Conspiracy Theory? Command and Control?

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According to one consultant, the EPA is about to pounce on electric utilities, again, with a rule that will limit the size of particles emitted by power stations, and that ruling will lead to the shutdown of a significant percentage of coal-fired power plants. Now, the Clinton Administration, in its energy bill, has proposed to command that the renewable share of generation reach 7.5%. I'm sure that the DOE and EPA haven't talked, but if they did, think of the dialog:

EPA: We've got to do something about air pollution.

DOE: We've got to do something to push renewables, especially with Kyoto looming in the background, but nobody wants them.

EPA: We can really close down a lot of coal-fired plants with this 2.5 micron rule, and somebody has to put something in their place.

DOE: Yeah, and renewables don't produce those particles, do they? Let's see, you close down 15% of the coal-fired power stations and that reduces capacity by 7.5%. We could tell electric companies to fill the gap by purchasing renewables.

TOGETHER: Sounds terrific. But don't tell anyone about this meeting. They might think we're sneaking Kyoto in by the back door, or even worse, trying to sneak in cleaner air under the guise of green power.

The real issue is not the EPA's desire to enforce a new standard, which either does or does not make sense as a cost effective health measure. The issue is: what is the goal of the renewable mandate? The next question is: can one reach that goal in a more cost effective way? Is the goal to reduce CO_2 emissions or to reduce our dependence on foreign fuel sources? If so, could a combination of extremely efficient gas generation and fewer four wheel drive vehicles do the job more efficiently? **If the purpose is to favor the technology of renewables, why do we think that we can pick the right technologies better now than when we picked synfuels?**

Is this like the decision to cure air pollution in California by pushing zero emission (electric vehicles), which the electric industry liked as a solution when it thought that electric cars would plug their batteries into the grid for recharging? Then one of the oil companies figured that reformulating gasoline would solve the problem for less? Now, of course, the battery powered car may give way to the fuel cell car, which does not recharge off the grid but might charge the grid.

"The Power of Choice"

The Cornell Society of Engineers recently held a conference entitled "The Power of Choice," at which various luminaries who either graduated from, taught at or sent children to Cornell spoke to a larger group of graduate engineers, some of whom had been out of school for a while. (One alumnus to another: "I never thought I'd see a girl's room in Phillips Hall.") A lot of people spoke at length. Here's a snapshot rundown (with embarrassing admissions omitted):

E. Linn Draper (American Electric Power)—Wants a "reasonably level playing field." Rationale for vertical integration is crumbling. Technology will matter: unified power controller in transmission, distributed generation via microturbines and fuel cells.

Comment: *First time I heard a utility executive insert a qualifier before "level"*

Judith Cardell (FERC) " Issues before FERC: can FERC define regions, rights and responsibilities of incumbents vs. new entrants, profit or non-profit?"

Comment: *Has FERC actually defined functions of newly named "regional transmission organization" and is the RTO really different from the ISO, or is it a rose by another name?*

Alfred E. Kahn (Cornell)—Shopping credits amount to "bribing customers to leave and calling it competition." It has to be paid by rest of customers. "Preserving competition is not the same as protecting customers." "As long as PUCs are arbiters, competitors will attempt to bias the process and PUCs will micromeddle."

Comment: *It's hard to keep out the "kleptocrats."*

David Rohy (California Energy Commission)—"Small users are voters. Politicians want something to happen while still in office. Emissions reduction credits are an issue in California, especially for new applicants that don't have dual fuel capabilities."

Comment: *Nothing is easy in California.*

Kenneth Lawrence (PECO Energy)—"Customers don't get it right away. They fail to understand that regulated entities still fix the wires when they fall down. Regulation in the new era has to deal with performance and goals, not be prescriptive."

Comment: *Pennsylvanians must be different. They actually buy from alternate suppliers.*

Richard Schuler (Cornell) —"Lessons learned from other deregulation (or questions asked). Why deregulate? What is needed for market to function? Indicators that market is not working? Who is to blame when something goes wrong? Enthusiasm of employees after deregulation? What institutions emerge?"

Comment: *If you want the answers, you have to enroll in Dick Schuler's public policy course.*

William Schulze (Cornell)—"Alternative auction procedures for generating output produce different prices, but the number of competitors in restricted markets really makes a difference, with six sellers needed to bring price down to a competitive level (the price is over 50% higher when there are only 2 bidders). Some local areas will see higher prices due to small number of competitors."

Comment: *Maybe this is why companies pay big bucks for packages of power stations.*

Kenneth Birman (Cornell)—"System will have to depend more on network technologies that rely on off-the-shelf commercial products. There are few state of the art success stories."

Comment: *Is this why the California ISO software costs so much?*

James Thorp (Cornell)—"Utilities used to have redundant systems. Seventy percent of reported disturbances involve relays. Better to have false trips than no trips.* Separation of operation from ownership: does it lead to operator burning out the line rather than putting in relays?"

