THE FERC's POLICY ON ELECTRIC MERGERS: A BIT OF PERSPECTIVE

by
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I. INTRODUCTION

Now that we have the Merger Policy Statement of the Federal Energy Regulatory Commission (FERC),[1] the last obstacle to deregulation of the electric utility industry seems to have dissolved in bureaucratic smoke. It was not ever thus. The movement for deregulation and competition in electric power began as far back as the *Otter Tail* decision in 1973,[2] and surely by 1978 with the independent power provisions of PURPA.[3] The movement was nourished by the astonishing differences in rates and costs from one utility service area to another in the 1980's. But along the way, the struggle to introduce competition into the electric power industry has encountered a series of stubborn obstacles. At various times, considerations of transmission access, of the obligation to serve, of fairness among the customer classes, of stranded costs and even of the waywardness of electric flows have seemed to block the deregulatory path. The passage of the Energy Policy Act of 1992 leveled the chief obstacle still standing by opening the way to mandatory access to transmission grids.[4] The promised land of free competition loomed on the horizon, and the advance party of large industrial customers pressed forward to reach it.

Just as it looked as if a whole new world of ruthless rivalry was about to emerge, a cloud no bigger than a man's hand appeared on the horizon. At the edge of the cloud one could barely make out the letters of a word— "Merger." For when the electric power people awoke from their long night of natural monopoly, they began to rush into each other's arms to attempt an unprecedented number of corporate couplings.

This was, in the minds of some, a surprising development in electric power deregulation, even though a similar outbreak of mergers had occurred in the deregulation of every other regulated industry—airlines, railroads, telecommunications, banking, less-than-truckload motor carriage and so on. The advent of this urge to merge among electric utilities challenged those most deeply committed to a textbook sort of competition in

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1. Inquiry Concerning the FERC's Merger Policy Under the Federal Power Act, FERC Order No. 592 (RM96-6-000), at 2 (Dec. 18, 1996) [hereinafter Policy Statement].

2. Otter Tail Power Co. v. United States, 410 U.S. 366 (1973).

3. Public Utility Regulatory Policies Act of 1978, Pub. L. No. 95-617, 92 Stat. 3117 (1978).

4. Energy Policy Act of 1992, Pub. L. No. 102-486, 106 Stat. 2776 (1992).

the industry. In the minds of many observers, a wave of electric utility combinations could only stifle the very competition that deregulation was committed to fostering. Mergers might confer that most dreaded endowment, market power, on the merging partners. There has, therefore, been anxious attention to consolidation in the electricity industry because of fear that mergers will strangle the infant, Competition, in her crib. But now, with its recent Merger Policy Statement, we are assured that the FERC vigilantly stands guard at crib-side.

The purpose of this article is to put the Merger Policy Statement in perspective—in the historical perspective of mergers among electric companies over the years, in the perspective of mergers in other regulated industries undergoing deregulation and in the perspective of the antitrust maxim that structure determines conduct, which, in turn, determines performance. This article will explain, *inter alia*, that the movement for merger and consolidation in an industry shifting from regulation to competition is a universal phenomenon, highly predictable and perhaps inescapable. It is a natural, and not necessarily harmful, reaction to a huge increase in risk.

This article begins by describing the FERC's new merger policy. Close attention will be paid to whether mergers occurring in the wake of deregulation are a special case, requiring a modified analysis. Specifically, the article will ask whether the time-honored centerpiece of merger control—the structure-conduct-performance paradigm, as embodied in the Policy Statement—is fully appropriate for industries undergoing deregulation. The new FERC policy will also be compared with those of other regulatory agencies that have overseen the deregulation of industries in their jurisdiction. Finally, the article will explore some reasons that might be advanced in defense of consolidation in the wake of deregulation.

II. *The FERC's New Merger Policy*

During the past sixty years when electric power has been a pervasively regulated industry, no comparable epidemic of mergers or related consolidations has broken out.[5] There have been a few sporadic efforts at merger, but nothing like the present phenomenon.[6] While pervasively regulated, electric utilities apparently saw little advantage in merger. They also probably correctly thought that their regulators, especially the state regulators, would not view merger activities with great favor. But above

5. The last wave, the 1920's movement to unite electric utility properties in holding companies, was of course reversed by the Public Utility Holding Company Act of 1935 (PUHCA), Pub. L. No. 74-333, 49 Stat. 803 (1935). PUCHA established a policy disfavoring consolidation in the industry, or what the Securities and Exchange Commission (SEC) has termed "the tilt against bigness." In the Matter of American Electric Power Co., Inc., SEC Public Utility Holding Company Act Release No. 35-20633, at 19 (July 21, 1978).

6. For a sampling of mergers and acquisitions active in late 1996 and early 1997, *see, e.g.*, Enron Corp. with Portland General Corp.; Puget Sound Power and Light Co. with Washington Energy Co.; Western Resources, Inc. with Kansas City Power and Light Co.; and Ohio Edison Corp. with Centerior Energy Corp.

all, the utilities did not perceive the risk—the risk of bankruptcy—that deregulation has brought.

Before the energy crisis of the 1970's, the most significant risk encountered by the investor-owned electric utility industry was of a government take-over in the 1930's[7] or of the encroachment of public power at various times and places.[8] Otherwise, the industry led a blissful life of guaranteed franchises, ever-expanding revenues, ever-declining costs and cost-plus regulation. In the 1970's and 1980's came the agonies of inflation, fuel shortages, cost overruns and plant disallowances. For the most part, however, the regulators saw to it that the industry continued to recover its costs, after a fashion. With competition only a gleam in professorial eyes, only a few mergers were announced and consummated.[9]

The floodgates opened with passage of the Energy Policy Act of 1992.[10] Competition, centered on the generation segment of the classic trio of generation, transmission and distribution, loomed larger and larger.[11] And with competition in generation came bedeviling risk. For with deregulation, the government presumably will cease to be concerned that the generating parts of the industry recover their costs. The electricity business thus has lost its oldest friend. Where there was once manageable or at least calculable risk, there is now formidable fear of the unknown and the potentially disastrous.

Strength through union is a natural response. At least two dozen electric utilities have announced plans to merge in the past few years.[12] Forty-five percent of utility executives and power marketers report being involved in merger activities. And two-thirds of utility executives do not expect their companies to remain "intact" over the next decade.[13] Faced with the task of evaluating this torrent of proposed mergers, the FERC elected to seek public comment with a view to issuing a new merger policy.

7. PHILIP J. FUNIGIELLO, TOWARD A NATIONAL POWER POLICY: THE NEW DEAL AND THE ELECTRIC UTILITY INDUSTRY, 1933-1941, at 31, 257 (1973).

8. The Tennessee Valley Authority's creation exemplified this tension between public and private power, a tension that continued for decades. It served, for example, as the backdrop to *Otter Tail,* 410 U.S. at 368.

9. *See, e.g.*, Centerior Energy, Cleveland Elec. Illum,., and Toledo Edison in 1986; Utah Power and Light with Pacific Power and Light in 1988; Kansas Power and Light and Kansas Gas and Electric in 1991; and Northeast Utilities with Public Service of New Hampshire, 1992. MARK W. FRANKENA AND BRUCE M. OWEN, ELECTRIC UTILITY MERGERS: PRINCIPLES OF ANTITRUST ANALYSIS 158 (1994).

10. Energy Policy Act of 1992, Pub. L. No. 102-486, 106 Stat. 2776 (1992). Sections 721 and 722 of the Act, codified in part at 16 U.S.C. §§ 824j(a), 824k(a), authorized the FERC to require public utilities to provide transmission service (wholesale wheeling).

11. Electricity deregulation primarily means deregulation of power generation. In most quarters, the wire businesses are still seen as natural monopolies, necessarily subject to governmental oversight. The sea change in the industry's course will impact the transmission and distribution functions but will not subject them to competition.

12. Michael J. Hamilton, *Measuring the Merger: Fact, Fiction, and Prediction*, 134 PUB. UTIL. FORT. 26 (1996).

13. *Firm Releases 1997 Outlook, Focuses on Choice*, PUR UTIL. WKLY., January 10, 1997, at 1.

