The Politics of Mercury

DEBATING EMISSION CAPS

By Steve Barlas

WHEN ADA-ES ANNOUNCED last August its first sale of a mercury emission control system to an electric utility, the name of the buyer was left out of the company press release. All the Littleton, Colo., company was willing to say was that the utility was located in the Midwest and was building a new 780-megawatt, coal-fired power plant. ADA-ES followed the same script the next month when it announced its second sale of an activated carbon injection system, this time to an unnamed utility building a new 575-megawatt, coal-fired facility in the Upper Midwest.

ADA-ES's refusal to release the name of those two buyers probably had something to do with the legal ramifications of proprietary information. But politics may have played a role, too. The utilities buying those mercury control systems were probably worried about their names being thrown into the acrimonious debate kicked off the previous March by the U.S. Environmental Protection Agency's publication of a clean air rule requiring coal-fired utilities to lower mercury emissions.

Some utilities, environmentalists and states aimed a fusillade of complaints and lawsuits at the EPA in the wake of the rule's publication, forcing the agency to reopen numerous questions revolving around its near-term "cap-and-trade" emissions reduction strategy. No utility will be forced to reduce mercury emissions until Phase 2 of the plan goes into effect in 2018. Meanwhile, the EPA will give states mercury emission ceilings, based in part on the kind of coal the utilities use. For the most part, states will be able to stay below those ceilings by virtue of utility mercury reductions made as a result of a second, allied rule called the Clean Air Interstate Rule (CAIR). CAIR will force utilities, mostly in the East and Midwest, to install scrubbers and precipitators to reduce emissions of sulfur dioxide and nitrogen oxide. Utilities will achieve mercury emission reductions, which they can "trade" to utilities in other states in danger of breaching their state's mercury "cap." In its first phase, the EPA said, mercury emissions would be reduced from 48 tons to 31 tons by 2010. The agency argued it was going the voluntary route because, according to the Edison Electric Institute (EEI) and the Department of Energy, proven mercury-emissions-control-only equipment was unavailable. Emissions would have to drop to 15 tons in 2018.

After the EPA issued the mercury rule, environmentalists and state pollution control officials argued that mercury controls for certain types of coals are available and could reduce emissions 90 percent. The ADA-ES press releases from last summer proclaimed: "Greater than 90 percent mercury capture has been demonstrated for several different equipment configurations that represent nearly all of the market for new and existing power plants that burn Western coals."

Rich Miller, vice president of business development for utility systems for ADA-ES, says the company does offer guarantees on emissions reduction performance to utilities who buy ADA-ES systems, which depends on activated carbon supplied by NORIT Americas. But these are squishy guarantees. He acknowledges, "If you are looking for guarantees based on 10 units operating for a year or two, which all have been getting great results, you are not going to find that."

The Edison Electric Institute has consistently argued that foolproof, mercury emission control technology is unavailable. Michael Rossler, manager of environmental programs for the EEI, said, "Recent public announcements about contract awards for mercury controls with guarantees do not explicitly state what the guaranteed performance is supposed to be for such mercury controls."

Rossler's skepticism is echoed by Doug McFarlan, spokesman for Midwest Generation, which owns six coal-fired plants in Illinois. Midwest is testing activated carbon systems at two of its utilities in 2006. Sorbent Technologies is supplying the systems. "Sorbent has indicated to us that these will

GUEST OPINION

Vigilance Required

By Sen. Jeff Bingaman

At the beginning of the last Congress, I outlined three recent failures of electricity markets that I believed an energy bill should deal with. First was the collapse of electricity markets in California and the West during 1999 and 2000, second was the blackout in the Eastern U.S. and Canada during 2003, and third was the series of bankruptcies and near bankruptcies of investor-owned utilities during the period between 1999 and 2003. I believe that the Energy Policy Act of 2005, deals, at least to some extent, with each of these failures.

Perhaps as important as what we did in the act was what we didn't do. There was strong pressure on the part of some in Congress to intervene in the Federal Energy Regulatory Commission's governance of electricity markets in a number of ways. Some would have had us specify transmission pricing formulas. Others would have forbidden FERC from taking actions to further their push towards regional market structures with clear rules. We resisted those impulses.

I believe the provisions we passed will help to address the problems that we have encountered recently. We do, however, need to be sure that FERC administers these programs aggressively. Genuinely competitive markets do not happen by accident. Consumer protection from abuse of corporate structure does not come like the weather. Reliability will not just come along. We in Congress must watch closely to be sure that the bill we passed is being implemented and that it is working.

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be successful tests if we get a 70 percent mercury reduction," McFarlan states.

Some states are in the process of trumping the EPA by establishing their own mercury emission reduction programs, which they are legally able to do, and are required, by EPA, to announce by November 2006. If enough states adopt tighter controls, that would destroy the possibility of the establishment of a trading market for mercury emissions as envisioned by the EPA cap-and-trade program.

The State and Territorial Air Pollution Programs Administrators and the Association of Local Air Pollution Control Officials, otherwise known as STAPPA/ALAPCO, have been agitating for tougher state laws. In November, the group published a model state law calling for 80 percent capture of mercury emissions in phase 1 and 90 to 95 percent capture in phase 2. The EPA clean air mercury rule (CAMR) calls for reductions of only 21 percent from current levels in phase 1 and phase 2 reductions of 69 percent. Connecticut has already passed a stringent law and Massachusetts has adopted a strict regulation. Other states are moving in that direction as well, but not without encountering political resistance.

Those political headwinds have battered Illinois Gov. Rod Blagojevich, who announced in early January a proposal which would force power-plant operators in his state, like Midwest Generation, to slash mercury emissions throughout their fleet of coal-fired facilities by an average of 90 percent by June 30, 2009. That goes beyond the STAPPA/ALAPCO model.

But after Blagojevich released his plan some Illinois legislators were critical. "Somebody is going to have to explain to me why Illinois is well served by having a separate standard … from the rest of the country," said state Sen. Steve Rauschenberger, one of 12 lawmakers on the legislative committee who has to approve the proposal. The Illinois Pollution Control Board also must sign off on the plan.

The EPA appears to be rethinking state mercury caps. This is because, as is often the case within the electric industry, some utilities are complaining that the EPA's rule favors certain regions. Bruce D. Alexander, strategy manager, environment, health and safety at Exelon Corp., says his company thinks the "adjustment factors" EPA plans to use in setting state caps penalize its plants.

Cinergy, which has coal-based facilities in Indiana, Kentucky, and Ohio, shares Exelon's concern in part. While Cinergy supports the coal-type adjustment in phase 1 of the EPA plan, it wants changes in the formula in phase 2.

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