

KEYNOTE ADDRESS

ELEPHANTS AT PLAY*

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I am flattered to be invited to participate in this symposium, featuring, as it does, such a glittering array of experts in deregulation and competition. Competition can get you anywhere these days. I recently received a free trip to Brazil, in Business Class, to speak about competition at a seminar that the Organization for Economic Co-operation and Development (OECD) hosted for Brazilian judges. Thank God I did not have to explain electrical market power to those judges. They just wanted a real-live judge to quiet the anxieties of the Brazilian judges facing all the mysteries of competition and perhaps lull them to sleep. I may have the same soporific effect here. Maybe that's why you invited me.

The first thing I did to prepare for this symposium was read Darren Bush's recent article in the *Oregon Law Review* on Enron and the finer points of gaming the system.¹ This article was apparently reviewed in advance by many of the leading lights at this conference and I want to know which one of you made the brilliant suggestion that Professor Bush include footnote one, which *made* the entire article. That footnote cites an article that I apparently wrote in 1989 entitled *The Wearing Away of Regulation: What Remains*.² I had entirely forgotten that there ever was such an article. But, footnote one alone should get the

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1. Darren Bush & Carrie Mayne, *In (Reluctant) Defense of Enron: Why Bad Regulation Is to Blame for California's Power Woes (or Why Antitrust Law Fails to Protect Against Market Power When the Market Rules Encourage Its Use)*, 83 OR. L. REV. 207 (2004).

2. *Id.* at 207 n.1 *citing* Richard D. Cudahy, *The Wearing Away of Regulation: What Remains*, 124 PUB. UTIL. FORT., Oct. 12, 1989).

rest of you rushing to read Professor Bush's article.

I was obviously on the wrong track in 1989 if I thought that regulation was going to be worn away. I just did not foresee that regulation would merge with antitrust to give birth to the obscure science of electrical market power. Perhaps you have followed the agonies of the judiciary in dealing with the Sentencing Guidelines. For me, they are just a warm-up for market power.

The Federal Energy Regulatory Commission (FERC), in its inimitable way, has chewed over all manner of rulings in pursuit of competitive conditions that would be free of that sinister and apparently indestructible monster, market power. I would be embarrassed to try to regurgitate the nuts and bolts of market power and its mitigation. Instead, I think I will play the role of old-timer, overwhelmed by this latest in regulatory labyrinths.

Starting out, I would like to suggest that you consider the counterpoint between integration and competition. Competition generally requires disintegration of systems into discrete parts that can interact with each other competitively and thereby hammer out the results predicted by economic theory. Integration is almost *per se* anti-competitive and, therefore, not to be encouraged in the present era, where competition is king. However, there are powerful forces, not necessarily all evil, pushing for integration and concentration. It is naive to believe that in the long run, or even the short run, these forces are going to die out. The integration of electric systems, both horizontally and vertically, recommends itself intuitively in a network industry, where everything interacts with everything else on an instantaneous basis. After all, the principle of electromagnetic unity of response has been recognized by the Supreme Court as having legal consequences.

Back in 1930, almost seventy-five percent of the power sold in the United States was controlled by a few holding companies.³ In 1935, the passage of the Public Utility Holding Company Act (PUHCA) produced the fragmentation which has been the rule ever since.⁴ That legislation forbade combinations of electric companies unless they could be integrated on an operating basis.⁵ We are now, at least in theory, attempting to enforce rules that

3. LEONARD S. HYMAN, ANDREW S. HYMAN & ROBERT C. HYMAN, *AMERICA'S ELECTRIC UTILITIES: PAST, PRESENT AND FUTURE* 137 (Public Utilities Reports, 7th ed. 2000); see also Northwest Public Power Association, *GRC Glossary Pages*, at <http://www.nwppa.org/web/grc/glossary.shtml> (last visited Sept. 29, 2005).

4. Public Utility Holding Company Act of 1935, 15 U.S.C. § 79 (West 2005).

5. *Id.*

cut in just the opposite direction. Electric companies can be merged, provided that they are sufficiently distant from one another not to compete in the same market. So, even while the PUHCA is still at least technically in force, the only sort of combinations that are acceptable are mergers between entities more than one wheel apart—perhaps like Commonwealth Edison and PECO Energy into Exelon and American Electric Power (AEP) and Central and Southwest into an enlarged AEP. The only point that I would like to make here is that integration may be an attractive proposition from an engineering and economic standpoint, even though it cuts against competition. In every industry exposed to deregulation, we can see the search for a new equilibrium and hence the pressures to consolidate. Deregulation demands consolidation, and we will have to figure out how competition can be maintained in the face of that thrust.

I should now like to turn my attention to the amazing efforts of FERC to stamp out market power wherever it appears to be rearing its ugly head. Of course, this goes far beyond enforcement of the antitrust laws and is a regulatory effort particularly aimed at the withholding of some generation as a means of bumping up prices for the remaining generators. Originally, in granting permission to charge market prices, the Commission pursued the so-called “hub-and-spoke” analysis, which considered a control area market in conjunction with other control area markets to which it was directly connected.⁶ This approach seemed to be adequate in dealing with traditionally configured utilities without much importation of power from outside sources.