Comment: *I don't even know what a relay is. But do the lawyers who are trying to redesign the network know, either?*

Steve Little (Cornell)—"Cornell is NYSE&G's largest single point customer, and it will shift load, raise load factor by means of project that uses Lake Cayuga water, pumped up hill, to cool campus in the summer. Deregulation benefits those with options, and large, stable loads."

Comment: *We might see more innovative thinking on the part of consumers once they look at new pricing schemes. That's how markets induce efficiency.*

Robert Shaw (Arete)—"Big question: is central station model still valid? Microgeneration (appliance sized) produces a scale shift, threatens to strand T&D. Eventually, hydrogen is both an energy carrier and means of storage. By 2004, the fuel cell in a car will cost about $100/kWw. Small engines now can be leased (with maintenance) and produce electricity at 5-6¢ per kWh. Big problem, now, is the high cost of protective devices demanded by utilities for connection to the grid."

Comment: *New technology comes along. Incumbent monopoly claims the system will collapse if the new technology is attached without expensive safe-*

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*Meaning: disturb customers more than necessary rather than have the entire system collapse?

guards and much deliberation. Anyone remember Hush-a-Phone?

Teresa Flaim (Niagara Mohawk)—"Old utility now has three parts: generation ("a business run by real men who make money and go broke"), commodity marketing and brokering (competitive, specialized, requires scale), and T&D (regulated for now). Big cultural problem in moving to competition is the move from an entitlement to a performance culture (which rewards results not efforts). Employees need to ask whether they have what it takes, or whether they should pursue a different career."

Comment: *What's amazing is the mix of people now in the electric business: outsiders raring to go, insiders eager to do it differently, and the clueless, who are still there, waiting for the natural gas shortage and the meltdown of the wires due to overuse by marketers.*

William C. Harding (consultant to large energy users)—"Electricity is a commodity. Customers know they are paying too much. Regulation led to high prices."

Comment: *For large users for sure, until they got smart and bargained. Will they do as well in a competitive market?*

Kenneth Estabrook (Lindaberry, McCormick and Estabrook)—"New Jersey regulatory law commanded a price reduction, reduced taxes on the electric bill, has the regulators determine stranded costs, and allows some opting out of the system"

Comment: *Sounds like a free lunch to me.*

Eugene Zeltmann (NY Power Authority)—" Regulation was designed to protect investors. In the network of the future, two way communications link all parties, and the grid becomes a smart network. Consumers, not policymakers, will shape the configuration."

Comment: *Right now the policymakers don't know that the consumers will make the ultimate decisions. Surprises are on the way.*

Now, let's put it all together. The restructuring will produce mar-

ket power problems, and it may take the antitrust people to straighten them out. Some of the so-called pro-competitive measures just protect competitors, sometimes at the expense of the public, because, like it or not, there is no such thing as a free lunch.

Somebody had better spend more time on mundane reliability issues. Large customers can make significant changes in consumption patterns in reaction to expected changes in pricing. Technological progress could strand even more of the utility plant. And some utility managers have to develop new attitudes or look for new jobs.

Next question: why don't these types of discussions surface at the usual meetings? We're looking at the potential for a completely new industry. Think about it. Old line types try to make out like bandits selling generation in restricted markets. Trust busters jump in, or worse, distributed resource people take advantage of the high prices caused by the generators to establish themselves in the market. And then the grid people make the network smart. Is this what we discuss at the Wall Street Utility Group?

Pooling Purchases

Discussion between utility analyst (UA) and banker (UB):

UB: What if a company announced that it would do its merger on a purchase basis, and the amortization of goodwill produced lower earnings per share?

UA: The market would look unfavorably on the deal. The stock would go down.

UB: Isn't that irrational? After all, the cash coming in and going out the door is identical either way?

UA: Well, I suppose so.

UB: If you explained that to investors, wouldn't they understand?

UA: I suppose so, but it would have to be a good explanation.

UB: Don't corporations do purchase accounting in other industries without any qualms?

UA: I suppose so, but utility investors are different.

ABOUT THE AUTHOR

Leonard S. Hyman, CFA, is a senior industry advisor to Smith Barney. Previously he was managing director of Fulcrum International Ltd., as well as an independent consultant specializing in the economics and finances of energy and telecommunications utilities.

From 1978 to 1994, as head of the Utility Research Group and first vice president at Merrill Lynch, he supervised and maintained equity research on foreign and domestic energy and telecommunication utilities. He was a member of privatization teams for offerings of British, Spanish, Mexican, Argentine and Brazilian utilities and consultant for other restructuring studies. Prior to joining Merrill Lynch, he was a partner at a New York Stock Exchange member firm and an officer at Chase Manhattan Bank.

Author of *America's Electric Utilities. Past, Present and Future,* author of *The New Telecommunications Industry: Evolution and Organization* and editor of *The Privatization of Public Utilities,* he has contributed to other books and to professional journals.

For more than a decade, Mr. Hyman was cited by *Institutional Investor* as one of the leading research analysts in his field. He is a Chartered Financial Analyst (CFA). He holds a BA from New York University, where he was elected to Phi Beta Kappa, and an MA in economics from Cornell University, where he majored in industrial organization and minored in Latin American studies.

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