Restructuring in the Rearview Mirror – a 10-Year Retrospective of California's Doomed Experiment with Electric Deregulation. By The Energy Overseer

Looking Outside the Circle for Market Power in Gas and Electricity

There is an old story about a man found crawling on all fours beneath a street light. "What are you doing?" a passerby asked.

"I'm looking for my keys."

"I don't see them here," the observer said. "Are you sure this is where you dropped them?"

"No, I think I lost them over there," he responded, pointing outside the circle of light. "But I can see much better under this lamp."

Increasingly, energy regulators are being asked to find and punish companies for exercising "market power" — that somewhat amorphous construct that argues that any market player capable of obtaining prices above its marginal cost must be doing something wrong.

Market-power abuse lies at the heart of the problem in electricity and natural gas markets, many people believe. When confronted with higher than desired prices, they presume "gaming" and manipulation of the system. And yet, when you ask them for substantive evidence beyond the fact of high prices, they can only answer, "Well, it must be here somewhere, if we just keep looking."

I suspect that, like the man in the story, we might be looking in the wrong places.

Case in point: Currently, the Federal Energy Regulatory Commission is conducting an investigation into alleged exercises of market power by El Paso Natural Gas Pipeline Company and its affiliate El Paso Merchant Energy. The proceeding is an outgrowth of a complaint brought by the California Public Utilities Commission that El Paso improperly awarded contracts for excess capacity on its pipeline system to its own marketing affiliate, and that the concentration of assets allowed the companies to drive prices at the Southern California Border to extremes. This complaint, in turn, is a replica of prior CPUC cases brought against El Paso and Dynegy Corporation, and then against Enron, when those other marketers held contracts for the same capacity. FERC rejected the CPUC's initial complaint, and the second was made moot when Enron withdrew from the contracts for other reasons.

FERC earlier this year found no basis for the initial allegations of affiliate-rule transgressions by El Paso, but turned instead to an investigation of whether the company had and exercised market power. I say "had" because in the intervening months, the Merchant Energy contracts have elapsed and the rights to about 1.2 Bcfd of pipeline space have been reallocated to about 30 other shippers.

It would surprise me if, even after assumption of those contracts by new shippers, the Topock prices drop to what the CPUC considers competitive levels.

So far, the El Paso hearings have generated some sparks but little light. The CPUC and intervenors Southern California Edison and Pacific Gas & Electric used consulting reports to allege that high prices at Topock prove El Paso is manipulating the system.

Edison offered a twice-warmed-over report from the Brattle Group that essentially showed that El Paso did not raise prices by withholding; it just didn't offer discounts on excess capacity as it "should" have.

The case against El Paso was backed by a FERC staff analysis, which used a technical calculation called the Herfindahl-Hirshman Index (HHI) to show that under some circumstances El Paso Merchant had market power because it controlled a significant share of the "relevant market."

FERC economist Jonathon Ogur testified that this power was measurable "when pipeline capacity constraints created a separate delivered-gas market in Southern California and under the assumption that El Paso's firm and near firm gas supplies are the relevant market."

In response, El Paso denied all the allegations and offered its own consultants, including Joseph Kalt, an expert on market economics from the JFK School at Harvard University, and John Morris, a vice president of Economists Incorporated and former staff economist for the Federal Trade Commission. These analysts claimed to find no structural market power and no conduct by the firms that would prove they had the ability to raise prices on a sustained basis. Morris testified that "other suppliers consistently have been in the position to respond to demand by bringing supplies to the market were Merchant to leave customers undersupplied" by withholding capacity.

Kalt found not only that El Paso Merchant did not have an incentive to withhold capacity, as alleged, but that its practices were consistent. When the difference between basin prices and border prices was at its highest, "Merchant has consistently put its full capacity on the market," Kalt said.

Key to El Paso's effort to undermine the credibility of the CPUC and utility arguments was that their own experts admittedly did not take into account any other factors that might be responsible for driving prices--such as increased demand and supply limits other than withholding. Also, an El Paso executive testified, the company actually lost a lot of money on gas-hedging strategies, so it had no incentive to withhold capacity because that would cut off a source of revenue by which it could trim its losses.

