Problems in the Organized Markets

A Special Report by the Electricity Consumers Resource Council

Frequently Asked Questions

What is ELCON, and what are ELCON’s views on competitive electricity markets?

ELCON (or, formally, the Electricity Consumers Resource Council) is the national association representing large industrial users of electricity. ELCON was an early supporter of competition in electricity markets and perhaps its strongest proponent. ELCON still believes and strongly supports real competition in electricity markets. We believe that real competition will bring significant benefits to all consumers and help promote a healthy US economy.

Have electricity markets become more competitive?

Overall, the current state of electricity markets, while very different from that of ten years ago (pre-Order 888), has only a limited form of supplier-on-supplier competition. More important, there is no true competition in the sense that generators (the supply side) and consumers (the demand side) do not directly compete to set market prices.

The so-called Organized Markets, in particular, have simply implemented a set of market rules in the form of an auction that make a few marginal units compete but consumers are still forced to be price takers. The net effect of this is, for the same mix of generation, consumers pay “prices” that are consistently higher than “rates” under traditional regulation. By no stretch of the imagination does this constitute a “competitive” market. There is no supply-
on-demand competition, lower prices, a customer focus, or other expected attributes of real competition. And to make matters worse, the benefits of efficiency improvements of coal-fired or nuclear plants are explicitly denied to consumers by the choice of market design.

That is very blunt criticism of the Organized Markets. Won’t policy makers and other stakeholders now think that ELCON is giving up on competition?

Absolutely not. ELCON’s criticism of the Organized Markets should not be misinterpreted. The suggestions in the Special Report are offered in a constructive spirit and in an urgent appeal to correct the problems in the Organized Markets—or move on to another competitive paradigm. The Special Report should not be misconstrued as a defense of the status quo ante by those who would just say no to competition, or by those suppliers that reap substantial financial gain from the status quo. On the other hand, it is hoped that the Special Report will not elicit a defensive reaction, as if any strong criticism of the current state of Organized Markets is dangerous to utter. FERC and the Congress must heed serious problems that need correction and not throw the baby away with the bathwater.

In ELCON’s view, what market rules in particular are stifling competition?

The Organized Markets have no internal means of creating efficient pricing outcomes that balance the interests of suppliers (generators) and consumers (loads). Consumers are unable to provide their “willingness to pay” in the market because of the absence of Demand Response in setting the market clearing prices. Prices are set solely on the basis of the price offers of generators. By relying on a single-price auction and locational marginal pricing (LMP), prices are set by the generator “on the margin” that is increasingly a high-priced gas-fired peaker.

Isn’t it true that prices in other competitive markets are based on the costs of the marginal supplier?

Yes that is generally true but the conditions that make such markets beneficial to both suppliers and consumers are absent from the Organized Markets.

Generating units with lower production costs, such as coal-fired or nuclear facilities, receive the same price as the generator on the margin. Both kinds of generators are often owned by the same utility holding companies and they have a powerful economic incentive to strategically structure their bids to maximize the revenue spread (“infra-marginal revenue”) between the market clearing price and the marginal production costs of their coal-fired or nuclear generators. Their bidding behavior also takes advantage of the fact that the transmission grid is frequently congested which increases the frequency that higher cost generators will clear the market. The owners of generators with local market power can at times be price makers and that can greatly increase the profits earned by all their generators that get dispatched. Chronic
congestion also prevents other lower cost generation from being bid into the local markets to restrain those prices. Thus, the utility holding companies that own the local generators have no incentive to mitigate the congestion.

Without Demand Response—that could push gas off the margin—and the mitigation of the local market power of dominant generators, the pricing outcomes of the Organized Markets can be very punitive to consumers, large and small.

We also need to better understand the context in which industry restructuring is being pursued. The markets are presently in a transitional state—not a viable end state of restructuring. During this transition regulators (both federal and state) are making policy decisions with the intent of advancing competition but in reality are merely shifting costs from producers to consumers. One such example was stranded cost recovery. Utilities were “made whole” by requiring customers to pay stranded costs because it was assumed that market prices would be below rates based on cost of service. Many of those stranded assets were subsequently divested—i.e., deregulated—with market values that included substantial premiums. Now, the new owners of many of those units cannot recover their fixed costs (because of the premiums) so additional sources of out-of-market revenue streams (e.g., LICAP) are created in an attempt to make them whole. To make matters worse, these payments are also given to generators who do not need them, especially in regions that are generation long. Thus, in a transition period that should be shifting investment risk to suppliers, the risk is all staying with end-use consumers. A so-called “market” where consumers bear all the risk is not a competitive market.

What is preventing real competition from happening?

The Special Report lists six necessary and essential preconditions for workable competition in the Organized Markets. Two are of particular concerns: (1) adequate transmission infrastructure, and (2) mitigation of market power, especially of dominant generating companies. Both conditions are absent in the Organized Markets, and arguably, both situations are getting progressively worse. The existing economic incentives in the Organized Markets—to maximize infra-marginal revenues—is a huge disincentive to new construction that would eliminate or reduce congestion. In addition, there is a general unwillingness on the part of regulators and anti-trust agencies to mitigate horizontal generator concentration.

What should be done to ensure that consumers benefit from competition?

