

Debating California

Sorry, Mr. Falk: It's Too Late to Implement Your Recommendations Now

The only alternative that seems to solve Falk's problem is to repeal the "just and reasonable" rate provision of the Federal Power Act. However, the probability this legislation would make it through Congress is virtually zero. In fact, recent versions of the national Energy Policy Act in Congress increase FERC's authority and strengthen its mandate to set just and reasonable prices.

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I would like to thank Jonathan Falk for his comments on my article and the editors of *The Electricity Journal* for an opportunity to respond to them. Falk's article reflects a view widely held in the industry, and as I explain below, a version of what he recommends may have been possible before the summer of 2000, but I am extremely skeptical that it is now possible to implement his main recommendation given the events in California from June 2000 to the present

time. I will respond first to what I believe to be the main point of his article, and then briefly respond to several of his comments on my article.

I. The Federal Power Act Requires FERC to Regulate

Despite the obvious appeal of Falk's statement, "The point of deregulating markets is (partly) to get FERC out of the 'just and

reasonable' business," it ignores a basic reality about the electricity industry in the U.S.—the Federal Power Act (FPA) of 1935 that statutorily mandates that FERC ensure wholesale electricity prices are "just and reasonable." Moreover, the FPA requires that if FERC finds that prices are not just and reasonable, it must take actions to make them just and reasonable, and order refunds for any payments in excess of just and reasonable prices. The FPA imposes much more stringent standards on the behavior of electricity prices versus the prices of other goods. This also means that "deregulation" of the U.S. electricity industry is not possible as long as these provisions of the FPA exist; only restructuring is possible.¹

Because Congress determined that the delivery of wholesale electricity is "affected with a public interest," FERC has a statutory mandate to regulate wholesale electricity rates.² We do not have a Federal Bread Act or Federal Book Act that established a federal agency to regulate the prices of these products. Because the FPA says that FERC must set wholesale electricity prices that are just and reasonable rates. Even if the markets often produce prices that are not just and reasonable because of market power, FERC has no other choice but to intervene and regulate when markets get out of hand. The FPA only leaves FERC with the choice of how to regulate, not the choice of whether to regulate wholesale electricity markets.

FERC tried an extreme version of the approach suggested by Falk in California during the period June 2000 to June 2001, and clearly this was not successful. An efficient wholesale electricity market was not the result. Exactly the opposite occurred, in part because of FERC's ill-conceived remedies, as noted in my article. FERC faced enormous pressure to regulate, first from California and then from other

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states in the west as the consumer harm associated with high electricity prices in the western U.S. spread throughout the region. Because of the Federal Power Act is still a part of the U.S. Civil Code, and FERC had already stated in its Nov. 1, 2000 and Dec. 15, 2000 orders that prices in California were not just and reasonable, Congress pressured FERC to enforce the provisions of the Federal Power Act implied by a finding that prices are not just and reasonable. As I will discuss below, before the summer of 2000 there may have been other ways to implement the spirit of Falk's recommendations,

but they no longer seem politically viable.

Clearly, Falk's recommendation that FERC should get out the business of ensuring that rates are just and reasonable and not enforce the Federal Power Act, if extended to all regulators and law enforcement agencies would have disastrous consequences. I don't think Falk would like a world where police officers decide not to enforce laws against stealing if they decide that social norms now make stealing unlikely, or that some greater goal is served by not enforcing these laws. Rather than not enforcing laws that may have outlived their usefulness or do not reflect social norms, a superior strategy is to repeal these laws. For this reason, I believe that FERC must enforce all of the provisions of the FPA it is empowered to enforce, until they are repealed.

I also believe that Falk is creating a straw man by arguing that a vibrant competitive wholesale electricity market cannot develop if FERC enforces these provisions of the FPA. I can think of no product that does not face regulatory oversight that constrains the behavior of market participants. The U.S. has product safety regulation, truth-in-advertising regulation, environmental protection regulation, and antitrust oversight, to name just a few often-binding regulatory constraints. However, there is a substantial amount of room for very vigorous competition and enormous profit

opportunities within the context of this regulatory structure. I believe it is possible for FERC to craft a regulatory oversight process that satisfies its statutory obligations, yet does not significantly hinder market forces. The 12-month competitiveness index discussed in the April 19, 2002 MSC report, Wolak, Barber, Bushnell and Hobbs (2002), is such an approach.

II. The Federal Power Act and Moral Hazard

I will now describe why it is sometimes necessary for FERC to set standards for forward contracting, demand-side involvement, or other market design parameters in carrying out its statutory mandate under the FPA, in spite of Falk's and my distaste for constraining market participant behavior. The argument Falk makes against the regulator determining the magnitude and price for prudent forward contract purchases on behalf of consumers is also an argument for why the real-time hourly wholesale price must be the default purchase price for all consumers. Customers can then decide how much spot price risk they would like to bear through the hedging arrangements they enter into with competing retailers, rather than by having the regulator or a monopoly retailer do it on their behalf. Such a proposal is discussed in detail in Wolak (2001b).³ Unfortunately, no state Public Utilities

Commission (PUC) that I am aware of is willing to allow this retail market design. Instead FERC is often faced with a retail market design poorly suited to support a workably competitive wholesale market.⁴

It may be necessary for FERC to set minimum standards for forward contracting and demand-side participation because of what economists call a moral hazard problem created by the FPA. This

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moral hazard problem arises because state PUCs and all market participants recognize that FERC has a statutory mandate to set just and reasonable rates, and even if the cause of these prices is a poorly designed retail market, the FPA requires FERC to intervene. Because of this statutory requirement, state PUCs and other market participants have less of an incentive to take the necessary precautions in terms of the retail market infrastructure to ensure that unjust and unreasonable prices do not occur at some future date.