FERC Policy Statement

The Commission has set out two goals for its Policy Statement: to focus its merger policy on competitive concerns in wholesale power markets, and to provide greater regulatory certainty.[14] The Commission has been successful in pursuing the goal of safeguarding competition. In doing so, the FERC has not veered perceptibly from its views in recent merger cases.[15] Its approach has been cautious, conservative and certainly orthodox. How adequate this approach will prove for a deregulating electricity industry is a matter this article will touch upon later.

The Commission has grounded its restated merger policy on three pillars. Taking its cue from the six *Commonwealth*[16] factors that have governed the Commission's evaluation of mergers since 1966, it has collapsed these factors into a surviving trio, the nucleus of its merger analysis. These key factors are the effect on (1) competition, (2) rates and (3) regulation.[17]

The Policy Statement places by far its greatest emphasis on competition and specifically on competition in generation. The foundation stone of competitive generation is the Commission's Open Access Rule, Order No. 888.[18] The Rule defines the market available to any given customer within boundaries set by the cost of transmission, line losses and the carrying capacity of the lines. Some analysts have taken the position that Open Access alone is enough to mitigate market power in generation (as well as in transmission).[19] The Commission has not adopted this view. Instead, it has adopted, without modification, the 1992 Horizontal Merger Guidelines of the Department of Justice (DOJ) and the Federal Trade Commission (FTC).[20]

14. Policy Statement, *supra* note 1, at 2.

15. *See, e.g., Union Electric Co. and Central Illinois Pub. Serv. Co.*, 77 F.E.R.C. 61,026, 1996 WL 594244 (F.E.R.C.), at 12 (Oct. 16, 1996) ("Our method [of assessing merger's competitive effects] uses the DOJ Guidelines"); *Baltimore Gas and Elec. Co. and Potomac Elec. Power Co.*, 76 F.E.R.C. 61,111, 1996 WL 432424 (F.E.R.C.), at 7-8 (July 31, 1996) (emphasizing use of DOJ Guidelines to assess "potential competitive consequences of the proposed merger").

16. *Commonwealth Edison Co.*, Opinion No. 507, 36 F.P.C. 927, 936-942 (1966), *aff'd sub nom.* Utility Users League v. FPC., 394 F.2d 16 (7th Cir. 1968).

17. Policy Statement, *supra* note 1, at 2-3. The other three *Commonwealth* factors are the reasonableness of the purchase price, the existence of coercion and the contemplated accounting treatment. *Id.* at 10.

18. Order No. 888, *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities and Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, III F.E.R.C. STATS. & REGS. ¶ 31,036 (1996).

19. *See, e.g.*, Robert J. Michaels, *Market Power in Electric Utility Mergers: Access, Energy, and the Guidelines*, 17 ENERGY L.J. 401 (1996). Professor Michaels takes the position that open access is enough to preclude market power, provided that transmission constraints are minimized and other obstacles to the free flow of electricity are removed. His seems to be a sort of potential competition or contestability approach: access in and out of a market, not concentration of generation ownership, better assays the risk of anti-competitive conduct. *Cf.*, WILLIAM B. TYE, THE THEORY OF CONTESTABLE MARKETS: APPLICATIONS TO REGULATORY AND ANTITRUST PROBLEMS IN THE RAIL INDUSTRY (1990).

20. Department of Justice and Federal Trade Commission 1992 Horizontal Merger Guidelines, 57 Fed. Reg. 41,552 (1992).

As adopted by the FERC, the Guidelines set out five steps in merger analysis: (1) assess whether the merger would significantly increase concentration; (2) assess whether the merger could result in adverse competitive effects; (3) assess whether entry could mitigate the adverse effects of the merger; (4) assess whether the merger results in efficiency gains not achievable by other means; and (5) assess whether, absent the merger, either party would likely fail, causing its assets to exit the market.[21] What the Commission calls its "Competitive Analysis Screen" involves primarily the Guidelines' first step—checking for increasing concentration. The screen can be broken down into two sub-steps: first, the definition of product and geographic markets, and second, the calculation of the Guidelines' concentration thresholds, indicating suspect mergers. In re-drawing the definition of product and geographic markets, the FERC first mentions the need to define product markets based on their cross-substitutability.[22] Then the Commission defines geographic markets as including sources of supply that offer a competitive delivered price and are accessible within the physical constraints of the system.[23]

The Policy Statement next calculates horizontal seller concentration in that market, using the Guidelines' well-worn Herfindahl-Hirschman Index (HHI). This method assigns a single number to describe the market's level of concentration by summing the squares of firms' market shares. If the post-merger sum or its increase (relative to before the merger) indicates competitive problems,[24] the Commission will look to further relevant analysis supplied by the applicant. Additional analysis could address the potential for adverse competitive effects, the potential for entry and the role

21. Policy Statement, *supra* note 1, at 21-22.

22. Policy Statement, *supra* note 1, at 59, Appendix A.

23. Policy Statement, *supra* note 1, at 26-27. The Open Access regime has rendered obsolete the older hub-and-spoke method, which looked only to the existence of physical interconnections to identify potential suppliers for a customer, without regard to economic factors or physical constraints. Policy Statement, *supra* note 1, at 20.

24. The Guidelines set up three ranges of market concentration. (1) *An unconcentrated post-merger market*—if the post-merger HHI is below 1000, regardless of the change in HHI, the Guidelines presume that the merger is unlikely to have adverse competitive effects. (2) *A moderately concentrated post-merger market*—if the post-merger HHI ranges from 1000 to 1800 and the HHI has risen by more than 100, the merger potentially raises significant competitive concerns. (3) *A highly concentrated post-merger market*—if the post-merger HHI exceeds 1800 and the change in the HHI exceeds 50, the merger potentially raises significant competitive concerns; if the change in HHI exceeds 100, it is presumed that the merger is likely to create or enhance market power. 1992 Horizontal Merger Guidelines, *supra* note 20; PHILLIP AREEDA AND DONALD TURNER, ANTITRUST LAW § 913.2 (1996 Supp.).

By way of contrast, one highly regarded observer has suggested as the threshold level for a finding of high concentration, an HHI of 2500, in apparent comparison with the Guidelines' 1800. PAUL L. JOSKOW, HORIZONTAL MARKET POWER IN WHOLESALE POWER MARKETS 11 (1995). Joskow draws his number from the Justice Department's 1986 report on deregulation of oil pipelines. *Oil Pipeline Deregulation*, Report of the Department of Justice, at 23-32 (May 1986). *See also* Lewis J. Perl, *Measuring Market Power in Electric Generation*, 64 ANTITRUST BULL. 311, 312 (1996) (arguing that "traditional tests [of market power], at least as conventionally employed, are likely to overstate the extent of market power").

entry could play in mitigating market power.[25] If applicants satisfy the analytic screen in their filings, they will typically be able to avoid a hearing on competition. On the other hand, the Commission will set for hearing any merger proposals that fail the screen analysis, raise problems of assumptions or data, or present questionable external factors.[26]

If an application of the Guidelines discloses potential market power, the FERC suggests a grab bag of mitigating measures. For example, divestiture of generation is an obvious means of alleviating potential market power in generation. In other cases, elimination of transmission constraints may lessen market power in generation by widening the set of potential power suppliers and thereby reducing market concentration. The FERC will also consider the commitment of transmission to an Independent System Operator (ISO) as possibly being an effective way to dampen market power in generation.[27]

While the Policy Statement goes into some detail about the screen (step one), it does not spell out explicitly what will happen to mergers that flunk the screen. Presumably the FERC will turn to the four Guidelines steps after the first one, concentration. Step two of the Guidelines requires the FERC to assess whether adverse competitive effects will flow from the merger. This suggests that the Commission will delve deeper into real competitive conditions rather than relying solely on raw concentration. As it stands, however, the Policy Statement leaves the specifics of its post-screen scrutiny to speculation.[28]

The Policy Statement on its face nonetheless gives us a sense of the Commission's likely tack. The FERC notes that the screen alone—and not the whole merger review—"will produce a reliable, conservative analysis of the competitive effects of proposed mergers."[29] The Commission also indicates that it will consider other market power problems undetected by the screen.[30] In sum, the Policy Statement confirms that the Commission will surely be "conservative" and responsive to the most hawkish demands of the commentors on its Notice of Inquiry.[31]

The FERC in its stated views tries to maintain a determined neutrality between encouraging and discouraging mergers. But, although it mentions as step four the possibility of "efficiency gains that reasonably cannot be

25. Policy Statement, *supra* note 1, at 3.

26. Policy Statement, *supra* note 1, at 27-28.

27. Policy Statement, *supra* note 1, at 28-33.

28. One scholar whose own proposal closely prefigured the Policy Statement has described some market characteristics that the FERC might examine in this context. They include ease of entry (the Policy Statement's step three), degree of excess capacity, proportion of fixed costs versus variable costs, degree of product homogeneity, buyer-side structure, extent of sellers' knowledge of each other's prices and costs, degree of transparency of any exercise of market power and extent of potentially available economies of scale. Richard J. Pierce, Jr., *Antitrust Policy in the New Electricity Industry*, 17 ENERGY L.J. 29, 48 (1996).

