

EPA Rulemaking Shows Patient Approach To Carbon Capture

By **Keith Goldberg**

Law360, New York (October 02, 2013, 5:58 PM ET) -- The U.S. Environmental Protection Agency's requirement for carbon capture and storage at new — but not existing — coal-fired power plants may seem like mixed messaging, but experts say the distinction effectively acknowledges the legal challenges of imposing a blanket rule while advancing the agency's belief that, as the technology improves, more regulated facilities will easily be able to use it.

In unveiling revised greenhouse gas emissions standards for new plants last month — 1,100 pounds of carbon dioxide per megawatt-hour for coal-fired plants and 1,000 pounds of carbon dioxide per megawatt-hour for gas-fired plants — the EPA maintained that those standards could be achieved by new coal-fired plants with at least partial implementation of CCS technologies.

Yet days after unveiling the new rule, EPA Administrator Gina McCarthy said CCS wouldn't be required in an emissions rule for existing plants the agency is required to craft by 2014 and finalize a year later, saying it isn't feasible to install CCS technology at existing plants, many of which are coal-fired.

But experts point out that new and existing plant rules are crafted under two different provisions of Section 111 of the Clean Air Act.

"Broadly speaking, new source standards for new plants involve an opportunity to require state-of-the-art technology," said Crowell & Moring LLP senior counsel Bob Meyers, a former EPA assistant air administrator. "When you're dealing with existing plants, it's a different calculus because EPA is only required to establish guidelines and has to take in other factors. I'm not surprised there's a differential [on CCS], because there's a different legal requirement."

Any rule governing existing power plant emissions will likely be crafted under Section 111(d) of the CAA, in which EPA would direct states to submit plans for reducing greenhouse gas emissions for their existing power plants within a certain amount of time, which would then require federal approval. That would allow plants to employ a wide range of pollution-control methods, including CCS, to meet those reductions, experts say.

However, McCarthy's acknowledgment that retrofitting existing plants with CCS isn't feasible underscores the reality that existing plants will likely resort to other methods to lower emissions before considering CCS, experts say. Combine that with the fact that rock-bottom U.S. gas prices have essentially stopped new U.S. coal-fired plant construction, and there's a question of whether there's a market for CCS technologies to grow into.

But even though U.S. coal plant construction has ground to a halt, the rest of the world is a different

story, so it would still behoove the energy industry to develop more advanced CCS technologies, says David Doniger, policy director for the Natural Resources Defense Council's climate and clean air program.

"There's a bigger world market, and if we're going to continue to use coal decades hence and not cook the world, there's no way to do it without CCS," Doniger said. "There's also a question of whether we'll need carbon capture for other fuels."

Currently, new gas-fired plants would easily meet the standards proposed by the EPA, but the agency is required to review so-called new source performance standards every eight years, meaning those plants and other new facilities could eventually find themselves vulnerable, experts say.

"If the U.S. heads down this path of carbon constraints and coal-fired power plants both new and existing are on the front line, CCS becomes vital to reducing carbon emissions from large industrial facilities, like cement plants or manufacturing plants," said Reed Smith LLP's David Wagner, a former EPA attorney and a contributor to the International Energy Agency's model regulatory framework for CCS. "At some point, in the long game, this is not just about coal-fired power plants. I think EPA is playing that long game."

Of course, questions persist about the feasibility of large-scale CCS projects. Experts say legal challenges to the EPA's new plant rule will likely center around the required CCS technologies and whether they are technologically and economically feasible under Section 111 of the CAA. The coal industry and its allies claim the new plant rule effectively bans any new coal-fired plant construction.

"Carbon capture and storage is kind of an on/off switch, in a way — if you're in for a dime, you're in for a dollar," Meyers said. "It's a capital cost, and the important decision in building a plant is the up-front capital cost."

The EPA has cited several ongoing CCS projects to support its contention that the technology is reasonable and has been adequately demonstrated. It's also nearing the finish line on a rule that would remove an obstacle to CCS by exempting carbon dioxide streams injected into the ground from hazardous-waste regulations — the White House's Office of Management and Budget completed its review of the rule on Monday, according to federal records.

But if the government is serious about its endorsement of CCS, it needs to do more to foster advances in the technology, according to Wagner.

So far, the U.S. Department of Energy has sunk billions into CCS research and development and is offering \$8 billion in loan guarantees for CCS and other advanced fossil energy projects as part of President Barack Obama's climate change action plan.

"There needs to be additional federal and probably state funding, as well as an effort by the utility industry to commit resources to it," Wagner said.

--Editing by John Quinn and Philip Shea.