 billion annually and yield economic benefits of \$15 billion to \$37 billion annually.

A new report out this week by the nonpartisan Economic Policy Institute also concluded that, overall, the benefits of Obama's EPA rules exceed the costs—although not by quite as large a margin as the agency calculates. The combined economic benefits of clean-air rules, not including the cross-state rule, will exceed the combined cost by \$10 billion to \$95 billion a year, or by a ratio of 2-to-1 to 20-to-1. The net benefits from the cross-state rule could exceed \$100 billion a year. The costs born by the companies, the institute said, amount to 0.13 percent of the economy.

THE ELECTION ISSUE

For now, the political forces fighting EPA seem to be winning. Environmental and public health groups are defending the rules, but Republicans and their allies appear to have reframed the fight as one about “environment versus economy.” If that is the choice, they know how voters, trapped in a stagnant economy with 9 percent unemployment, will choose.

Many energy economists familiar with EPA's rules say that's a false choice. But the White House essentially conceded it was losing the political debate on Sept. 2, when it delayed the schedule for implementing a major ozone rule. Privately, senior White House staffers say they feared that the new rule would trigger further accusations that EPA had put an undue burden on the economy—particularly in Midwestern states that rely on coal and are crucial for Obama's reelection. “I have continued to underscore the importance of reducing regulatory burdens and regulatory uncertainty, particularly as our economy continues to recover,” Obama said.

Jackson made another concession last week when she slowed—albeit just briefly, she said—the rollout of carbon rules. “This short-term delay and a two-year pause in the ozone review is a tacit admission by this administration that its energy and environmental regulations are dragging down an already flailing economy,” said Phil Kerpen, a spokesman for Americans for Prosperity, in a statement blasted to reporters. “Affordable, dependable energy is the backbone of a modern economy. The president should take every step to abandon his manipulation of the energy markets through taxpayer-funded favoritism of firms like Solyndra and permanently call off his EPA regulators.”

That’s the kind of message Democrats fear could resonate beyond the tea party and into states dependent on coal mining or coal-fired electricity, such as Indiana, Missouri, Montana, Ohio, and Pennsylvania. The fight between coal and EPA could make the difference in who wins the White House in 2012.