To better understand this issue, consider the following

hypothetical market. Suppose that the state PUC and market participants do not implement the necessary safeguards at the start of the market that limit the ability of suppliers to exercise significant market power. Then system conditions arise that allow this market power to be exercised and cause enormous consumer harm. FERC is then legally obligated to remedy this harm. As the aftermath of the California crisis has demonstrated, it is extremely costly to remedy consumer harm after the fact rather than prevent the harm in the first place. Given that FERC knows how to reduce the likelihood of significant consumer harm, it makes sense to mandate minimum requirements for the market design to prevent this harm from occurring. This was one of the very worthy goals of FERC's recent Standard Market Design (SMD) Notice of Proposed Rulemaking (NOPR).

Because of the huge transactions costs associated with enforcing the FPA after the fact, a lower-cost strategy is for FERC to put guardrails on the competitive market process to protect consumers from harmful market outcomes. These can take the form of minimum standards for forward contracting by LSEs and demand-side participation requirements for certain customer classes. FERC can then slowly relax these guardrails over time as the market participants become more sophisticated and are better able to protect themselves from harmful market

outcomes and as state PUCs implement retail market designs better suited to support workably competitive wholesale markets.

III. Guardrails for Wholesale Market Outcomes

FERC's response to this moral hazard problem has been to regulate hourly market outcomes with automatic mitigation procedures (AMP) and other hourly market interventions which can effectively amount to a very inefficient form of cost of service regulation.⁵ FERC's currently favored AMP mechanism looks at the bids submitted by a market participant each hour and runs two tests. The first is a conduct test, which determines whether the supplier's conduct is consistent with exercising market power by comparing these bids to reference levels computed from accepted bids during "competitive" market conditions. If a bid exceeds its reference level by a certain magnitude, then it is deemed to have violated the conduct test. This leads to an impact test which asks the question of whether this high bid exerts a material impact on market prices. If this is the case, then the supplier's bid is mitigated to some level related to the unit's reference level. These AMP mechanisms are far more intrusive ways to, as Falk states, "keep FERC in the generation pricing business," than I would advocate.

In fact, although these mechanisms may reduce wholesale price volatility, I believe they increase average prices by making it costly for a generator to bid a low price, because any low price bid that is accepted reduces the unit's reference level and hinders the ability of the supplier to bid high prices in other hours.

My preferred solution to the FPA statutory mandate and the accompanying moral

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hazard problem is for FERC to set guardrails on competitive market price with automatic intervention if this standard is violated. It should set a prospective measure of the extent to which electricity prices over a rolling 12-month horizon can exceed some competitive benchmark level. If the difference between the quantity weighted average market price over the previous 12 months exceeds the quantity weighted average competitive benchmark price computed using the methodology outlined in BBW (2002) over the previous 12 months by more than \$5/MWh, then an automatic regulatory intervention

would be triggered. In Wolak (2002), I argue that this intervention should be a 12-month period of cost-of-service prices for all suppliers.⁶ The idea behind this intervention is that it is viewed as sufficiently draconian, yet credible to implement, so that suppliers never allow this benchmark to be violated. For example, rather than exercise substantial market power in the spot market, a supplier will sign forward contracts or other spot price hedging arrangement to improve spot market performance before these guardrails are exceeded.

Iwould also strongly urge FERC to get rid of the automatic mitigation procedures (AMP), which I believe results in prices that are \$1/MWh too high in 500 hours per year instead of prices that are \$500/MWh too high in one hour of the year, which is a far superior price signal for load to become more involved in the spot market. I would also increase the price cap in the ISO's real-time market to something significantly higher than \$1,000/MWh, with the long-term goal of not having a price cap at all on the spot market. This would allow market forces to operate on the short-term and medium-term basis, and only trigger intervention when significant consumer harm occurs. Moreover, the risk of high spot prices will provide strong incentives for active demand-side participation in the spot market, which will result in more efficient utilization of the

existing generation capacity, and lower average prices to consumers. These arguments are developed in more detail in Wolak (2001b).

To provide an idea of the amount of consumer harm that must occur to trigger regulatory intervention under this scheme, consider the following example. A \$5/MWh difference between the average actual price and the average competitive benchmark price on a 12-month basis is roughly equal to slightly more than a \$1 billion annual overpayment in California. I am willing to argue that if consumers are paying \$1 billion more than the competitive benchmark price, significant consumer harm is occurring because of unjust and unreasonable prices. James Bushnell has performed these benchmark calculations in the PJM and ISO-NE markets and the \$5/MWh standard on the 12-month rolling average price difference has never been triggered. The first time it would have been triggered is in July 2000 in California, which I believe is exactly the time when an intervention should have occurred.