29. Policy Statement, *supra* note 1, at 25.

30. Policy Statement, *supra* note 1, at 25.

31. *See, e.g.*, Pierce, *supra* note 28; Carmen D. Legato, *Electric Mergers: Transmission Pricing, Market Size, and Effects on Competition*, PUB. UTIL. FORT., (June 1, 1996) at 23.

achieved by the parties through other means,"[32] the Statement's implicit thrust is negative. It takes the approach of the trustbuster. The Statement emphasizes why mergers might be bad—and offers suggestions for making them less bad—but fails to list any specific benefit, save one, that they might confer.[33] This single specified advantage to be gained from a merger is the rescue of a "utility in severe financial distress" to "ensure reliable electricity service."[34] This is, perhaps, an unintended reminder that electric power is an infrastructure industry, and no one really wants to pursue the competitive paradigm to the point of turning out the lights.

No one knows with what draconian rigor the FERC will apply the measures outlined in the Policy Statement and particularly the concentration threshold. In the Statement the FERC has allowed itself some room for maneuver. But the FERC cannot be charged, on the basis of the Policy Statement, with indifference to the competitive aspects of electric utility mergers. It is hard to imagine how the FERC could find itself at cross purposes with the Department of Justice in evaluating a proposed electric utility merger. In this respect, the Statement conforms to what the most demanding of critics has suggested[35] and is wholly orthodox in its approach.

From that point of view, the cloud no bigger than a man's hand has been dissipated, and the introduction of competition into the electricity industry can go forward unthreatened by mergers. In fact, one is struck in reading the Statement by the huge reliance being placed on competition as the panacea for any and all problems in the industry. Perhaps there are other important public interests in the structure of electric generating organizations than their impact on competition, but one would hardly get this impression from reading the Policy Statement.

III. The Inevitability of Consolidation After Deregulation

Viewing the FERC's new policy and the commentary of academics and industry, one might get the impression that the FERC and the industry in its charge are braving virgin territory. They are not. Power generation is not the first infrastructure industry to undergo deregulation; it is one of the last. There may well be something to learn about the electric industry's future from other deregulated industries' past.

Competition is a powerful solvent of inefficiencies and its advocates rejoice in that fact. But its onset is turbulent and disorderly. Deregulation is bound to roil a regulated market structure and to push an industry toward some new competitive equilibrium. As one deregulated industry after another has sought a new equilibrium, an undeviating sequence has emerged. When a capital-intensive industry is deregulated, market concen-

32. Policy Statement, *supra* note 1, at 3.

33. For a discussion of these possible specific benefits, see *infra* Section V.

34. Policy Statement, *supra* note 1, at 7.

35. Even the rural electric cooperatives, among the most anxious about the danger of excessive consolidation, have greeted the Policy Statement with cautious approval. *NRECA Wary of FERC's New Merger Policy*, Electric Co-op Today, at 3 (January 10, 1997).

tration inevitably rises.[36] This has been the story in all the major deregulated, capital-intensive, infrastructure industries: passenger air travel, less-than-truckload motor carriage, air cargo, railroads, natural gas and even telecommunications.[37] And the primary mechanism in boosting concentration, though not the only one, is merger.

One perceptive scholar, Almarin Phillips, showed remarkable prescience in describing how the very process of deregulation would alter the structure of a regulated industry. Although he directed his work specifically at the airlines, it has much broader significance. Not long after the passage of the Airline Deregulation Act of 1978, Phillips argued that, although airline deregulation was a major step forward, there was little understanding of the forces that it would unleash. The architects of deregulation were, he wrote in 1981, "hopelessly naive in their often implicit, always sanguine evaluations of the *structural* consequences of deregulation."[38]

I certainly do not see those architects—like Alfred Kahn and Stephen Breyer—as "naive" but as enlightened. Nonetheless, I am not sure that anyone (besides Phillips) forecast the structural consequences of deregulation. If there was a mistake in this regard, its origins are easily identified. "Armed with the economic theory of competition, with evidence suggesting an absence of significant economies of scale, with faith in the efficacy of free entry, and, after the mid-1970's, perhaps, with a contagious fervor to deregulate something," the proponents of deregulation made the key but flawed assumption: "that there would not be a need for significant structural readjustments in the new competitive environment."[39]

The essence of deregulation—the introduction of market forces into an industry previously sheltered—should belie any breezy assumptions of structural stability. The dynamic turbulence of competition was sure to force airlines, "starting from a condition far from equilibrium, . . . to

36. The chief exception is the special case of AT&T, where a judicially-imposed break-up of a monopoly preceded deregulation.

37. This pattern of consolidation is not confined to physical infrastructure industries. It exists, too, in commercial banking, the principal industry outside the physical infrastructure to be deregulated. Although commercial banking remains deeply fragmented along state lines and within market segments, Congress and federal regulators have steadily chipped away at the legal partitions within commercial banking. In direct response, the number of U.S. banks fell from 14,407 in 1985 to 9,941 in 1995. Peter Martin, *Comment & Analysis: Banks That Drag Their Feet*, FIN. TIMES, at 18 (July 25, 1996). Mergers have been the key mechanism for boosting banks' market concentration; their pace has been "little short of frenzied." *Fewer Banks, Bigger Banks*, FIN. TIMES, at 23 (June 20, 1995).

This staggering consolidation of this highly capital-intensive business is set to continue, particularly if further regulatory barriers fall. If the wall with investment banking comes down, for example, Federal Reserve Chairman Alan Greenspan opines, "We'll see inevitably various types of mergers." Tim Carrington, *Greenspan Backs Ending Glass-Steagall*, WALL ST. J. A2 (Mar. 1, 1995).

38. Almarin Phillips, *Airline Mergers in the New Regulatory Environment*, 129 U. PENN. L. REV. 856, 856 (1981) (emphasis added); *accord*, GEORGE WILLIAMS, THE AIRLINE INDUSTRY AND THE IMPACT OF DEREGULATION 11 (1993) ("The clear expectation of those advocating total economic deregulation was that the sector would be transformed into a highly efficient, competitive, and consumer orientated marketplace . . . That this idealistic vision was flawed was a result of the response of the existing carriers to the real competition imposed upon them.").

39. *Id.* at 856-57.

develop and employ new modes of conduct in response to new market conditions."[40] Competition would propel changes not just in price but in the very shape of the industry:

> [In a deregulating industry,] competition must be viewed not as a simple price-quantity equilibrating mechanism operating *within a given market structure*, but rather as a dynamic process that *causes changes in structure.*[41]

What the airline industry in the early 1980s was being driven toward, and what electric power will soon be driven toward, has been called "equilibrium."[42] Equilibrium exists for competitors in a market when workable competition can be sustained and competition disciplines prices but the number of competitors remains roughly stable. Under regulation, there is no equilibrium or need for equilibrium. When deregulation occurs, a search for equilibrium is set off. This may result in competitors of a wholly different size and number than existed under regulation. In the case of electric utilities, why would one expect a system in which the production units are now basically defined by state lines (presumably because of state regulation) to maintain its structure in a regime of interstate competition? There is every reason to expect the advent of a new equilibrium characterized by a new structure.

