DEREGULATION AND MERGER ENFORCEMENT IN THE NATURAL GAS INDUSTRY

DAVID BALTO JAMES MONGOVEN*

I. INTRODUCTION

During the last several years there has been a tremendous increase in mergers and acquisitions in the natural gas industry. In the past year alone there have been numerous mega-mergers, including El Paso's \$16 billion acquisition of Coastal and the \$6 billion merger between Duke Energy and Phillips Petroleum. Natural gas mergers account for a substantial part of the merger workload at the Federal Trade Commission, with six enforcement actions taken in the past two years alone.

While this increase in natural gas mergers has coincided with the overall merger wave, the primary driving force behind recent consolidation is increased deregulation. A generation ago, integrated firms controlled the distribution of natural gas, from production field to city gate. During the 1980s and 1990s, the Federal Energy Regulatory Commission (FERC) deregulated significant aspects of the market, leading to the creation of new markets and new types of competitors. FERC's Order 636² has resulted in significant vertical unbundling in the industry, to the point where many firms do not participate in all aspects of delivering natural gas. Moreover, new forms of transportation service have arisen, often creating new markets or increasing rivalry in traditional markets. Traditionally integrated companies have spun off segments of their busi-

^{*} Mr. Balto is a Member of the District of Columbia Bar and the former head of the Office of Policy and Evaluation of the Bureau of Competition of the Federal Trade Commission. Mr. Mongoven is an attorney with the Office of Policy and Evaluation. This article does not necessarily reflect the views of the Commission, any individual Commissioner, or any other member of the staff.

¹ For a description of the reasons behind the merger wave and recent enforcement actions, see David Balto & Richard Parker, *The Merger Wave: Trends in Merger Enforcement and Litigation*, 55 Bus. Law. 351 (1999). The unprecedented wave of consolidation over the last few years is due to a variety of factors, including strong capital markets, greater international trade, the emergence of new markets, increased innovation, and a drive for new, more efficient arrangements.

² See infra note 32 and accompanying text.

ness, leading to a number of horizontal acquisitions, particularly in transportation and gathering. In addition, the ongoing deregulation process in both natural gas and electric power has led to a number of vertical mergers, called "convergence mergers," whereby fuel suppliers have acquired or been acquired by power companies.

The movement towards deregulation is an important change in the American economy, and it has not been confined to the natural gas industry. It has particularly affected all energy sectors. Entry, capital controls, rates of return, and even retail prices have been deregulated in energy industries, including natural gas and electricity. However, the movement towards market forces has been uneven. Natural gas, which was subject to a pervasive system of federal regulation, has been mostly deregulated. In contrast, the electricity industry is still in its early stages of deregulation. Electric power has been mostly subject to state regulation, so electricity deregulation will be a slower process requiring multiple legislative efforts at the state level. Thus, energy deregulation will be an ongoing process for some time.

Deregulating an industry is a major undertaking that has substantial economic consequences. When the industry is as basic to the American economy as any of the energy industries, those consequences spread far beyond the industry in question. It is incumbent upon policy makers to get it right, and to use the lessons of past deregulatory efforts to help new industries make the transition into a competitive environment. In particular, antitrust policy must be correctly applied to industries undergoing deregulation, especially merger policy. If deregulation and structural reorganization are met with lax merger enforcement, the best energy policy could be undone by the abuse of private market power. Antitrust policy and enforcement have an important role to play to ensure that accumulation or abuse of market power does not happen.

The FTC has been alert to this danger, and has tried to anticipate some of the problems. Although the Commission is not a regulatory body, it has been an active participant in the process of deregulation in the energy industries,⁴ most particularly in the natural gas industry.

³ See Federal. Trade Commission, Staff Report: Competition and Consumer Protection Perspectives on Electric Power Regulatory Reform (July 2000).

^{&#}x27;In addition to enforcing the antitrust laws, the FTC plays an important role outside of the litigation context in both the electric power and the natural gas industries. In particular, the Commission's Bureau of Economics and Policy Planning Staff have been active in filing comments with both FERC and the states. In March 1999, the Staff filed comments with the California Public Utilities Commission concerning distributed generation and competition in electric distribution service. See Federal Trade Commission, Comments of the Staff of the Bureau of Economics, Before the Public Utilities Commission

Drawing from the lessons learned in that process, then-Chairman Pitofsky warned of the dangers of attempting wide-scale deregulation of an industry without sufficient antitrust enforcement to ensure that competitive forces would prevail. In testimony before the House Judiciary Committee he noted:

Deregulation in a number of industries has proven to be beneficial to consumers and the competitive process. The deregulated industries exhibit lower prices, increased quality and quantity of goods and services, and heightened innovation....

The potential for consumer savings and increased choice is enormous, but it is certainly not guaranteed. Vigilant antitrust enforcement is an essential component of a market economy, especially in the formative years after the regulatory grasp is loosened. In particular, strong merger enforcement is necessary to ensure that the inevitable restructuring does not result in the accumulation and abuse of private market power.⁵

The Commission's efforts at applying antitrust principles to the deregulating natural gas industry are most visible in the merger area. Natural

of the State of California, "Distributed Generation and Competition in Electric Distribution Service," Dkt. No. R.98-12-015 (Mar. 17, 1999). Distributed generation refers to on-site generation of electricity by commercial and industrial firms and, potentially, by residential users. This is, of course, an important topic for natural gas industry participants because, in large part, plans for distributed generation are possible because of the development of gas-powered microturbines and fuel cells. As distributed generation becomes more prevalent, consumers with access to power from smaller gas-powered generators may be able to self-generate in order to avoid paying higher rates for electricity (including electricity transmission and distribution) during peak periods.