Subsequently, FERC moved to a supply margin assessment screen that employed a more precise approach to the availability of capacity and measured the need for the applicant’s capacity to participate in reaching a system peak.⁷ It was a means of measuring whether withdrawal of the applicant’s capacity would necessarily elevate prices. But the Commission suspended the use of this test in favor of a pivotal supplier test in conjunction with an analysis of wholesale market shares.⁸ These screens, of

6. STEVEN STOFT, AN ANALYSIS OF FERC’S HUB-AND-SPOKE MARKET-POWER SCREEN (Sept. 12, 2001), available at <http://www.ksg.harvard.edu/hepg/Papers/Stoft-2001-0912-FERCs-Hub+Spoke.pdf> (last visited Sept. 21, 2005).

7. AEP Power Mktg., Inc., *et al.* 107 F.E.R.C. ¶ 61,018 (2004); see also Elec. Power Supply Ass’n, *The Bare Essentials: Market-Based Rate Authority*, at http://www.epsa.org/forms/uploadFiles/358D00000005.filename.bare_essentials_mbr_authority.pdf (last visited June 9, 2005).

8. Press Release, FERC, Commission Revises Interim Generation Market Power Screen and Mitigation Policy; Seeks Public Input on Future Market Power Rulemaking (Apr. 14, 2004) available at <http://www.ferc.gov/press-room/pr-archives/2004/2004-2/04-14-04-market.asp>.

course, are all regulatory addenda to the antitrust laws, and the need to have recourse to them underlines how different and unique electricity is. The rest of the economy can make do with the antitrust laws, but when it comes to electricity, we have to indulge in regulatory fine-tuning. Electric generators are like elephants at play, and their vestiges of natural monopoly characteristics, as well as the natural monopoly character of transmission, complicate our efforts to bend them to our competitive will.

I would like to get into Professor Bush's discussion of why most of the Enron high jinks did not involve market power at all, but mostly legitimate or illegitimate ducking around the market rules. But before that, I want to take a detour suggested by a recent article by Matthew Estes in *Natural Resources & Environment*, the publication of the ABA Section of that name.⁹ Estes notes FERC's suggestion of pursuing a delivered price test analysis for applicants that have flunked the current interim screens.¹⁰ The article also notes FERC's observation that the delivered price test (which is also used to test mergers) is "more robust" and surmises that FERC is considering using the delivered price test as its final market power test for market-based rates.¹¹ In that context, generation available in the market is defined to include the generators that can deliver power at the market price plus five percent. The analysis considers only short-term, non-firm markets and identifies the qualifying generators, adjusts for the available transmission capacity, and makes multiple calculations for various seasons and conditions of use. Mr. Estes does not feel that these data necessarily reflect reality and may, in fact, not be available.¹² The projected market prices may be only approximations. There is a need to predict future fuel prices, and if cost estimates are too high, the available generation comes out too low; if cost estimates are too low, the available generation comes out too high.¹³

Further, transmission availability data may be unreliable, and undisclosed assumptions may be manipulated by the applicant. The analysis is time-consuming and expensive, and the delivered price test may not be more accurate than a simpler methodology. The author concludes that developing a more

9. Matthew W.S. Estes, *Measuring Market Power with FERC's Appendix A Analysis*, 19 NAT. RESOURCES & ENV'T 20 (2005).

10. *Id.* at 21.

11. *Id.*

12. *Id.* at 22–24.

13. *Id.* at 23.

sophisticated methodology is of little use.¹⁴ He feels that hub-and-spoke is good enough for areas where old-fashioned utilities prevail.¹⁵ In regions where there are well-developed wholesale markets, the pivotal supplier and wholesale market-share approaches are relatively simple, should be based on transparent data and also should address different categories of generation. FERC can satisfy itself that no participant has a market share greater than twenty or twenty-five percent, and it should not waste time on a more detailed and sophisticated model but instead should focus on manipulation of market rules which can be accomplished successfully even by those without market power.¹⁶

There is one problem, and it is a monumental one, with this relatively simple and apparently common sense recommendation. FERC is proceeding on the assumption that a competitive rate is “just and reasonable” under the prevailing statutes. It can hardly desist from demanding an extremely level playing field for competition if it intends to convince the courts that the result is “just and reasonable” under the Federal Power Act. Of course, the market is the measure of value throughout the rest of the economy. However, as the California crisis has demonstrated, when electricity prices jump in response to market shortages, citizens are unwilling to recognize the result as just and reasonable. There may well be trouble with the courts if a party can argue that insufficient efforts have been made to squeeze out market power. So I think that FERC must at least *appear* to leave no stone unturned in pursuit of market power. However, one stone FERC will likely find too heavy to turn is exercising stronger authority over transmission lines. Much as this additional power for FERC is yearned for by advocates of competition, it is about as likely to get congressional support as a tax increase.

I should now like to offer a few random comments about Enron’s gambits in the California market and some related questions. As Professor Bush has demonstrated, and he is apparently seconded by Matthew Estes, Enron’s strategies—colorfully denominated as Ricochet, Fat Boy, Death Star, Wheel Out, Get Shorty and others—were simply a means of taking advantage of the California rules and were not enabled by market power.¹⁷ For example, shipping power outside the market

14. *Id.* at 23–24.