Merger policy, Phillips believed, ought to incorporate the fact of this search for a new equilibrium. Remember that the forces driving consolidation in the airlines perhaps were not fully appreciated. "The vision [held by deregulation's proponents] of the deregulated airline industry as effectively competitive suggested that merger policies developed under the antitrust laws would suffice for whatever mergers and acquisitions might transpire," Phillips observed. "In this the proponents of deregulation were wrong."[43]

The roots of the failure to appreciate the full dimensions of the merger problem lie deep in American merger law. The paradigm that most deeply informs modern merger policy is entitled "structure-conduct-performance.""[44] This is to say, industry structure determines firms' conduct, or at least the choices open to firms; and conduct in turn shapes an industry's performance. This principle is central to the FERC's Policy Statement, for the significance of concentration statistics is, of course, derived from this paradigm. That approach assumes, in line with the great bulk of expert opinion, that in the case of horizontal mergers, the likely conduct of firms depends in large measure on how many and how big the firms are in the relevant market.[45]

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40. *Id.* at 859.
41. *Id.* at 859 (emphasis added).
42. *Id.* at 858; *see also* Michaels, *supra* note 19, at 406.
43. Phillips, *supra* note 38, at 857.
44. HERBERT HOVENKAMP, FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE § 1.7 (1994). Although the 1992 Horizontal Merger Guidelines have retreated from the purer structuralism of the 1968 Guidelines, principally in the opportunities to rebut inferences drawn from the concentration statistics, the "analysis remains mainly, although not exclusively, structural." *Id.*
45. "[A] consensus among economists attaches great significance to the degree of market concentration" as a prime way of assessing the anti-competitive effects of a horizontal merger. PHILLIP AREEDA & DONALD TURNER, ANTITRUST LAW § 910b (1996).

Yet as far as its structural consequences are concerned, deregulation is different. As an industry moves from a pervasively regulated setting to loosely fettered competition, orthodox principles may no longer adequately describe the forces at work. "Even if it is true that a highly concentrated market structure tends to produce poor economic performance under relatively static market conditions," Phillips argued, "this truth obscures the more important relationships between structure and performance in a dynamic setting." And, as Phillips saw with remarkable clarity, "[d]eregulation creates such a setting."[46]

Phillips contended that deregulation reverses a causal link that orthodox antitrust policy assumes. "The traditional view has been that industry structure gives rise to specific types of conduct," he wrote. "In the deregulated airline industry, the exact opposite is true."[47]

> The analysis must therefore address the question of how the actual and perceived changes in the performance of the carriers are likely to "feedback" to private decisions affecting the hitherto regulated and unregulated aspects of structure and conduct.[48]

The Phillips Thesis in Electricity Generation

To establish the relevance of Phillips' insight for electricity deregulation, take one problem that electric power may soon encounter. Phillips describes the same problem in airlines after that industry's own deregulation: the proclivity of carriers to take on new routes and to undertake new services on the basis of short-run incremental cost. This may make sense from the point of view of the individual airline. Incremental revenue may exceed incremental cost for, at worst, a contribution to overhead. But other carriers are led by competition to take on like business on a similarly short-run basis. Soon many carriers are operating at a loss. If the carriers cannot make up the shortfall elsewhere—presumably in the inelastic demand sectors—there will be none of the long-run profits needed for survival. In Phillips' words: "To the extent that mergers yield more efficient

46. Phillips, *supra* note 38, at 857.

47. Phillips, *supra* note 38, at 859. Phillips's observations, plausible on an intuitive basis, could be construed as some sort of modification of antitrust doctrine, or as a suspension of the "concentration breeds market power" dictum in the circumstances of post-deregulatory consolidation. Phillips, however, after laying down the iron law that consolidation in the course of deregulation is inevitable and is apparently legitimate in the circumstances, goes on to discuss all the cost and demand factors that may be operative in a deregulatory situation. Economic factors are at work that must be balanced against any theoretical impairments of competition. As a formal matter, this fits into the "efficiency" part of the analysis outside of, and in addition to, the strictly competitive scrutiny. Thus Phillips does not outright reject concentration as a potential source of impairment to competition. He believes that in the unique circumstances of deregulation—a critical escalation of risk accompanied by newfound fears of failure—there may be powerful forces at work that regulators should not ignore in favor of a narrowly focused approach. *Id.* at 859-860.

Some commentators, however, do reject seller concentration as a guide to market power in generation. Professor Michaels' contestability approach, for instance, flatly contradicts the Guidelines. Michaels, *supra* note 19, at 410. He concludes that, "In reality, the evidence favoring the Guidelines is sparse." These views, though a distinct minority, show the breadth of opinion on this subject.

48. Phillips, *supra* note 38, at 859-60.

operations—or shield carriers from such ruinous rivalry—mergers will be encouraged by the threats to survival."[49]

It is not difficult to shift this scenario into the world of electric generating companies. In electricity generation, short-run incremental cost is generally only a fraction of average total cost. It seems likely that many generation operators, focused on the recovery of incremental cost, will fall short of total cost recovery—and for them there will be a major risk of failure. In theory, the problem of widespread below-cost operation would not arise unless there were excess capacity. But, of course, that is the present condition.

For a number of reasons, excess capacity may persist. Marginally efficient or even inefficient capacity may not be purged promptly from the market. First, there are economic reasons. Power plants have a single use. The capital tied up in them has little value except to produce electricity. This is a practical guarantee that marginal plants will be run to recover running costs alone. Even if the running costs of electric generators are not quite competitive, firms might still run them to escape the considerable cost of decommissioning and scrapping them. Second, even after deregulation, concerns about the adequacy of bulk power supply may cause regulators to continue to require approval of withdrawals of a plant from service.[50] Analogous plant in other industries—for example, branch railroad lines—proved very difficult to abandon for many years.[51]

Finally, the limited experience with electric utilities in bankruptcy has shown that, while owners and creditors may change, electricity flows on. In the airline industry there was a similar experience: the practice of bankrupt carriers' continuing to operate in bankruptcy was a source of anguish to their solvent competitors. With respect to electric power, there used to be a clearer reason to prop up a bankrupt utility (serving retail customers) than might be the case for an unbundled power generator. Public policy grounds, however—maintaining the bulk power supply—might still argue for keeping the generators in business, even if insolvent.

The overhang of excess capacity, then, threatens the financial livelihood of many electricity firms. True, recovery of stranded costs will presumably cushion the write-off of uneconomic assets, but it remains to be seen whether these adjustments will fully compensate for excess capacity's downward pressure on electricity prices. Particularly given the possible continuation of at least some regulatory restraints on electric plants leaving the market, excess capacity may turn out to be a long-lived albatross around the industry's neck. For many utilities faced with this problem, the choice may be between an early consolidation or a later shotgun marriage under threat of bankruptcy.

49. Phillips, *supra* note 38, at 877.

50. *See, e.g.*, 220 ILL. COMP. STAT. ANN. 5/8-508 (West 1996) ("[N]o public utility shall abandon or discontinue any service or, in the case of an electric utility, make any modification . . . without first having secured the approval of the [Illinois Commerce] Commission").

51. *See, e.g.*, FRANK J. DOOLEY & WILLIAM E. THOMS, RAILROAD LAW A DECADE AFTER DEREGULATION 18 (1994).

In at least one way, the oncoming restructuring of electric utilities may be much more transformative than the airlines' experience. Ownership arrangements of an entirely new sort may appear on the scene. "The present industry structure is the result of complex legal and regulatory restrictions imposed by state and federal governments. Without such restrictions the market might evolve in different directions."[52] The most prominent example now is the mixed gas/electricity mergers, such as Duke Power with PanEnergy, Enron with Portland General Electric and Long Island Lighting with Brooklyn Union Gas.[53] Beyond these, as two respected students of the industry noted some years ago, are the large engineering and construction firms or electrical equipment or boiler manufacturers that may enter the market to build *and operate* new base-load capacity.[54] Any of these sets of firms presumably has a great deal of experience in plant design and construction and could save money with uniform plant designs. Any of the industries mentioned is highly concentrated and, as plant owners, would impart their own concentration to the ownership of the plants. These new industry structures would present further challenges in the search for equilibrium.

