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Some of the electric power industry's top analysts met at the Federal Energy Regulatory Commission on January 10, 2007 to evaluate the problems facing restructured electricity markets and to offer possible solutions. The event was sponsored by the Atlantic Energy Group: (<http://www.eng.umd.edu/~sgabriel/AEG/index.html>).

This is an extremely hot topic given increases in electricity prices, and several states, such as Delaware, Illinois, Maryland, Michigan and Pennsylvania, are actively considering a return to a more regulated paradigm. This issue made front page national news when the New York Times ran several front page articles in October 2006 and September 2007 on the failure of competition to reduce electricity bills and the corresponding new push to regulate power costs.

Roughly speaking, there are two schools of thought: re-restructuring versus re-regulation. Of course, we never deregulated in the first place, so re-regulation is somewhat of a misnomer. In any event, what one sees as the solution depends on what one thinks is the problem.

The political goal of restructuring was to lower electricity rates; the public policy argument was that restructuring would result in a more efficient power system. The marriage of regulators wanting lower prices in high-cost states with economists and analysts who wanted a more efficient power system was one of convenience, which was put asunder by the relatively recent increase in natural gas prices. Efficient markets set prices at marginal cost; regulated utilities price at average cost. When marginal prices were below average costs, the window of opportunity opened for restructuring; with the increase in natural gas prices, the situation has reversed and, not surprisingly, calls for re-regulation have increased.

One group views high prices as the problem caused by market power and manipulation, compounded by a market design that has one clearing price (by time and location), and the increase in cost of capital needed in restructured electricity markets to fund new investments. The other group sees minor exercise of market power (at least in ISO markets, which have extensive market monitoring and mitigation policies), higher natural gas prices, and in fact, electricity prices that are too low to induce new investments.

Before delving into areas of disagreement, it is worth noting some important areas of agreement. First, wholesale and retail markets need more demand response, and I think that there is near universal acclaim on this topic. In my view, the problem is that states are reluctant to push real-time pricing particularly at the small commercial and residential levels for political reasons. The good news is that it does not take much demand response to have a large effect, something that many studies have pointed out over the last several years. Also, improvements in metering technology and corresponding reductions in costs can only help.

Another area of broad agreement is the need to have aggressive market monitoring and mitigation policies. No one can dispute the many serious factors inherent in electricity markets that make them conducive to market power: inelastic supply and demand in the short run, transmission congestion, relative small number of suppliers, and the need to balance supply and demand (nearly) instantaneously.



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One last area of agreement is the unique aspect of electricity markets, such as loop flows, network effects, and the importance of reliability. Disagreements arise out of the implications of these issues, however.

What are the areas of disagreements? One set revolves around the facts on the ground. Are profits excessive: are they above the level to induce new entry? Apparently to PJM, the answer is no, which is one of the major reasons PJM has adopted its Reliability Pricing Model (RPM). This does not mean that some generation units are not making excessive profits, such as a baseload unit that has much of its capital depreciated but is now able to sell at electricity prices determined by the run up of natural gas prices. Another means of measuring excessive profits is determining whether market power is being exercised.

Another set of disagreements centers on whether the right type of capacity is being built. Looking back, if developers would have known about the run up in natural gas prices, perhaps fewer would have been built. But I believe it is difficult to contend that in the 1990s with low fuel and capital costs and relatively low emission rates of combined cycle and gas turbines that under cost-of-service regulation building anything but natural gas would have been prudent.

A final important area of disagreements is on whether the cost of power plants under cost-of-service or long-term contracts is less than in restructured electricity markets. The cost of capital is less under cost-of-service because there is less risk. The issue then becomes whether the capital itself is more under cost-of-service regulation because ratepayers pay for prudently incurred but nonetheless inefficient investments. Closely related to this issue is how effective is a regulatory process in determining the amount and mix of generation assets; if it gets it right, it may be less expensive than markets, but if it gets it wrong, which in my view is likely, the costs may be higher than with a market, and ratepayers not investors are on the hook. Having investors not ratepayers exposed to investment costs gives investors a strong incentive to get their investment decisions right and to minimize their expenditures.