15. *Id.* at 24.

16. *Id.*

17. *Enron Memos Put FERC in the Hot Seat; All Western Sellers Will Be Grilled,*

and having it return as imported power enabled Enron to mark up the price; similarly there were a number of ways of taking advantage of congestion rents. Section 1 of the Sherman Act requires concerted conduct, and there was no conclusive evidence of this with respect to Enron in California.¹⁸ In addition, bidding too high to effect economic withholding apparently does not violate the antitrust laws nor, apparently, does physical withholding. No one is required by the antitrust laws to sell into the market at any particular time. But, in the case of electricity, withholding, whether economic or physical, can certainly result in an application of market power. Market power must be regulated. The Enron experience shows that the maintenance of a pro-competition regime in an electricity context is difficult to manage and intrusive. Electrical generation is extremely capital intensive. Electricity cannot be stored, and electric power has very little elasticity of demand. And, you can throw in Kirchoff's Law about electricity following its path across a network.¹⁹ All these factors and more help explain why trying to involve electricity in an ongoing competitive regime is not simple.

I will now turn to the mitigation ordered by FERC in its Order on Rehearing of April 14, 2004, in the *AEP* case.²⁰ The numerous rehearings on some of these generation market power rulings indicate how much uncertainty is involved, how difficult it is to determine what sort of mitigation will rectify matters, and how a proposed mitigation may be excessive or create more problems than it solves. In the April 2004 Order, some mitigation required utilities to post certain incremental costs.²¹ There was objection to this on the grounds that some of this information might be proprietary.²² The Southern Company objected to "mandatory purchases and sales."²³ Presumably, this objection referred to offering uncommitted capacity to cure market power. In any event, the agency backed away from requiring these specific measures in mitigation. Instead, the agency indicated that the utilities involved should first try to tailor their own mitigation, and only if this failed, would default rates be put into effect—a leap from the frying pan into the fire.²⁴

ELEC. UTIL. WK., May 13, 2002.

18. 15 U.S.C. § 1 (2004).

19. See generally STEVEN FERREY, *THE LAW OF INDEPENDENT POWER* ch. 8 (West Group 2002) (1989).

20. *AEP Power Mktg., Inc.*, 107 F.E.R.C. ¶ 61,018 (2004).

21. *Id.* ¶ 61,018, at 61,052.

22. *Id.*

23. *Id.* ¶ 61,018, at 61,072.

24. *Id.*

Another question perennially raised with respect to mitigation is whether short-term mitigation also results in mitigation in long-term markets. Giving the matter more consideration, FERC announced that it would require all long-term sales into any market where the applicant has market power to be filed with the Commission for review (with required approval prior to the commencement of service) and to be priced on an embedded cost-of-service basis.²⁵ The Commission also prescribed certain steps to mitigate, based on the relative size of the applicant.²⁶ These steps include the requirement that applicants post the optimum areas on their systems for locating prospective generating facilities on their websites. FERC put off the issue of third-party control of OASIS sites and backpedaled on the exemption for sales into an RTO. Still, it stated that an ISO or RTO control area should be the default geographic market.²⁷ All this backing and filling—amid multiple rehearings—seems to underline the difficulty and uncertainty of measures to cure market power. The measures, of course, go far beyond the antitrust laws and are frequently intrusive. I do not envy the regulators this thankless task.

One is left with the impression that, when it comes to market power, certainty is illusory and market power dies a slow death. I will not try to quote any odds on the total eradication of market power. However, even if, as Matthew Estes suggests, efforts against market power inevitably lack precision²⁸ under the law, there seems to be no sure escape from pursuing such efforts to the last decimal point.

This Symposium is going to address topics other than market power. There are certainly questions whether the regime of competition is entirely compatible with measures to protect the environment. One problem is obvious: cheap power, which is the professed goal of competition, is generally not good for the environment. For example, internalizing external (environmental) costs into prices is not compatible with competitive pricing. This underlying conundrum is offset by the opportunity to sign up for green power.

As for reliability, which is taxed by the much more extensive exchanges of power over longer distances in a deregulated system, the answers are difficult. In many respects, reliability is more important than minor increases in efficiency, because the

25. *Id.* ¶ 61,018, at 61,073–74.

26. *Id.* ¶ 61,018, at 61,074

27. *Id.* ¶ 61,018, at 61,078

28. Estes, *supra* note 9, at 22.

external costs of a general blackout are very high. Not only are individuals affected by the loss of power they are paying for directly, but they suffer the loss of transportation, temperature control, use of electrical machinery and other benefits. This is another way of saying that the electric delivery system provides many external benefits—basically the infrastructure of a modern society. Reliability cannot be left entirely to financial incentives, market solutions or the like. There is a requirement for command and control here.

Many questions have yet to be answered about deregulation and competition, but this Symposium seems spectacularly well-equipped to point the way. And, as I noted at the beginning, you can be grateful that you do not have the Sentencing Guidelines to cope with at the same time.