The Staff has also filed comments with various agencies concerning affiliate codes of conduct designed to discourage cross-subsidization and discrimination, assessment of existing market power in retail markets, stranded cost recovery techniques that distort entry conditions, and potentially misleading use of utility logos by unregulated affiliates. Affiliate rules are becoming an issue in both the gas and electric industries as markets are opened to competition. See, e.g., Federal Trade Commission, Comments of the Staff of the Bureau of Economics, Before the Louisiana Public Service Commission, "Affiliate Transactions," Dkt. No. U-21453 (Oct. 30, 1998). The basic policy issue, in this context, is to balance the costs and benefits of separating regulated utilities from their unregulated affiliates. On the one hand, there are significant potential economies of vertical integration, scale, and scope that could be lost if utilities were barred from conducting business with unregulated affiliates. On the other hand, there is significant potential for abuse by utilities in the form of discrimination against non-affiliated companies and subsidization of affiliates at the expense of rate payers and otherwise lower-cost competitors of the affiliates. Coincident with the potential for abuse is the existing market dominance and power of many utilities and the possibility that entry is easiest and most likely at the time when competition is first introduced. If dominant utilities can exploit existing market power left over from the regulatory era to prevent entry at a crucial time, they may be able to significantly retard the growth of new markets or achieve an entrenched position in those markets.

All of the Commission's advocacy comments are available at http://www.ftc.gov/be/advofile.htm.

⁵ Robert Pitofsky, Chairman, Federal Trade Commission, Prepared Statement of the Federal Trade Commission Before the Committee on the Judiciary, U.S. House of Representatives 8 (June 4, 1997).

gas mergers are primarily reviewed by the FERC and the FTC.⁶ Relying on its antitrust authority, over the past several years the FTC has brought eighteen enforcement actions involving natural gas mergers, more than in any other industries except supermarkets and pharmaceuticals. This article attempts to provide a framework for the Commission's analysis in these cases, which is based upon the paradigm set forth in the 1992 Horizontal Merger Guidelines and, for vertical aspects, the 1984 Merger Guidelines. The Commission's policy provides a case study in the application of the antitrust laws to an industry undergoing deregulation.

The article begins by discussing the impact of deregulation in the natural gas marketplace and suggests why that has led to industry restructuring. We then describe some of the older natural gas merger enforcement actions, which established the initial foundation of merger analysis in this industry. The article then examines cases from the last few years to highlight important recent developments in all segments of the industry, ending with a discussion of convergence mergers.

Antitrust enforcers face a difficult task in trying to set the correct enforcement policy in an industry undergoing deregulation. When supply shortages⁷ are combined with continuing deregulation in energy industries, the almost inevitable result will be a restructuring within and across those industries. Strong companies will be acquirers in an attempt to increase capacity more quickly than could be accomplished through construction. Merger efficiencies will drive many acquisitions as firms take advantage of both horizontal and vertical synergies denied to them in the past by regulatory hurdles. Interfuel competition will lead to a blurring of industry lines as natural gas companies and electricity companies become energy companies. Potential anticompetitive mergers are also inevitable in this kind of environment, where some firms will merge in an attempt to acquire and wield market power.

In looking at the cases, we discuss in detail several issues that stand out in the new merger paradigm in the energy sector. Perhaps the

⁶ Federal antitrust agencies can intervene in merger applications before the FERC, but typically refrain because their investigations rely on confidential data that the FERC would find difficult to keep confidential under its regulatory proceedings. See Federal Trade Commission, Comments of the Staff of the Bureau of Economics, Before the Federal Energy Commission, "Inquiry Concerning Commission's Merger Policy Under the Federal Power Act," Dkt. Nos. RM95-8-000 and RM 94-7-001 (May 7, 1996).

⁷ Supply issues in all energy industries are notoriously complex. Environmental legislation and regulations make it difficult to construct or expand refineries and pipelines. OPEC nations calibrate supply decisions based on political as well as economic considerations. Siting concerns make the expansion of the electricity distribution system difficult. All of these issues and more support a consensus that energy supply nationwide will be tight for the foreseeable future.

most intriguing, and potentially the most important, is the issue of convergence mergers, or vertical integration by electric utilities. We have not seen many of these mergers yet, but the few that have occurred hint at the kinds of competitive problems they will pose. Potential evasion of rate regulation is one issue that may recur frequently. An electric utility whose retail rates are regulated by a state entity may be able to artificially inflate its own costs by paying higher-than-market rates to a subsidiary natural gas company. The state regulatory entity may be illequipped to ascertain the inflated payments or to effect a remedy. A federal antitrust agency, in reviewing the merger of the utility and the natural gas company, may be the only agency able to craft an effective remedy that can prevent an anticompetitive transfer price. The FTC's remedy in the Entergy/Koch⁸ matter was designed to prevent such an evasion of rate regulation by increasing the transparency of internal transfer pricing between the utility and its natural gas subsidiary.

A second important issue frequently found in convergence mergers will be the potential to raise rivals' costs. A utility that controls a natural gas supplier to a competing utility can inflate its rival's main energy cost, thus making it less competitive. The PacifiCorp/Energy Group⁹ and Dominion Resources/CNG¹⁰ matters involved the potential to raise rivals' costs, and consent orders in both matters required divestitures that eliminated the ability to do so.

Remedies are another important issue in the natural gas merger context. While the Commission has "wide discretion in its choice of a remedy," its remedies are chosen to be equitable, and not to punish. In moving to arrest unlawful conduct and prevent future unlawful conduct, the relief may be either (or all or some combination of) structural, conduct, or monetary. The foremost goal of any successful merger remedy is to restore competition to the premerger level, and remedies in individual cases should be no broader than necessary to achieve this goal.