The Phillips thesis suggests that there will be many electric power mergers—probably sooner rather than later. If appropriate mergers are blocked, the antitrust laws can be by-passed. "Efficient" firms can grow internally, while other, less efficient, firms fall by the wayside. These less efficient firms, denied an avenue to efficiency by merger, may lurch toward failure and later seek merger under the failing-firm doctrine. This process could leave only a few very large, not necessarily efficient quasi-monopolies in the industry.[55] The FERC therefore would be well-advised to consider the Phillips thesis as a "public interest" factor to be weighed along with inferences drawn from measures of concentration.

IV. The Phillips Thesis in Airlines and Railroads

If the Phillips thesis fits as suggested into the "public interest" part of the merger analysis, how much weight should the FERC give it? For comparative purposes, it may be useful to look at the approach of other regulatory agencies overseeing industries comparable with electric power. For comparable industries, this article selects the transportation businesses—principally airlines and railroads—which are sufficiently capital-intensive to be economically analogous. In addition, the processes of deregulation and of consolidation are well enough along in these industries to be instructive.

52. Paul L. Joskow & Richard Schmalensee, Markets for Power: An Analysis of Electric Utility Deregulation 191 (1983).

53. The FERC takes notice of these new cross-industry mergers in the Policy Statement, but offers little detail on its contemplated approach to assessing them. Policy Statement, *supra* note 1, at 7-8.

54. Joskow & Schmalensee, *supra* note 52, at 191.

55. Phillips, *supra* note 38, at 880.

A. *Airlines*

From the 1930's until the late 1970's, the airlines were subject to a regulatory scheme designed to protect them as an infant industry from "excessive" competition, yet also to maintain a managed rivalry thought to promote efficiency. Under regulation, the Civil Aeronautics Board (CAB) oversaw the airlines' fares and determined their route structures and several other essential features. The demise of a trunk (major) airline or the rise of a new one was disfavored. A leading element of this regime was the handicapping of competition: the CAB expected the airlines to use some profits from lucrative routes to subsidize marginal ones,[56] and it provided the weaker carriers with enough route awards to keep them in the race without necessarily making them winners.[57] As a protectionist arrangement, the system worked splendidly. Almost all the original trunk (major) airlines survived from 1938 until the coming of deregulation, and no new airlines joined the list.[58]

After dissatisfaction with the system led to abandonment of the old regulatory regime in 1978,[59] the popularity of mergers and acquisitions skyrocketed. After deregulation, the number of airlines in many city pair markets increased significantly, but this initial burst of competitive zeal fizzled after 1983 as the measures of firm concentration rose inexorably.[60] The market share of the three leaders has at times approached 60 percent.[61]

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56. Paul S. Dempsey, *The Dark Side of Deregulation: Its Impact on Small Communities*, 39 ADMIN. L. REV. 445, 458 (1987).

57. Alfred E. Kahn (Speaker), *in* Donald L. Flexner (Moderator), *To Regulate or Deregulate: An Article of Faith or Analysis?*, 55 ANTITRUST L.J. 205, 206 (1986).

58. Robert M. Hardaway, *Transportation Deregulation (1976-1984): Turning the Tide*, 14 TRANSP. L.J. 101, 135 (1985).

59. Airline Deregulation Act of 1978, 92 Stat. 1705. After deregulation, the airlines had to devise new policies with respect to route structures, fare structures, service frequency, flight equipment, ground service and promotion. Phillips, *supra* note 38, at 859.

60. *See* Jan K. Brueckner & Pablo T. Spiller, *Economies of Traffic Density in the Deregulated Airline Industry*, 37 J. L. AND ECON. 379, 381 (1994) (showing industry-wide concentration dipping in the early 1980s but rising thereafter).

Air cargo, another capital-intensive business with economies of scale and of traffic density, followed the same course as the passenger airlines in moving promptly to consolidate after deregulation. Air cargo was fully deregulated by 1979. ANDREW S. CARRON, TRANSITION TO A FREE MARKET: DEREGULATION OF THE AIR CARGO INDUSTRY 2 (1981). The top four firms in 1978 had a 55% market share, which grew to 62% in the next two years. The grip of these firms on freight aircraft grew in the same period from 83% to 94%. *Id.* at 37. Three years after deregulation, a knowledgeable observer commented that air cargo competition although "intense immediately after deregulation, may now be in decline." *Id.*

61. WILLIAMS, *supra* note 38, at 37; Paul Dempsey, *The Disintegration of the U.S. Airline Industry*, 20 TRANSP. L.J. 9, 15 (1992).

As a leading investor said in explaining why he now considers airline stocks a "buy," "Airlines are becoming a little oligopolistic. They are not competing with each other as much as they used to." *Still a Winner: Predictions of Julian Robertson's Demise Prove Premature*, BARRON'S, at 17, (Nov. 18, 1996). Julian Robertson is the founder of Tiger Management Co., with $8 billion under management.

To a significant degree, higher concentration has been achieved by merger.[62] Between 1979 and 1988, there were 51 airline mergers and acquisitions.[63] Some of these after 1982 were monsters—shrinking the number and inflating the size of the survivors.[64] And in a reverse of the view that prevailed on the eve of deregulation, most observers now expect massive additional consolidation in the airlines.[65] A possible union of Delta and Continental has been seriously considered and may be revived.[66] TWA, Northwest, and USAir are themselves prime merger targets.[67]

This record confirms the Phillips thesis that deregulation itself, by making a new equilibrium necessary and by enhancing risk, creates a powerful force for consolidation.[68] And these risks are real. In the years after deregulation, the industry rang up losses that exceeded all its prior earnings since the inception of commercial aviation. A number of lines simply went bankrupt and out of business, like Pan American (old-timers) and Midway and Air Florida (new post-deregulation carriers).[69] Others dwelled for a long time in a twilight world in-and-out of Chapter 11, such as America West and Continental.[70] Plenty in good times is no guarantee of survival in bad. This bit of airline wisdom helps explain why Continental, which has been in bankruptcy twice, would apparently like to find a safe harbor at a time when it is doing well.[71]

How has the Department of Transportation (DOT) dealt with mergers among airlines? Under the Airline Deregulation Act of 1978, this agency was required to approve mergers under a standard reflecting a modification of the Clayton Act.[72] The Deregulation Act, however, mandated more than a pure antitrust approach. The DOT had to weigh the probable anti-

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62. Barry Hawk, *Airline Deregulation After Ten Years: The Need for Vigorous Antitrust Enforcement and International Agreements*, 34 ANTITRUST BULL. 267, 276 (1989).

63. Amy Hunt, *Assault on the Airline Industry: Private Antitrust Litigation and the Problem of Settlement*, 59 J. AIR L. & COM. 983, 991 (1994).

64. Frontier and People Express joined Continental; Western merged into Delta; Northwest took over Hughes Airwest and Republic; TWA swallowed Ozark and USAir did the same to Piedmont. WILLIAMS, *supra* note 38, at 42.

65. *See, e.g.*, WILLIAMS, *supra* note 38, at 62 ("It is apparent that a very small number of similarly sized and equally endowed megacarriers will ultimately survive the restructuring triggered by deregulation."); Adam Bryant, *Merger Plan: Good Reasons for a Wedding at the Airport*, N.Y. TIMES (Dec. 5, 1996), at D1 (describing "a widely held belief in the industry that another round of consolidation is inevitable in such a capital-intensive business").

66. Kenneth N. Gilpin, *Continental's Merger Talks End, Chief Says*, N.Y. TIMES (Dec. 16, 1996), at C2; Adam Bryant, *Delta Air and Continental Are Reported in Merger Talks*, N.Y. TIMES, Dec. 4, 1996, at C1.

67. Frank Swoboda, *Airlines Silent on Merger Rumors: Delta-Continental Combination Could Spark New Consolidation Wave*, WASH. POST, Dec. 5, 1996, at D3.