I prefer this guardrails-to-competition approach to the current FERC approach to enforcing the FPA. As FERC gains confidence that the appropriate retail market safeguards are in place, it can increase the magnitude of the guardrail to, say, \$10/MWh or some higher level and increase the magnitude of the price cap on the spot market.

IV. What Could Have Been and Will Now Have to Wait

Given the events of since the summer of 2000, I believe the guardrails for competition approach described above is the best way forward. Nevertheless, it is interesting to ask what FERC could have done before the summer of 2000 or during the summer of 2000 that it can't do now to

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promote workably competitive wholesale markets.

One solution that could have been implemented before the summer of 2000 is for FERC to declare that effective some date more than two years into the future from the start of each wholesale market all market prices are *per se* just and reasonable because they involve voluntary exchange between willing parties. This would have given state PUCs ample opportunity to implement the retail market designs and take the necessary precautions to protect consumers or allow them to protect themselves from significant harm.

Although I am skeptical that such a declaration by FERC would stand up to legal challenge given the long history of precedents that exist for what constitutes just and reasonable prices, this is something that FERC could have attempted because it is the government agency charged with determining whether wholesale electricity prices are just and reasonable.

FERC could have even attempted to make this statement when the California crisis first began. Instead of recognizing that wholesale electricity prices in California were unjust and unreasonable during the summer of 2000, as a number of FERC commissioners did during hearings throughout California at the time, FERC could have stated a policy that all market prices are *per se* just and reasonable and encouraged California to solve its problem with high spot prices. Faced with this response from FERC, I doubt that California would have been as slow to act during the summer and autumn of 2000. A case can be made, based on a number of statements by FERC staff and commissioners, that a remedy for these unjust and unreasonable prices was on the way. The logic was that FERC is collecting information during its hearings in order to formulate the appropriate regulatory remedy. The actions by the state and three LSEs immediately following the imposition of FERC's Dec. 15, 2000 remedies suggests that a far different response to the summer of 2000

would have occurred had FERC made such a statement.

The only alternative that seems to solve Falk's problem is to repeal the just and reasonable rate provision of the Federal Power Act. However, the events in California and the fear of many politicians that the same thing could happen in their state imply that the probability this legislation would make it through Congress is virtually zero. In fact, recent versions of the national Energy Policy Act in Congress increase FERC's authority and strengthen its mandate to set just and reasonable prices. Although I believe that a competitive wholesale market would be possible and could deliver substantial benefits to consumers and producers without these provisions of the FPA, I doubt we will ever find out if this is the case.

Advocates of electricity restructuring must therefore recognize the political realities that exist as result of the California crisis and try to make the best of the current situation. Although I am a supporter, in concept, of repeal of the just-and-reasonable rate provision of the FPA, states must then have the ability to choose to opt out of wholesale competition. The recommendations in my article were made taking into account the political realities that resulted from the aftermath of the California crisis. I believe they are the best way to achieve the goal that I believe both Falk and I share of vibrant and robust competitive wholesale

markets that require little, if any, regulatory intervention. ■

Endnotes:

1. For this reason, I do not think it is useful to describe the restructuring process as de-regulation. It is more appropriate to describe restructuring as an alternative regulatory mechanism that uses market mechanisms, where it is technologically feasible, rather than explicit regulatory processes to set the prices firms receive for their output.
2. Title 16, Chapter 12, Subchapter II, Section 824(a) of the U.S. Civil Code (the Federal Power Act) is titled "Federal regulation of transmission and sale of energy." It states, "It is declared that the business of transmitting and selling electric energy for ultimate distribution to the public is affected with a public interest, and that Federal regulation of matters relating to generation to the extent provided in this subchapter and subchapter III of this chapter and of that part of such business which consists of the transmission of electric energy in interstate commerce and the sale of such energy at wholesale in interstate commerce is necessary to the public interest, such

Federal regulation, however, to extend only to those matter which are not subject to regulation by states.

3. Frank A. Wolak, *Designing a Competitive Wholesale Market that Benefits Consumers*, Oct. 2001, available at <http://www.stanford.edu/~wolak>. Hereinafter "Wolak 2001b."
4. Patrick and Wolak (1997) provide ample evidence that large and medium-sized industrial and commercial customers can alter their demand in response to real-time prices. In spite of this evidence and publicly advocating for the benefits of real-time pricing for almost a decade, I have seen little movement from state PUCs in getting these programs implemented. Robert H. Patrick and Frank A. Wolak, *Estimating the Customer-Level Demand for Electricity under Real-Time Market Prices*, 1997, available at <http://www.stanford.edu/~wolak>.
5. Although he makes no mention of these procedures, given his distaste for regulatory intervention, it hard to believe that Falk is a fan of FERC's hourly AMP mechanisms.
6. Frank A. Wolak, Comments on "Market Design 2002, Project: Preliminary Draft Comprehensive Design Proposal," Feb. 20, 2002, available at <http://www.aiso.com/msc>.



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