The preferable remedy is structural, since mergers themselves are structural events.¹² A structural remedy is often cleaner and easier to administer than other remedies, primarily because it is a one-time event.

⁸ See infra notes 92-94 and accompanying text.

⁹ See infra note 86 and accompanying text.

¹⁰ See infra note 91 and accompanying text.

¹¹ FTC v. Ruberoid Co., 343 U.S. 470, 473 (1952).

¹² In duPont, the Supreme Court concluded that divestiture is a "natural remedy" for a violation of Section 7 and always should be "in the forefront of a court's mind when a violation . . . has been found." United States v. E.I. duPont de Nemours & Co., 366 U.S. 316, 329, 331 (1960); see also Ford Motor Co. v. United States, 405 U.S. 562, 573 (1972) (divestiture is "particularly appropriate" in merger cases).

If the structural overlap of assets in a natural gas merger raises anticompetitive issues and is such a large part of the assets that the merger would not be viable without them, only a preliminary injunction halting the merger will be a sufficient remedy. If the overlap is smaller, and a divestiture of one set of the overlapping assets will restore competition while not destroying the merger's efficiency justification, an agreement between the Commission and the parties can usually be reached.¹³

As recent cases demonstrate, however, divestiture may not always be the most effective remedy in natural gas mergers. The horizontal and vertical efficiencies that drive many mergers may be lost through divestiture, and if potential anticompetitive effects can be avoided through other means, divestiture may not be called for. Licensing, although not common in natural gas cases, may be used where substantial intellectual property rights are an important part of the competitive equation. Requiring ongoing assistance to the buyer of divested assets is also a frequently used tactic to ensure that the new competitor is viable. This assistance can include contract manufacturing or supply agreements, access to critical personnel or facilities, or a continued customer relationship. The Commission's remedial actions in Entergy/Koch, ¹⁴ DTE/ MichCon, 15 and Williams/MAPCO16 show the kind of innovation in remedies that will become increasingly necessary as consolidation continues. Opening bottlenecks to competing firms and making spot fuel purchases transparent are the kinds of innovative remedies that are needed to preserve competitive opportunities as well as acquisition efficiencies.

These issues form the cutting edge of antitrust merger analysis in industries undergoing deregulation. By looking at the Commission's enforcement actions in the natural gas area, we may be able to discern future actions not only in this industry, but also in other industries that are or will be subject to the same deregulatory forces.

II. DEREGULATION OF NATURAL GAS

Traditionally sectors of energy industries, such as electric power and natural gas,¹⁷ were regulated because they were thought to be natural monopolies that would operate most efficiently with only one provider

¹³ See Federal Trade Commission, Bureau of Competition Staff Report, A Study of the Commission's Divestiture Process (1999).

¹⁴ See infra notes 92-94 and accompanying text.

¹⁵ See infra note 95 and accompanying text.

¹⁶ See infra note 74 and accompanying text.

¹⁷ The discovery and gathering of natural gas has not been heavily regulated. Most of the regulation has focused on the transportation and the local distribution of gas.

in each local area. Recent economic thinking, inspired in part by changes in technology, has reclassified certain industries (or parts of industries) long thought to be natural monopolies as candidates for deregulation, the energy industries among them. Electric power is the latest candidate to feel the sweep of this historic change. A number of states, with an assist from the FERC, the successor to the Federal Power Commission (FPC), have already opened their wholesale and retail electricity markets to new competitors, and other states are watching the outcomes and considering their own deregulation. Legislation has been introduced in Congress to mandate competition in all states. But mandating competition does not mean that effective competition will be available to all consumers. A key facet of deregulation in any industry is the application of antitrust principles while the process unfolds to ensure that the potential benefits of competition are forthcoming.

Removing entry and capital expenditure controls from an industry subject to a long period of regulation typically results in consolidation as firms search for new market arrangements.²² Once regulators lose or relax the power to control prices, or the terms of entry and consolidation, long-dampened market forces are likely to lead to a period of significant industry restructuring. The resulting consolidations may be economically efficient, but they also can result in the acquisition of market power.²³ It is particularly important to establish effective merger enforcement in this critical time period. If the withdrawal of regulatory authority is followed by the accumulation of undesirable market power, deregulation will not fulfill its promise. Thus, as Congress considers the regulatory reform of the electric power and other industries, there are important

¹⁸ See Ernest Gellhorn & Richard J. Pierce, Jr., Regulated Industries 46 (2d ed. 1987); William J. Sharkey, The Theory of Natural Monopoly (1982).

¹⁹ For a discussion of the general trend toward deregulation in a number of formerly highly regulated industries, see Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323 (1998).

²⁰ As of February 2001, 23 states had enacted electric power restructuring legislation. *See* Status of State Electric Industry Restructuring Activity, Energy Information Administration, *available at* http://www.cia.doe.gov.

²¹ See e.g., 107th Cong., S. 1047 (Shelby bill) (creates task force comprised of the FTC, DOJ, and FERC to study competition in deregulated markets); H.R. 1045 (Wilson bill) (requires rapid deployment of distributed generation resources); S. 472 (Domenici bill) (eliminates Nuclear Regulatory Commission's antitrust merger review).

Restructurings of all kinds are likely to increase, including vertical unbundling followed by geographic consolidations of individual stages of production.