68. *Cf.* Brueckner and Spiller, *supra* note 60, at 410 ("[B]y showing the cost advantage from high traffic densities, our estimates suggest that industry consolidation may be the inevitable result of deregulation.").

69. Mark C. Mathiesen, *Bankruptcy of Airlines: Causes, Complaints, and Changes*, 61 J. AIR. L. & COM. 1017, 1045 n.21 (1996).

70. *Id.* at 1024.

71. Bryant, *Merger Plan*, *supra* note 66.

72. Airline Deregulation Act of 1978, Pub. L. No. 95-504, 92 Stat. 1705, § 26 (formerly codified at 49 U.S.C. § 1378(b)(1)(A)-(B), now repealed); Hawk, *supra* note 62, at 279.

competitive effect of a merger against the obligation of "meeting significant transportation conveniences and needs of the public . . . unless . . . such significant transportation conveniences and needs may . . . be satisfied by a reasonably available alternative having materially less anti-competitive effect."[73] Under this standard, the DOT approved "nearly every merger the airlines proposed to it."[74] With concern mounting about the DOT's permissive review,[75] Congress allowed the DOT's authority over domestic airline mergers to expire, which automatically shifted it to the Department of Justice and the Federal Trade Commission.[76] Congress left mergers involving foreign commerce to the DOT.[77]

This was a classic case of closing the barn door long after the horse had escaped for good. Let us take an example or two of how the DOT applied this statutory mandate (ways which Alfred Kahn was to call "unconscionable").[78] In the Northwest Airlines-Republic Acquisition Case in 1986, the DOT noted that the merging carriers' combined share of emplanements at their would-be joint hub of Minneapolis-St. Paul was 80%.[79] The DOJ intervened to oppose the merger on the grounds that it was anti-competitive.

The DOT rebuffed the DOJ. It held that the controlling statute, rather than using concentration figures as the "pivotal inquiry, . . . requires a functional analysis focusing directly on the structure, history, and probable future' of the industry involved."[80] In a bow to contestability theory, the DOT said that low entry barriers meant that "measures of concentration in that market will provide little insight into market power."[81] Very significantly, in rejecting the received antitrust wisdom, the DOT observed that, "[A]irline markets are nearly always concentrated by traditional anti-

73. Airline Deregulation Act, § 26.

74. 136 CONG. REC. S1299 (1990) (reprinting Larry Eichel, *Congress Ponders Role with Airlines*, NEWS AND COURIER (Dec. 29, 1989)).

75. Senator Howard Metzenbaum warned in 1987 that "[c]oncentration in the airline industry has reached unprecedented and unhealthy levels. . . . [T]he fact that Justice opposed some recent airline mergers certainly suggests that Justice would better protect the interests of the public." 133 CONG. REC. S3616-02.

76. The Civil Aeronautics Board Sunset Act of 1984 set the DOT's reviewing authority to expire on January 1, 1989 (49 U.S.C. § 1551(a) (1988), now repealed); Charles Rule, *Antitrust and Airline Mergers: A New Era*, 57 TRANSP. PRAC. J. 62, 62-63 (1989).

77. 49 U.S.C. §§ 41308-09. Even within this rump of its earlier authority, the DOT's alleged antitrust leniency has sparked heated criticism. Asra Q. Nomani, *U.S. Aide's Drive to Make Airline Pacts Immune From Antitrust Laws Is Assailed by Justice Agency*, WALL ST. J., Jan. 3, 1997, at A10.

78. Alfred E. Kahn, *Deregulatory Schizophrenia*, 75 CALIF. L. REV. 1059, 1065 (1987).

79. Northwest-Republic Acquisition Case, Order 86-7-81, 1986 WL 70258 (D.O.T.), at 2 (July 31, 1986). The next largest airline held a 3.3 percent share at Minneapolis-St. Paul.

80. *Id.* at 4.

81. *Id.* at 4. For an example of contestability theory applied to airlines, see Elizabeth E. Bailey and William J. Baumol, *Deregulation and the Theory of Contestable Markets*, 1 YALE J. REG. 111 (1984). *But see* Kahn, *supra* note 78, at 1062 ("[I]f contestability were perfect, there would be no need for antitrust laws at all. That is very close to the position the Department of Transportation has taken in blithely dismissing objections by the Department of Justice to the Northwest-Republic and TWA-Ozark mergers.").

trust standards, yet most are competitive in performance."[82] This view conflicts directly with the principle that structure determines conduct, which, in turn, determines performance.

In the later TWA-Ozark case, the DOT reiterated that "airline markets are nearly always concentrated under traditional antitrust standards, yet they perform competitively."[83] As these examples show, the DOT was inclined to weigh economies, efficiencies, and other "public interest" factors heavily in the balance with purportedly anti-competitive aspects of proposed mergers—and certainly more heavily than would the FERC under its Policy Statement.

B. Railroads

Railroads also provide a case history of deregulation as a signal for relentless merger activity.[84] Only one industry is more capital-intensive than railroads, and that is electric generation. The two industries are economically comparable. The rails were partially deregulated under the 4-R Act in 1976[85] and, more significantly, under the Staggers Act in 1980.[86] There had been considerable merger activity among the railroads before deregulation, but since the Staggers Act, the number of significant U.S. railways has shrunk from 26 to 9.[87] Only five giants remain. The merger of the Union Pacific and the Southern Pacific (involving almost 25,000 miles of track) leaves only two major rail systems in the West. In the East, two systems—CSX and Norfolk/Southern—which had been bidding for the third—Conrail—now are set on dismembering the latter. CSC and Norfolk/Southern will then acquire the Conrail pieces, leaving only two major systems in the East. Already there is newspaper and industry speculation of an East-West merger to create the nation's first transcontinental railroad.

82. See, *supra* note 78, at 4 (quoting Texas International/Pan American-National Merger Case, Orders 79-12-163/164/165, at 12 (October 24, 1979)).

83. TWA-Ozark Acquisition Case, Order 86-9-29, 1986 WL 70380 (D.O.T.), at 2 (Sept. 12, 1986).

84. Deregulation also triggered a rush to consolidate in less-than-carload (LTL) trucking, the capital-intensive branch of the motor carrier industry. This branch moves shipments of less than 10,000 pounds, too small to fill a truck, and requires sprawling but intricate networks and distribution systems. To compete here a great deal of up-front capital is required, together with high volume and complicated coordination. The motor carrier business was fully deregulated between 1976 and 1980. Between 1976 and 1993, the market share of the top four interstate LTL carriers rose from 17% to 43%, ROBERT CRANDALL & JERRY ELLIG, ECONOMIC DEREGULATION AND CUSTOMER CHOICE: LESSONS FOR THE ELECTRIC INDUSTRY 49 (1997); the top ten's share grew from 39% to 64% between 1980 and 1990. NICHOLAS A. GLASKOWSKY, JR., EFFECTS OF DEREGULATION ON MOTOR CARRIERS 33 (1990). According to one authority, deregulation of LTL trucking had created "a closed club with a dwindling number of members." *Id.* at 34.

85. The Railroad Revitalization and Regulatory Reform Act of 1976, Pub. L. No. 94-210, 90 Stat. 31 (1976).

86. Staggers Rail Act of 1980, Pub L. 96-448, 94 Stat. 1895; DOOLEY AND THOMS, *supra* note 51, at 5.

87. U.S. Department of Transportation, News Release: Transportation Opposes Merging of Union Pacific and Southern Pacific Railroads Unless Significant Changes Are Ordered, 1996 WL 302206 (D.O.T.), at 1 (June 3, 1996). The subsequent Union Pacific/Southern Pacific merger dropped the number from 10 (in the news release) to 9.

