

Facing Shutdowns, Coal Power Braces For EPA Air Rules

By **Derek Hawkins**

Law360, New York (November 22, 2011, 2:21 PM ET) -- With two landmark air pollution rules by the U.S. Environmental Protection Agency slated to take effect by the end of the year, coal-fired power plants are bracing for new expenses and other requirements that could result in the closing of many of the country's older facilities.

The EPA's rules, which place new limits on emissions from power plants, are certain to strain part of the nation's coal power fleet, likely leaving gas-fired plants and other sources to increase output to make up for the difference, according to experts.

Aging, high-polluting coal-based plants and those that haven't invested in emissions control equipment will be hit hardest. Some have already announced plans to close, and numerous others are expected to follow suit once the rules are in place.

Meanwhile, many newer coal-fired plants — more than half of which are already in compliance with the rules — will be retrofitted with pollution capturing equipment and will purchase emissions allowances.

Overall, experts said, the rules change the economics across the board for utilities, which will have to examine all their generating stations and emissions profiles to see which plants need to come into compliance.

"It will depend upon what their assets look like," said Christopher McAuliffe, senior counsel in Morgan Lewis & Bockius LLP's energy practice. "It's very specific for each individual company. They're not monolithic on these issues."

The rules are the Utility Maximum Achievable Control Technology, or Utility MACT, Rule and the Cross-State Air Pollution Rule, or CSAPR, and both have their origins in amendments to the Clean Air Act in 1990.

The Utility MACT rule is scheduled to become final on Dec. 16 after being delayed one month for the EPA to take further public comments. Under the rule, coal-fired power plants would have until 2015 to cut mercury and other hazardous emissions by more than 90 percent.

The CSAPR, which replaces the 2005 Clean Air Interstate Rule, begins its first phase of implementation on Jan. 1. Over the next year, the rule will require power plant operators in 28 U.S. states to reduce sulfur dioxide and nitrogen oxide emissions that migrate across state lines. They have until 2014 to comply.

Both rules face opposition from some members of Congress, who have introduced bills to delay or kill them before they take effect, saying they could destroy jobs and cause a spike in electricity costs. The rules could also be blocked by a federal court decision.

But if they take effect as planned, the rules will without a doubt force many coal-based power plants to retire because it will cost too much to take the steps necessary to bring them into compliance.

“There are going to be a number of units that simply won’t be able to comply,” said Neal Cabral, senior counsel at McGuireWoods LLP, who has worked extensively on environmental regulatory issues. “Some coal units are just not going to run.”

Other units, he said, would stay open but would be less active.

“You’re going to have to figure out which units you can run at what amount to stay under the caps,” Cabral said.

Estimates vary as to how much the rules will cost companies and what portion of the U.S. coal fleet will retire or reduce production.

According to an August report by the nonpartisan Congressional Research Service, the EPA has pegged compliance costs between \$10 billion and \$11 billion annually from 2015 through 2030, with about 9 percent of coal-fired plants installing scrubbers and filters for the Utility MACT rule alone. The agency adds that the costs will be overwhelmed by the benefits — estimated between \$59 billion and \$140 billion — that come from preventing premature deaths.

For the cross-state rule, the EPA estimates annualized costs of about \$2.4 billion a year, and says benefits could run as high as \$280 billion.

Analyses by the Edison Electric Institute and the North American Electric Reliability Corp. are less optimistic. While their outlook for the CSAPR is similar to the EPA’s, they project that power plants will need as much as five times more pollution control equipment than the agency believes, according to the CRS, which reviewed their analyses.

Cabral said utilities also faced a tight deadline to comply, which could create complications.

“It’s not unreasonable to say, ‘You should have been prepared to do this stuff,’ but it is unreasonable to say, ‘You should have known what to do,’” he said.

If a large number of plants seek to install pollution control equipment at the same time, the contractors performing the work could be spread thin, resulting in delays, Cabral said. Some plants, he said, could be taken offline for months or years until construction is complete.

“Everybody has a couple units that could fall into that,” he said.

According to the CRS, power plants with little or no pollution controls that began operating between 1940 and 1969 are prime candidates for retirement following implementation of the rules. Those plants represent about 110 gigawatts of power, or about one-third of the country's coal-fired capacity, the service said.

Studies by the U.S. government, industry groups, market analysts and environmental organizations show anywhere from 12 gigawatts to 75 gigawatts shutting down. More than 20 coal-based plants have announced closure in recent months.

Some experts fear shuttering of a significant part of the coal fleet could cause grid reliability problems and increase consumer electricity costs. Even localities with sufficient power supplies in aggregate could face reliability issues, and some consumers could be hit with rate spikes greater than 10 percent, according to some analyses.

Others contend that the boom in U.S. natural gas and, to a lesser extent, an increased investment in renewable energy will be more than enough to make up for the loss.

"I don't think we'll see any nationwide blackouts," said Mark Williams, an energy partner at Bingham McCutchen LLP. "We're not seeing anything dramatic or avulsive happening immediately here because there is an implementation period."

Nor are the rules the death knell of coal in the United States, experts said. Earlier this year, the EPA estimated that coal generation would be the same in 2015 as it was in 2008. The agency also projected that by 2030 the country would still receive 43 percent of its electricity from coal, down from 45 percent currently.

But even without the regulations, some experts said, coal would be at a disadvantage.

"New coal projects and material changes to existing coal projects are a tiny slice of the market activity in the highest demand portions of the United States," Williams said. "There is still a role for coal, but for certain classes of base-load only."

In the meantime, experts said, utilities would likely schedule more natural gas. Although coal is inexpensive and plentiful, its price has risen slightly over the past 10 years, while gas prices have dropped dramatically as companies have tapped into vast shale gas reserves in the eastern United States and elsewhere.

Moreover, more than three-quarters of generating capacity added in the United States since 1990 has been natural gas, although coal remains by far the largest source of U.S. electricity generation, according to the Energy Information Administration. Gas-fired power plants also release about half the amount of greenhouse gases as coal facilities.

"Look over the last 15 to 20 years at all of the expansion and extension work being done by natural gas companies," Williams said. "Many people have for years been getting the market signal on which is the more economically optimal and generally desirable fuel and gas has been winning for years."

--Editing by Pamela Wilkinson and Chris Giganti.