²⁵ Merger enforcement is designed to prevent the acquisition of market power that may be used to increase prices, reduce output, or retard innovation. Antitrust enforcement is less effective in addressing existing market power accumulated while an industry was heavily regulated. The issue of existing market power can be at least ameliorated, however, by merger enforcement that prevents further aggregation of market power and leaves open the possibility of increased competition.

lessons to be learned from the application of the antitrust laws to the natural gas industry²⁴ and efforts to address the post-deregulation trend toward consolidation.²⁵

Natural gas was one of the first industries, along with airlines, where Congress lifted years of tight regulatory control. In 1978, Congress passed the Natural Gas Policy Act (NGPA), designed to provide incentives to increase the supply of natural gas to reduce shortages that had occurred in the 1970s. The NGPA provided for gradual deregulation of wellhead prices for certain categories of natural gas, based in significant part on the belief that direct federal price control exacerbated supply and demand problems by preventing the market from making long-term adjustments. In 1989, Congress eliminated all remaining price controls on wellhead sales of natural gas through the Natural Gas Wellhead Decontrol Act, Calling price controls an outdated, inaccurate relic from a period of stringent economic regulation.

²⁴ See Michael O. Wise, Overview: Deregulation and Antitrust in the Electric Power Industry, 64 ANTITRUST L.J. 267, 270 (1966) ("FERG is relying explicitly on its natural gas experience in setting its deregulation agenda for electric power.").

²⁵ See Richard J. Pierce, Jr., The State of the Transition to Competitive Markets in Natural Gas and Electricity, 15 ENERGY L.J. 323, 328-29 (1994):

There are many parallels between the nearly complete transition in the gas industry and the transition that is in its early stages in the electricity industry. In both cases, economics of scale and natural barriers to entry in the production process are sufficiently low that the sales market can become structurally competitive in most areas. Furthermore, the major impediment to creation of a competitive sales market is the existence of large sunk cost.

Of course, the parallels are not perfect. There are certain technological differences between natural gas and electricity that make comparisons difficult. For instance, electricity cannot be stored in large quantities so that, unlike gas, current production does not face competition from past production. Also, electric power transmission faces a "loop flow" problem, in that the electrons follow the path of least resistance, rather than where the producer wants them to go. Natural gas transmission does not have that problem.

²⁶ In 1938, the regulation of natural gas, until then a state matter, was assigned by the Natural Gas Act (NGA), 15 U.S.C. §§ 717 et seq., to the FPC. The NGA gave the Commission the authority to establish rates for the interstate transmission of gas and to regulate asset acquisitions and changes in facilities and service. Interestingly, the regulation of natural gas was the direct result of an FTC study of the industry, which found that interstate pipelines were exercising monopoly power and concluded that the federal government should regulate them. See Report of the FTC to the U.S. Senate, S. Doc. No. 92, 70th Cong., 1st Sess. (1936). For a discussion of the report, the changing nature of the industry, and the economic thinking on market power that presaged deregulation, see Richard J. Pierce, Reconsidering the Roles of Regulation and Competition in the Natural Gas Industry, 97 HARV. L. REV. 345 (1983). See also Paul W. MacAvoy, The Natural Gas Market: Sixty Years of Regulation and Deregulation of the regulation of the natural gas industry has "'worked,' in that there were no gains to consumers, nor were there gains to producers or pipelines").

^{27 15} U.S.C. §§ 3301-32.

²⁸ Transcontinental Gas Pipe Line Corp. v. State Oil & Gas Bd., 474 U.S. 409, 424 (1986).

^{29 15} U.S.C. § 3301.

³⁰ H. REP. No. 101-29 at 2, reprinted in 1989 U.S.C.C.A.N. 51, 52.

The policies embodied in the statutes have been carried forward by FERC in its rulemaking. After a number of orders that eased certain regulatory provisions in the industry, ³¹ FERC issued Order 636 in 1992. ³² This Order required natural gas pipelines to unbundle their services into separate components and to become open access carriers. Before Order 636, a pipeline acted as a merchant of gas, buying gas at the wellhead, gathering and storing it, transporting it through the pipeline, and charging customers a single price for the integrated service. Order 636 requires pipelines to separate out the charges for each service and gives customers the option to deal with different suppliers for each service. In effect, the Order converted the pipelines from sellers of gas to sellers of transportation services. The Order also enabled shippers to sell unneeded pipeline capacity, which could become a competitive alternative for transportation services for some customers. The Order also eased the regulatory requirements for building new pipelines.

As a consequence of the deregulation of the natural gas industry, along with the beginnings of the deregulation in electricity, a restructuring process has taken place.³³ With entry restrictions eased and unbundling mandated, companies that formerly considered themselves gas or electric companies now market themselves as energy companies. They offer information and planning assistance designed to address energy problems faced primarily by larger customers but, in some instances, by consumers, as well. In many cases, utilities and other companies that do not already participate in both the electric and gas fields have sought to do so in order to improve their ability to respond to this new demand for "energy solutions" by enhancing their ability to offer a complete package to their customers. Recent years have seen a number of mergers between electric marketers or utilities and gas pipelines or distribution companies.³⁴

This restructuring has been accompanied by a surge in merger activity. Most mergers are procompetitive or competitively neutral. Much merger activity after deregulation begins as an inevitable consequence of

³¹ For a list of FERC orders issued between 1979 and 1985 that attempted to open up competition in the natural gas industry, see ABA Section of Antitrust Law, Antitrust Law Developments 1194 n.444 (4th ed. 1997).

³² Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation; and Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol, 57 Fed. Reg. 15,267 (Apr. 16, 1992); order on rehearing, Order No. 636-B, 57 Fed. Reg. 57,911 (Dec. 8, 1992).

³³ See, e.g., George R. Hall & Regina R. Johnson, Lessons from Georgia: The Benefits of Retail Gas Choice, 138 Pub. Util. Fort., May 15, 2000, at 32.