Railroad mergers must be approved by the Surface Transportation Board (STB) in the Department of Transportation.[88] This agency is the successor to the Interstate Commerce Commission (ICC).[89] In reviewing rail mergers, the STB applies the selfsame statutory standard that the FERC must use for electric utility mergers: the proposed combination must be "consistent with the public interest." The STB has issued no merger "policy statement" comparable to the FERC's, but its approach is clear from its recent order approving the merger of the Union Pacific and Southern Pacific, two parallel railroads. The DOJ intervened there to allege an annual competitive injury to shippers of $800 million—more than the railroads' claimed annual savings from the merger. In the words of the Antitrust Division's chief, the combination would be "the most anticompetitive rail merger in our history."[90]

The STB labeled the DOJ's claim of harm "totally without foundation."[91] Rejecting the DOJ's proposed ameliorative merger condition—divestiture of more than a thousand miles of track—the STB criticized the DOJ's entire approach:

> Our statutory mandate, which requires us to balance efficiency gains against competitive harm, sharply contrasts with the approach to mergers taken by DOJ and the Federal Trade Commission (FTC). The policies embodied in the antitrust laws provide guidance, but are not determinative.[92]

And in a separate opinion, Commissioner Owen pointed to the long history of railroad regulation in asserting the antitrust laws' diminished relevance:

> Since the passage of the Transportation Act, 1920, it has been the public policy of the United States to encourage railroad mergers and consolidations that are in the public interest. . . . Railroads were the first major industry where merger and consolidation were promoted by the federal government. . . . Moreover, Congress repeatedly has directed that railroad merger and consolidation applications be measured by a different standard than is used by the Justice Department.[93]

There is, of course, much history and several Supreme Court decisions distinguishing the role of the STB from that of the FERC in dealing with merger applications. Since 1920, Congress has had a policy "of encouraging consolidation of the Nation's railroads into a limited number of sys-

88. Like airlines mergers under the DOT, but unlike electric utility mergers under the FERC, merger approval by the STB immunizes railroad mergers against DOJ action. 49 U.S.C. § 11321(a) (railroad immunity); Northern Lines Merger Cases, 396 U.S. 491, 508-509 (1970) (tracing immunizing power back to 1920 Transportation Act, 41 Stat. 456).

89. The demise of the ICC was hailed by political figures across the spectrum, but as this STB's attitude toward mergers will show, the ICC's soul, like John Brown's, goes marching on!

90. *Union Pacific-Southern Pacific Merger Approved by Regulators: Transportation Board Rejects Arguments That Creating Nation's Largest Railroad Will Destroy Freight Competition*, STAR-TRIB. (MINN.-ST. PAUL), July 4, 1996 at 1D.

91. Union Pacific and Southern Pacific Merger Case, Surface Transportation Board Decision No. 44, 1996 WL 467636 (I.C.C.), at *87 (Aug. 12, 1996).

92. *Id.* at *86.

93. Owen, Separate Commenting Opinion, *213.

tems,"[94] although in recent years there may have been some evident retreat by Congress from this policy.

Nonetheless, as noted, the statutory standard that the STB and the FERC apply is the same—consistency with the public interest [95] The STB construes this as a mandate to rationalize or consolidate the rail system and to give great weight to efficiencies, savings and economies claimed on behalf of the proposed merger. The FERC has construed the same language to mandate a strict application of the DOJ's antitrust principles, to rely almost wholly on competition to govern the industry and to treat with skepticism the promised savings and efficiencies attributable to the merger. Certainly the FERC has had no thought in recent years of rationalizing the electric utility industry by deliberate efforts to consolidate it.[96]

Thus, there seem to be two respects in which the railroad and airline regulators have taken a different path from the FERC's declared course in the Policy Statement. First, the STB and the DOT have displayed skepticism about the value of concentration statistics (specifically the Herfindahl-Hirschman Index) in their respective industries. These regulatory agencies have often ruled that, in spite of the apparent opportunities for collusive action that concentration creates, competition may still thrive.

Second, the STB (with railroads) and the DOJ (with airlines) have given a great deal of weight to claimed economies and efficiency ("public interest") factors as counterbalances to the anti-competitive aspects of a merger. Since the "Phillips factor"—the power of deregulation itself to induce consolidation—appears to be a "public interest" balancing factor, an agency charged with the "public interest" standard might give it substantial weight. The FERC's Policy Statement does not encourage such a course, but the Federal Power Act leaves the way open. The FERC should carefully consider what part the "Phillips factor" can play in realistically appraising a merger entered into during deregulation.

94. Penn-Central Merger Cases, 389 U.S. 486, 492 (1968) (citation omitted).

95. 49 U.S.C. § 11324(c) (STB) ("The Board shall approve and authorize a [consolidation, merger or acquisition] . . . when it finds the transaction is consistent with the public interest"); 16 U.S.C. § 824b(a) (FERC) ("[I]f the Commission finds that the proposed disposition, consolidation, acquisition, or control will be consistent with the public interest, it shall approve the same.").

U.S. Senator Dale Bumpers (D-AK) has introduced a bill that would modify the FERC's statutory mandate and repeal PUHCA. His bill would, among other things, insert the words "including the promotion of competitive wholesale and retail electric generation markets" after "public interest." S. 237, 105th Cong. § 113 (1997).

96. This was not always the case. For instance, in 1962, in a speech to representatives of the New England utilities, the Chairman of the Federal Power Commission (FPC), predecessor of the FERC, urged the companies in his audience to merge. And in 1964, the FPC's *National Power Survey* concluded that by closely coordinating plant construction and operations the nation's electric companies could cut costs sharply. STEPHEN G. BREYER & PAUL W. MACAVOY, ENERGY REGULATION BY THE FEDERAL POWER COMMISSION 89, 111 (1974).

V. Possible Competitively Neutral or Pro-competitive Benefits to Merger

There are many reasons for firms and their managers to seek mergers—including, of course, the prohibited motive of acquisition of market power. Some of these reasons go by the name of "savings" or "economies" (*e.g.*, of scale or of scope). These sometimes can be quantified. There are other reasons that are meaningful but cannot be quantified. Sometimes these reasons go under the rubric of synergies. Occasionally the purpose is simply to get bigger or to preclude a takeover. We have already noted a transcendent reason for merging in the course of deregulation—to cope with risk and to achieve equilibrium. Bearing in mind that the mere acquisition of market power is forbidden, we will look into some of the many permissible reasons, ranging from the obvious to the fanciful.

With respect to mergers, economies of scale or scope (or sometimes density) are sought after by the proponents. In electric power generation at the plant level, economies of scale are not usually decisive since, in current thinking, these are exhausted at 500 megawatts or so, and most modest-sized utilities can support this. Some authorities set 1600 megawatts as the maximum capacity from which savings can be realized through placing multiple plants at a single site.[97] This seems easy to achieve without raising market concentration concerns. Current thinking also sees a much bigger role for combined-cycle gas turbine generation, where economies of scale are exhausted early. At the firm level, some economies of scale in the form of labor and other savings usually can be claimed as a result of combining operations and eliminating jobs. There might also be some advantages in combined buying of fuel or materials.

Despite the relatively unexciting prospects for economies of scale, everyone, or almost everyone, is impressed with the expectations for economies of scope and coordination at the firm level. These would include efficiencies achieved through the classic diversities associated with electric power. Merging companies serving complementary classes of customers (particularly adding industrial load to a company without it) may be helpful.[98] Or, for example, a major economy can be realized through demand diversity, combining a company with a summer peak with a winter-peaker.[99] And there are, of course, major benefits to be obtained by the central dispatch of a large number of diversified plants. Presumably, a horizontal merger, by increasing the number and diversity of the plants within the system, can increase the benefits. Access to a larger array of plants through merger may also reduce reserve requirements and thereby lower the costs of reliability.

Professor Pierce has pointed out that the same coordination benefits may be obtained by adopting a strongly integrated power pool with an

97. Pierce, *supra* note 28, at 53; Raymond S. Hartman, *The Efficiency Effects of Electric Utility Mergers: Lessons from Statistical Cost Analysis*, 17 Energy L.J. 425, 449 (1996).