Instead, Kalt argued that physical limits on California's pipelines were the culprit. "It makes no sense to even hypothesize that gas prices were elevated by artificial withholding of gas supply flows by Merchant (or any other supplier of gas into California)," he concluded. The supply/demand balance and the resulting price are set by physical limits on the system.

So what we have is essentially a standoff between consultants.

Some media reports have focused on other "evidence" that an El Paso Merchant manager wrote a memo to support the contracts as a way to "increase control" over the market. Or that because El Paso informed CEO William Wise of the deal, that somehow proves "collusion" among the companies.

I tend to think that just shows someone was trying to score points with the boss.

Just as it would make sense for, say, Sempra Energy Resources to tell CEO Steve Baum it wants to build a power plant in affiliate San Diego Gas & Electric's territory, it proves nothing to discover that Wise had some say in a decision to enter an auction held by the affiliated pipeline. In fact, it would be stupid not to include Wise in the decision.

My guess is these factors will bear little relevance to FERC's eventual decision in the case. And even if FERC finds that some market power existed, it will determine that the problem has already been corrected by the recent auction of contracts and reallocation of Topock delivery rights--whether or not prices drop in the future.

But if El Paso did not cause the higher prices, what did?

There is something else going on in natural gas markets that is not being considered by regulators because it falls outside the circle of light provided by HHI indexes and traditional market-power analysis.

It is possible that the answer lies in the nature of gas trading as it has evolved in recent years--in particular, with the rapid expansion of electronic trading platforms and financial contracts for gas that really have no relationship to the physical delivery of gas.

Point to Enron, if you will. Enron Online is the company's newest success, passing one million transactions during May--with Enron's trading units having a position in every single deal, whether it be for gas, power or broadband capacity on some underground piece of wire. Enron uses SoCal/Topock as its exclusive hub for California gas trading, putting considerable emphasis on this famously constrained delivery point.

More importantly, the contracts for gas do not have a requirement for actual delivery. That is, they can expire and be settled by cash changing hands rather than gas flowing. That, some gas traders argue, is a system ripe for abuse, because the resulting prices forged in deals do not have to be related to the actual cost of gas supplies and delivery. And the greater the difference in "basis" between supply basins and border deliveries or Henry Hub benchmark prices, the more opportunity there is to arbitrage.

If you want to go back to the old journalistic saw "follow the money," it piques one's interest that Enron is reputed to have cleared $1 billion through playing the Topock price against the Henry Hub national benchmark prices in what are essentially "paper trades," while El Paso Merchant lost almost $700 million in hedging deals.

Am I blaming Enron? No, not really. An investigation might well show the traders are "playing by the rules." The problem is that it's Enron's proprietary platform that makes the rules for trades, and since Enron is a party to every transaction, it holds a great deal of market information about its counterparties.

The entire problem of electronic trading platforms is a puzzling one for regulators, even for the federal Commodity Futures Trading Commission. In other commodities, such as grain or cotton, CFTC tries to enforce delivery requirements and monitor the dominance of players in specific markets. But the agency has not looked at energy trading in depth. It might be time for such an inquiry.

This week, FERC member William Massey raised the issue of market power analysis in a dissenting opinion in an electricity case under the heading Southwest Transmission Cooperative. The way that FERC measures market power is "an anachronism," he said. "This method focuses solely on the market share of the individual seller instead of conditions in the market."

He recommended that FERC institute an investigation to find more appropriate methods and promoted a "delivered price test" sometimes used in merger cases as a possible alternative to a simplistic calculation of market concentration.

That's a good idea, but it doesn't go far enough. Power and gas markets have changed radically with the opening of wholesale trading and the introduction of electronic exchanges. Rules have not kept up with these changes, and, as Massey suggests, they should be revisited to determine whether they "create perverse incentives or obstacles" to market players behaving in competitive ways.

He also points to a lack of demand responsiveness, particularly in electricity markets, that enables price setting by suppliers with little counterbalancing power by the buyers. And finally, Massey said, behavior is a key measure. "Past instances of withholding of supply to run up the price could be a clue to flaws in the market that were undetected by other elements of the analysis."

In other words, there are a lot of other places to look for problems in the market than under the closest lamppost **[Arthur O'Donnell].**

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