³⁴ Ken Silverstein, *The Big Boys in Gas*, 3 UTIL. Bus, 34 (Jan. 2000) (as a result of customer demand for a variety of energy services from one utility, "you are seeing a consolidation of companies involved in different sectors of the energy industry").

dammed-up forces released to seek the most efficient production and distribution outcomes. In some cases, firms have created new alliances, forming entities with the potential for greater economies of scale and scope. The FTC and the Department of Justice have responded with a merger policy designed to allow competitive forces to restructure natural gas markets in a manner that maximizes competition and consumer welfare while protecting against anticompetitive mergers. An examination of the enforcement actions that have flowed from that policy can provide useful lessons for the electric power industry and other industries that face similar changes in entry and capital flow regulations.

III. EARLY ENFORCEMENT ACTIONS

Although deregulation has heightened the pace of natural gas restructuring, mergers in the industry are not new. Two early cases in the natural gas industry highlight the jurisdiction of the antitrust agencies over mergers in this industry, as well as several important aspects of antitrust merger law that presage the analytic model currently used by the federal enforcement agencies.

A. CALIFORNIA V. FEDERAL POWER COMMISSION

Before the Supreme Court addressed the issue, it was not entirely clear whether the antitrust agencies had jurisdiction over natural gas mergers. FERC retains the authority to approve or disapprove of mergers in the natural gas industry. The agency controls all forms of entry into the interstate transportation of natural gas by authority of a requirement of section 7(c) of the NGA,35 which prohibits the acquisition of such assets without first obtaining a "certificate of public convenience and necessity" from that agency.36 FERC is thus required to rule on any merger in which interstate pipeline assets change hands. FERC does not have antitrust jurisdiction over mergers, but the "public interest" standard it must satisfy before granting a certificate includes consideration of competitive conditions in the relevant market(s).

The jurisdictional issue came before the Court in California v. Federal Power Commission, ³⁷ where the Supreme Court held that the federal courts retain antitrust jurisdiction over natural gas mergers. In this case, the FPC granted a certificate for the asset acquisition of one natural gas company by another, despite the fact that a Clayton Act suit filed by the

^{35 15} U.S.C. § 717(c).

³⁶ FERC has no regulatory authority over the acquisition of voting securities.

^{37 369} U.S. 482 (1962).

U.S. Department of Justice was pending in a federal district court. The Supreme Court held that the FPC's hearing on the certificate should be stayed pending the resolution of the antitrust matter in the courts, noting that "where the primary jurisdiction is in the agency, courts withhold action until the agency has acted.... The converse should also be true, lest the antitrust policy whose enforcement Congress in this situation has entrusted to the courts is in practical effect taken over by the Federal Power Commission." 38

Thus, FERC approval of a merger in the natural gas industry does not prevent the antitrust agencies from bringing a merger case. Separate antitrust review of natural gas mergers assures that competitive issues will be addressed in an industry that is still partially regulated. While regulation may alleviate certain economic problems, it may also create certain competitive concerns.³⁹ Reliance on regulation or a "public interest" standard of merger review can lead to inefficiencies and distortions of economic incentives.⁴⁰

B. UNITED STATES V. EL PASO NATURAL GAS CO.

Once the jurisdiction issue was settled, the Supreme Court then set out the analytical merger model that continues to be followed in the natural gas industry. In *United States v. El Paso Natural Gas Co.*, ⁴¹ the Supreme Court reversed a district court decision allowing the acquisition of Pacific Northwest Pipeline by El Paso Natural Gas. El Paso was the sole out-of-state supplier of natural gas to the State of California, and it supplied more than 50 percent of all gas consumed in the state. At the time of the acquisition, Pacific Northwest, one of only two major interstate pipelines serving the trans-Rocky Mountain states, did not sell gas in California. However, Pacific Northwest had made several prior attempts to enter the fast-growing California market, and remained a potential entrant. The Court found that "Pacific Northwest, though it

⁵⁸ Id. at 490 (citation omitted). This ruling also applies to FERC, which assumed the duties of the FPC.

³⁹ See Terry Calvani, FTC Commissioner, The Federal Trade Commission's Agenda in the Energy Industry, Remarks Before the Seminar on Current Competitive Issues in Natural Gas Marketing (June 2, 1987).

⁴⁰ See Harvey Averch & Leland L. Johnson, Behavior of the Firm Under Regulatory Constraint, 62 Am. Econ. Rev. 1052 (1962); William J. Baumol & Alvin K. Klevorick, Input Choices and Rate of Return Regulation: An Overview of the Discussion, 1 Bell J. Econ. Mgmt. Sci. 162 (1970); Robert M. Spann, Rate of Return Regulation and Efficiency in Production: An Empirical Test of the Averch-Johnson Thesis, 5 Bell J. Econ. Mgmt. Sci. 38 (1974); John W. Kendrick, Efficiency Incentives and Cost Factors in Public Utility Automatic Revenue Adjustment Clauses, 6 Bell J. Econ. 299 (1975); David P. Baron & Robert A. Taggart, Jr., A Model of Regulation Under Uncertainty and a Test of Regulatory Bias, Bell J. Econ. 151 (1977).

^{41 376} U.S. 651 (1964).

had no pipeline into California, is shown by this record to have been a substantial factor in the California market."⁴² The acquired firm also "had a powerful influence on El Paso's business attitudes within the State."⁴³ The Court concluded that the acquisition would harm competition and ordered the district court to institute immediate divestiture.