If it were possible to make certain reforms to the market design of the Organized Markets, and get new transmission facilities built, and break up the dominant generators, the Organized Markets might become workably competitive. But we do not see at least the last two conditions happening any time soon.
The only way to perhaps achieve real competition in wholesale electricity markets is have a market structure based on long-term bilateral contracts with a small spot market for maintaining reliability. This allows greater generator-on-generator competition because suppliers are forced to bid (by negotiating directly with customers) a blend of their resources. Other terms and conditions of service may also be negotiated such as options on price-responsive load. Thus, forward markets are more customer driven and customer focused. A market dominated by a spot market only benefits the generators and has little or no customer focus.

Wouldn’t a change to bilateral contracts remove the price signals created by LMPs from the market place? And aren’t such price signals an important part of competitive markets?

It is true that LMP-based markets spew out a lot of “price signals,” but we have to wonder if, in practice, there are any benefits. Few end-use consumers are exposed to these signals or are able to react to price with Demand Response. And it is also clear that transmission owners ignore the price signals. The congestion revenues generated in this market were supposed to signal the need for new transmission investment, where the investment was needed, and the revenue stream necessary to cover the capital and operating costs of the investments. This has not happened.

A very inexpensive load flow program can tell system planners where new investments are needed. Complex price signals for monopoly transmission services are overkill for a problem that does not have to be complex. Also, the use of congestion revenues to fund new investments is illogical because, if the investments are done right, congestion (and congestion revenues) go away.

Won’t transmission congestion also be a problem in a market dominated by bilateral contracts instead of the Day-Ahead and Real-time Spot Markets?

Clearly the transmission infrastructure in most regions needs to be expanded to accommodate any form of competitive wholesale market. However, the amount of transmission congestion in the Organized Markets is significantly increasing year after year. Arguably, the market design creates opportunities for suppliers to artificially create congestion and therefore the profits they make in the energy markets. We think there is a reputable presumption that if the market transactions were predominantly self-scheduled bilateral contracts, there would be less overall congestion, and the system would be operated more efficiently. Nonetheless, new infrastructure is desperately needed.

Can Demand Response help in alleviating transmission congestion?

Yes, definitely. Demand Response – the ability of end users to sell their rights to consume – can be a useful tool in dealing with transmission congestion. Demand Response adds two immediate benefits to the market. First, it competes head on with the marginal supplier to reduce prices, and second, it
reduces overall demand at times of transmission congestion and therefore partially alleviating the problem. This is why suppliers oppose opening the markets to price-responsive loads.

Ignoring congestion, each decrease in MW consumed has the same impact as an increase in MW generated and therefore Demand Response should be treated symmetrically and priced on the same basis as a generator. If FERC is serious about maintaining the Organized Markets, it should do everything in its power to remove entry barriers to price-responsive load.

What else needs to be done to get new transmission facilities in the ground?

This is a real quandary. First, the approach used in the Organized Markets to create financial incentives for new investments based on the value of congestion revenues probably gives transmission owners too convenient an excuse to do nothing—especially if their generation affiliates are benefiting from the imperfect markets. Another part of the problem is the dual regulation of transmission by state and federal regulators. The lack of cooperation between state and federal authorities on the appropriate direction of the electric industry is creating significant regulatory uncertainty that is hamstringing new investment. Regrettably, we have no magic fix for this problem. Yet, another problem is that RTO planning processes are not very effective and this is adding to the regulatory uncertainty.

Won’t RTOs eventually “get it right?”

Many RTOs (and ISOs) are hindered by an unbalanced stakeholder process that allows one group of stakeholders (suppliers) to be over-represented and another group (customers) to be under-represented. The net effect of this over-representation is the maintenance of the status quo, i.e., more gas on the margin, more congestion, and no incremental investments. We believe that no class of market participants should be able to unduly influence RTO decision-making. Until this gets resolved, along with other improvements to the RTO governance process mentioned in the Special Report, RTOs will not “get it right.”

Aren’t ELCON’s problems with the Organized Markets caused by high natural gas prices?

No, but high natural gas prices—and to some extent, high coal prices—certainly exacerbate the situation. We have opposed a market design based on nodal pricing since the days of $2 gas. The market design based exclusively on short-term auctions is not very robust in the face of generator market power and chronic congestion. High marginal fuel prices only makes a bad situation worse.

What does ELCON recommend?

The White Paper proposes ten recommendations as the next steps. These recommendations are intended to trigger investigations of ELCON’s concerns
(and those of other stakeholder groups that share some or all of our concerns) in the context of existing FERC rulemaking dockets or new dockets. We recognize that any change to the Organized Markets must be subject to formal adjudication. Before this can happen, it is essential that FERC recognize that problems exist and are in need of perhaps a strong policy fix. This is not unlike the situation in the United Kingdom in the late 1990s when the UK regulator pronounced the England & Wales Pool a failure and initiated a process for adopting an alternative market paradigm based on bilateral contracts. They did not abandon competition in the process, and we, of course, are not abandoning competition.

**Given the present situation, can truly competitive markets ever really be achieved?**

Absolutely but it will take some time. FERC has only begun the process of dealing with market power on a comprehensive basis. We are hopeful that the outcome of Docket No. RM04-7-000 (“Market-Based Rates for Public Utilities”) will be a series of market power screens and mitigation measures that will enable and sustain a truly competitive wholesale electricity market.