98. Hartman, *supra* note 97, at 441.

99. See, e.g., Pacificorp and Utah Power & Light. Hartman, *supra* note 97, at 432.

Independent System Operator (ISO).[100] In theory, at least, this is correct, but it remains to be seen how the interactions of these institutions actually play out. In fact, Professor Hartman, from various econometric studies, concludes that (with one caveat) power pools did *not* seem to offer any real alternative to mergers, because pooling did not lower costs.[101] In his view, "significant efficiencies will not be gained by [horizontally] consolidating generation facilities . . . in the restructured world."[102] As a matter of logic, these conclusions seem dubious because, as noted, horizontal combination increases the number and variety of plants subject to coordination. But Hartman does emphasize the economies of scope in electric power, primarily through the use of the computer to coordinate generating and other activity. He also provides a fresh insight by claiming that, "efficiency gains from vertical consolidation are more plausible and should be given more weight [than from horizontal merger]."[103] In light of the importance of vertical coordination, he argues that the "necessity for functional unbundling" will have to be carefully reconsidered. In this view, he is joined by Gagax and Nowotny,[104] whose analysis upholding the economic value of vertical integration in the electric utility industry has yet to be convincingly refuted. All these views, which blend the heretical with the orthodox, need to be addressed in any serious attempt to achieve a synoptic view of electric utility mergers.

The effect of consolidation in furthering diversification can also lower business risk and concomitantly reduce the cost of capital. The competitive generation of electric power, unless fortified with a full portfolio of long-term contracts (a presumably anticompetitive arrangement), will be fraught with business risk. Diversifying that risk by consolidation would seem to make business sense and would reduce the cost of capital. Larger blocks of generating facilities are likely to offer a broader range of types of generating plants, thereby reducing the risk of failure of any one type. A large inventory of plants of different types also provides an opportunity for one-stop shopping by customers. Regulatory risk, of course, varies from state to state. Even after deregulation, the potential for state intervention is significant in areas such as choice of fuel, plant siting, environmental requirements, demand-side management, integrated resource planning and the like. A geographically dispersed plant mix could provide a distinct advantage in the event of severe regulatory problems in particular jurisdictions.

100. Pierce, *supra* note 28, at 54. An ISO is conceived as independent of any of the participants in the pool. Under most proposals, it periodically calculates market-clearing prices, conducts economic dispatch, insures reliability, plans for expansion of transmission facilities and carries on other related functions.

101. Hartman, *supra* note 97, at 454.

102. Hartman, *supra* note 97, at 454.

103. Hartman, *supra* note 97, at 452.

104. Gagax and Nowotny, *Competition and the Electric Utility Industry: An Evaluation*, 10 YALE J. ON REG. 63 (1993).

Some commentators have written of the benefits of mergers of generating companies operating in different regional markets.[105] Apparently, mergers like this could increase size and diversity without increasing concentration. Ironically, this approach flies in the face of the principle incorporated in the Public Utility Holding Company Act of 1935, which forbids holding companies from owning several utilities unless they can be electrically integrated—usually meaning that the companies must be contiguous.[106]

Another factor relevant to the size of a power-generating enterprise, and one not much investigated in connection with deregulation, is the matter of planning. One of the premises underlying the deregulation of generation is that the market in its wisdom will determine when capacity has to be built and what kind of capacity it ought to be. Contrary to today' s conventional wisdom, it is hard to imagine that generating companies will assume this responsibility without substantial regulatory oversight. Extensive externalities burden electricity generation. There are crucial environmental considerations—thermal impact, clean air, clean water, distance from population centers and all the rest. Then there are questions of domestic and international fuel supply, which have major public dimensions. Energy security considerations may be important—like the longstanding and so far unsuccessful effort to diminish reliance on foreign oil. These and more prosaic matters will require planning both by the generation suppliers and by the government. There will have to be cooperative planning with each party displaying a comparable degree of sophistication. And there will have to be appropriate input from the public. All this would seem to require, on the part of generating companies, substantial staffing and expertise to operate smoothly. The point has been made that competition will pare overhead to the bone. That may be true, but a large generating company can absorb essential planning staff more economically than a smaller company.

As of March 1997, the industry problem is excess capacity. The competitive difficulty is how to operate profitably at prices under pressure from that excess capacity. A similarly serious problem may arise in reverse when growth has eliminated the excess electric capacity. The worst specter in the minds of those in the generating business will still be the creation of more excess capacity. They may be reluctant to add to plant. At that point, a return of the decried Averch-Johnson effect[107] might even be welcome. From the consumer's perspective, adequate capacity, including the necessary reserve, is crucial. It will be very important that the industry have the technical capacity and the confidence in its own judgment neces-

105. *See, e.g.*, Legato, *supra* note 31, at 28.

106. PUHCA defines an acceptable system (in the context of a merger) as one "physically interconnected or capable of physical interconnection and . . . confined in its operations to a single area or region." 15 U.S.C. § 79b(a)(29); *see* 15 U.S.C. § 79j(c)(2).

107. Averch and Johnson brought to light the tendency for regulated firms to invest inefficiently so as to expand their rate base—assuming that their rates of return were limited but higher than their cost of capital. Averch & Johnson, *Behavior of the Firm Under Regulatory Constraint*, 52 AM. ECON. REV. 1052 (1962).

sary to provide new capacity at crucial times. Only companies that can afford adequate planning staffs and that have enough capital to survive periods of excess capacity or other temporary exigencies can do the job.

Another area where the quality and strength (and size) of electric generating companies may count for a good deal is in developing electricity into something more than a commodity. Currently, everyone believes (correctly) that power from any source is pretty much the same as power from any other source. This means that electricity must trade on price alone. To the extent that distinguishing quality features can be developed for electricity, generators will not be entirely at the commodity market's mercy. Larger enterprises having more resources may be better suited to developing distinguishing features for their own electric power.[108] These distinctions might lie somewhere in the regularity of supply (e.g., voltage regulation) or, quite credibly, in reliability. Reliability is such a fundamental and crucial aspect of the electricity supply that we may overlook it as a source of "brand" identity. But, particularly for certain industrial uses, "premium" reliability may be in demand.[109] A rock-crushing machine, for instance, may be rendered inoperative if the power is interrupted for even a fraction of a second. Firms using such machines will pay extra for sure reliability. Owners of large computers may equally value extra reliability. It might be hard to imagine now how a power generator acquires an image of quality. But that is what American marketing ingenuity is all about.

In a similar vein, a larger generating entity would presumably be able to cover all categories of generation—base load, intermediate load and peaking. A generating company covering this broad a spectrum of plants would be in a position (subject to the interventions of the Independent System Operator) to furnish a continuous and variegated supply of power to a customer with a minimum of interruption. These are only a few among perhaps many quality features that larger generating companies could develop.

VI. Conclusion

This article began with a description of how the pilgrimage to the promised land of competition had pulled up short when the pilgrims spotted the cloud Merger hanging faintly over the horizon. This article has tried to show that, if there is a cloud named Merger, the cloud-watchers at the FERC have firmly engaged it. The FERC people are employing all the weaponry made available to then by a longtime merger-killer, the DOJ. Long a partisan of the structure-conduct-performance paradigm, the DOJ has felt right along that the concentration of electric generating firms in the market would be the key to the vigor of their competition. The FERC's acceptance of the DOJ's Horizontal Merger Guidelines seems to guarantee

108. *Business Bulletin: Utilities Turn Up the Heat on Marketing to Cope as Deregulation Advances*, Wall St. J., Jan. 30, 1997, at A1 (describing the newly avid attention of utilities to marketing).

109. *See, e.g.*, James J. Burke, *Utility Characteristics Affecting Sensitive Industrial Loads*, Power Quality, at 8 (Nov.-Dec. 1996).

that competition in generation will be preserved by a rigorous application of conventional principles—to the extent it can be.

Neither the DOJ nor the FERC, however, has found a place in its merger analysis for the concept that, immediately after deregulation, deregulated firms respond to a wholly new and threatening environment. These firms in overwhelming numbers seek a measure of security in consolidation. This has been the universal trend across the whole spectrum of regulated industries. This article has focused on the airlines, where an earlier vision of numerous participants of equivalent size has yielded to a reality in which three airlines are dominant. It has also examined the railroads, where merger will soon shrink the field to four major roads—conceivably on their way to one. There is no reason to believe that electric power generation will be immune from the same implacable pressures.

These pressures are already coming to the fore in the search for a new equilibrium. Equilibrium was irrelevant under regulation. Now the search for it is a necessary part of deregulation. It would be imprudent and futile to ignore it.