Several aspects of this decision are instructive for the application of antitrust law to later natural gas merger cases. Defining the relevant markets is a key issue in any merger case. Though the Court in El Paso did not explicitly set forth its reasoning, it found that the relevant product market was natural gas. ⁴⁴ Later cases have followed this lead and found natural gas markets in regions served, or potentially served, by the acquiring and acquired companies. Since El Paso, courts have consistently held that, although other products, such as coal or heating oil, can also be burned to provide heat, these products are not sufficiently substitutable to belong in the same relevant product market as natural gas. Availability of supply, difficulty of use, incompatibility with handling and burning machinery, and other factors prevent full substitutability of fuels and would give a natural gas monopolist the ability profitably to raise prices without fear of losing sufficient buyers to make the price increase unprofitable.

El Paso also set the standard of narrow geographic markets (in this case the State of California), which are limited in natural gas cases by the ability to supply certain customers. That ability depends on a number of factors, including obtaining certificates of public convenience and necessity, having or building a pipeline into the region, and obtaining a sufficient supply of gas to enable the company to write long-term supply contracts. 46

Entry barriers are a crucial variable in any natural gas merger case. The *El Paso* decision turned on the potential entry of a new competitor into the relevant market. Entry was difficult because of the need to gain a certificate to serve the market, as well as the necessity of getting customers in a market characterized by long-term supply contracts. The cost of building a new pipeline, along with the lengthy construction period, also contribute to high entry barriers in natural gas cases.

⁴² Id. at 658.

⁴³ Id. at 659.

[&]quot;Id. at 657 ("There can be no doubt that the production, transportation, and sale of natural gas is a 'line of commerce' within the meaning of § 7.").

⁴⁵ Id. ("There can also be no doubt that California is a 'section of the country' as that phrase is used in § 7.").

⁴⁶ Buyers of natural gas demand long-term contracts due to heavy sunk costs of investment and the fact that the supply of electricity must be uninterruptible.

The issue of potential competition is always an important factor in natural gas cases. In El Paso, the acquired company did not serve the relevant market. Yet the Court found that it had attempted to enter earlier, that it was a likely future entrant, and that its presence on the edge of the market had a current economic effect. In its earlier entry attempt, Pacific Northwest had signed a tentative contract to supply natural gas to Southern California Edison, the largest industrial gas user in southern California. In an attempt to keep this large customer, El Paso renegotiated its contract to give Edison a non-interruptible supply and reduced its price from 40 cents to 30 cents per Mcf (million cubic feet). In fact, the impact of Pacific Northwest on potential competition in California was so large that the Court called "irrelevant" the "findings that Pacific Northwest, as an independent entity, could not have obtained a contract from the California distributors, could not have received the gas supplies or financing for a pipeline project to California, or could not have put together a project acceptable to the regulatory agencies."47 While it is not clear that such facts are ever irrelevant, the Court in El Paso seemed to be saying that the case could be decided on potential competition grounds alone.

Potential competition has particular relevance in cases like those involving natural gas, where current competitors are few in number due to past regulatory constraints and complex supply conditions. Current competitors are acutely aware of all potential competitors, particularly in industries undergoing deregulation. In the natural gas industry, the role of potential competitors has become more significant as regulatory constraints have been loosened and consumers, such as large industrial users, have become more aggressive in searching for alternative supply sources. As described below, some recent enforcement actions have resulted from attempts by incumbents to acquire potential entrants in order to prevent new competition.

C. OTHER EARLY ENFORCEMENT ACTIONS

The Supreme Court holdings in the *El Paso* and *California v. Federal Power Commission* ⁴⁸ cases cleared the way for merger review in the natural gas industry by the federal antitrust agencies. ⁴⁹ The "first generation" of antitrust natural gas merger cases was brought in the 1980s, and firmly

⁴⁷ Id. at 657-58.

⁴⁸ See supra note 37 and accompanying text.

⁴⁹ See 16 U.S.C. § 824k(e)(2) (the Energy Policy Act "shall not be construed to modify, impair, or supersede the antitrust laws").

established the analytical framework that is still in use today and is encapsulated in the Horizontal Merger Guidelines.⁵⁰

1. InterNorth

The potential horizontal anticompetitive effects of substantial overlapping assets were highlighted in the proposed acquisition of Houston Natural Gas Corporation (HNG) by InterNorth, a case brought by the FTC in 1985.⁵¹ HNG operated a number of pipelines transporting natural gas out of the producing fields of the Permian Basin in west Texas and the Anadarko Basin in the Texas and Oklahoma Panhandle. The gas was shipped to the consuming area of the Texas Gulf Coast. InterNorth also operated pipelines out of the same basins and, in addition, was a competitor of HNG in the natural gas consuming areas of the Texas Gulf Coast through Nor-Val, its joint venture with Valero Company. The Commission alleged that the acquisition would increase the likelihood of collusion in each of these geographic markets. The case was settled by requiring the divestiture of sufficient overlapping assets to restore premerger competition.

2. Occidental/MidCon

Vertical mergers involve firms that are not direct competitors but are aligned in a distribution relationship. In 1986, the Commission considered a merger in which a gas supplier acquired a distribution system.⁵² Occidental Petroleum, a producer of natural gas, acquired MidCon, which owned an extensive natural gas transmission system that transported gas from the natural gas producing areas of the country to various consuming areas. One pipeline subsidiary of MidCon, Mississippi River Transmission Corporation (MRT), was the sole supplier to the local gas distribution company for the city of St. Louis. Neither state nor federal law required MRT to transport gas for others, and there were no alternative transportation facilities for natural gas into the St. Louis area.

The Commission's complaint alleged that, as a consequence of these factors, the acquisition could lead to the potential for the evasion of rate regulation.⁵³ All of the factors necessary for this anticompetitive potential to be realized were present. First, Occidental would be able to

⁵⁰ U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines (1992), reprinted in 4 Trade Reg. Rep. (CCH) ¶ 13,104.

⁵¹ InterNorth, Inc., FTC Dkt. No. C-3168 (Oct. 29, 1985) (consent order).

⁵² Occidental Petroleum Corp., 109 F.T.C. 167, FTC Dkt. No. C-3191 (June 25, 1986) (consent order).

⁵³ The basis for the evasion of rate regulation theory is described *infra* at notes 81–83 and accompanying text.

internally transfer large quantities of deregulated natural gas to MidCon pipelines. Second, although MidCon's interstate pipeline subsidiaries were subject to FERC rate-of-return regulation, Occidental was likely to be able to inflate the price of the gas it sold to its own pipelines in a manner that escaped regulatory strictures. Third, MidCon would be able to pass along inflated prices to customers in any market where MidCon pipelines had market power. Fourth, MidCon was likely to have market power in the St. Louis area because its pipelines are the sole suppliers of the area. The order required divestiture within twelve months. The pipeline divestiture to Arkla, Inc., approved by the Commission on June 27, 1986, cured the potential for evasion of rate regulation.

3. MidCon/United Energy

In a separate case involving MidCon, the Commission filed a complaint against MidCon's acquisition of United Energy Resources.⁵⁴ United owned an extensive gas transmission system serving the populous and highly industrialized corridor between Baton Rouge and New Orleans. MidCon owned 50 percent of a series of partnerships, including Acadian Gas Pipeline System, that also transported natural gas to users in the Baton Rouge-New Orleans corridor. One part of the complaint alleged anticompetitive effects in the transportation and sale of natural gas in the Baton Rouge-New Orleans corridor, including elimination of actual competition between MidCon and United in that market, increased concentration in the market, and an increased likelihood of collusion. These effects were alleviated by requiring MidCon to sell its ownership stake in the Acadian system to a Commission-approved buyer.

The more interesting MidCon issues arose from Count One of the complaint, one of the few Commission-litigated natural gas cases.⁵⁵ The assets at issue included United's ownership interest in three of four offshore pipelines that transport gas from deepwater wells in certain areas of the Outer Continental Shelf to shore. MidCon acquired United's one-fifth percent interest in the HIOS Pipeline, its one-third interest in the UTOS Pipeline, and its one-half percent interest in the Sea Robin Pipeline. When added to MidCon's 50 percent interest in the Stingray pipeline, the only other pipeline serving the areas in question, this acquisition would, according to complaint counsel, give MidCon the ability to unilaterally exercise market power by raising transportation rates to the offshore producers.

⁵⁴ MidCon Corp., FTC Dkt. No. 9198 (Mar. 12, 1986) (consent order).

⁵⁵ MidCon Corp., FTC Dkt. No. 9198, 112 F.T.C. 93 (July 18, 1989) (complaint dismissed). Count Two of the complaint settled by consent order, while Count One proceeded to administrative litigation.

Respondents agreed with complaint counsel that the transportation of natural gas from producing fields to shore was a relevant product market. The critical issue turned out to be geographic market definition. Complaint counsel alleged that the relevant geographic market consisted of four areas of the Gulf of Mexico (described in Paragraph 20 of the complaint), defined by leasing blocks. In these areas, the four pipelines competed for transporting gas to shore. However, the Commission found that "no evidence about price sensitivity between the Paragraph 20 region and other areas was offered," ⁵⁶ and that "it is not entirely clear that pipelines outside the Paragraph 20 area are too far away to provide transportation alternatives for producing blocks in the area." ⁵⁷ Thus, complaint counsel was unable to show any anticompetitive effects in this geographic market, and the complaint was dismissed.

4. Arkla/TransArk

In 1989, Arkla entered into a consent order with the Commission resolving concerns over the acquisition of the TransArk Transmission Company, a joint venture of Lear Petroleum and Esco Exploration Company. Both firms had pipelines running from the Arkansas/Oklahoma Basin to the consuming area of the Conway-Morrilton-Russellville corridor in Arkansas. The Commission alleged that competition would be lessened in both markets by the horizontal overlaps.⁵⁸ Under the consent order settling the case, Arkla had to divest either the TransArk pipeline or an undivided interest in the Arkla system to a Commission-approved buyer.

However, six years later, the Commission modified the divestiture requirement after Arkla argued that increased entry and capacity expansion, along with FERC Order 636, had changed conditions such that the acquisition would not have an anticompetitive effect. In particular, Arkla argued that Order 636 had created a secondary market for purchases of pipeline capacity, and purchasers of "firm capacity" were effective competitors of the pipeline since they could sell that capacity to others. The Commission agreed and eliminated the divestiture requirement.⁵⁹

These early cases laid an analytical foundation for the analysis of natural gas mergers in the 1990s. They established the outlines of the relevant markets and showed the potential anticompetitive effects of both horizontal and vertical acquisitions.

⁵⁶ Id. at 166.

⁵⁷ Id. at 167.

⁵⁸ Arkla, Inc., FTC Dkt. No. C-3265 (June 8, 1989) (consent order).

⁵⁹ Arkla, Inc., FTC Dkt. No. C-3265 (Apr. 5, 1995) (consent order modification).

IV. RECENT ENFORCEMENT ACTIONS AND REMEDIES

A. HORIZONTAL MERGERS

The Commission has taken enforcement action in a number of horizontal natural gas mergers in recent years. Anticompetitive effects are most likely to arise in the pipeline sector, where competitors tend to be few and barriers to entry are substantial. However, Commission cases recognize that market power can be wielded at any point in the distribution system. We review these cases grouped by the sector where competitive harm was identified: reserves, gathering, processing, pipelines, local distribution, and ultimately distribution to the final consumer.

Horizontal natural gas cases are unique among merger cases in that, at least since *El Paso*, the relevant product and geographic markets are rarely disputed. The cases tend to turn on the probability of anticompetitive effects, either through unilateral or concerted action. The HHIs in these cases tend to be quite high, often to the point where post-merger unilateral effects can be presumed. Barriers to entry are also high, due to the need to obtain certificates, the fact that most customers already have long-term contracts, and the long lead time necessary to construct new pipelines. Most remedies involve divestiture, although increasingly, the Commission has turned to conduct relief in order to solve contractual problems that otherwise might prevent the full restoration of competition.

1. Reserves

As a general matter, ownership of natural gas reserves (as well as other carbon reserves, such as oil, shale, and tar sands) is relatively unconcentrated. Gas can be transported economically over long distances, and there are a significant number of producers. Partly for this reason, in 1996 the Commission changed the Hart-Scott-Rodino premerger filing rules to create an exception to the notification requirements for acquisitions of natural gas and other reserves that fall below a given size.⁶⁰

⁶⁰ 16 C.F.R. § 802.3. Under the new regulation, no filing is required for acquisitions of carbon-based mineral reserves, including natural gas reserves, that do not exceed \$500 million. The Commission "concluded that acquisitions of oil and gas reserves valued at \$500 million or less are unlikely to violate the antitrust laws." 61 Fed. Reg. 13,678 (1996). The exemption includes associated exploration and production assets, such as equipment, machinery, fixtures, and other assets that are integral and exclusive to current or future exploration or production activities. Importantly, however, the exemption includes gathering facilities only to the extent they are dedicated to the particular reserves being purchased. Non-dedicated gathering facilities are not included in the exemption because "acquisitions of these assets in certain local markets have, from time to time, raised competitive con-

a. BP Amoco/ARCO

One recent case where the Commission challenged an acquisition related to reserves was the merger of BP Amoco and ARCO.⁶¹ Although the primary focus of the merger was the production of crude oil on the Alaska North Slope, the FTC raised significant concerns over the reserves of natural gas. The Alaska North Slope gas fields are some of the largest in the world, with potentially over 35 trillion cubic feet of reserves. Over \$1 billion has been spent to commercialize these reserves. BP, ARCO, and Exxon/Mobil were the only three firms attempting to commercialize these fields, and BP and ARCO were the two largest firms. The Commission required the divestiture of all of ARCO's natural gas business in Alaska to Phillips Petroleum to assure that there would continue to be three firms competing to commercialize these reserves.

2. Gathering

Gas-gathering services are sold to natural gas producers, and are the first step in the process of moving the product out of the field to the ultimate consumer. Gathering consists of a system of small-diameter pipes that collect and combine gas from individual wells for transmission to a facility for further treating, processing, or fractionation, or to a larger transmission pipeline. This market segment may include facilities for removal of impurities (such as excess water and sulfur) and for compression. Gathering services are unique—there is no substitute for a pipeline system for gathering. The geographic market will always be limited by the need for gathering systems that are physically proximate to the wellhead. Even a large increase in gathering fees will not greatly expand the geographic area in which a producer can economically obtain gathering services.

The main antitrust concern in mergers among gatherers is the potential exercise of monopsony power. If a merger would allow one or a small number of gathering firms to exercise market power, whole production fields could face higher prices in moving the gas off the drilling sites. The level of competition in gathering affects the prices that producers receive for the gas, and a lack of gathering competition also can have a negative effect on exploratory and developmental drilling for new natural gas. Protecting competition in gathering is important because without it the ultimate price to the consumer will not be the competitive price. This type of case has become even more important

cerns." Id. at 13,678–79. Of course, the fact that these acquisitions are nonreportable does not mean that they are immune from antitrust challenge.

⁶¹ BP Amoco plc, FTC Dkt. No. C-3938 (Apr. 13, 2000) (consent order).

with the emergence of competition in wellhead pricing because the benefits of that competition can be defeated if producers have no competitive method of transporting their gas from the wellhead.

The Commission has had a number of cases over the last several years involving acquisitions of gas-gathering assets. Recent cases have focused on consolidations where gathering alternatives were few and entry was unlikely. Typically, the market in these cases is defined by the need for proximity of gathering systems to the wellhead. The greater the distance from the wellhead, the greater the cost of gathering the gas for transporting. Concentration varies from market to market, but sometimes is very high, with only a few choices for producers and limited potential for entry. While new entry could be rapid, the likelihood of such entry is affected by considerations of sunk costs and expected profitability, given the flow volumes of producing wells in the area. In some cases, where the potential size of the market is substantial, there may be a greater potential for entry. A market-by-market analysis is required.

The least troublesome markets from a competitive standpoint are likely to be those in which producers have some sort of protection from price increases, typically because there are several competing companies offering gathering services in the area. A market may also be characterized by easy expansion if the size of the reserves in the area is large, meaning that competing gatherers could profitably expand if a dominant incumbent attempted to increase prices.

a. Shell Oil Co./The Coastal Corp.

In 1998, the Commission challenged the acquisition by a subsidiary of Shell of gas-gathering assets owned by subsidiaries of Coastal Corporation, including gathering assets in western Oklahoma, the Oklahoma and Texas Panhandles, and southwestern Kansas, as well as a natural gas processing plant in Oklahoma. Through its subsidiary, Shell was the largest gatherer and processor of gas in the six areas of concern, and Coastal was also a substantial competitor. In those areas, gas producers could only turn to Shell and Coastal or, at most, one other gas gatherer, for gas-gathering services. It was unlikely that new entry could replace the competition lost through the acquisition, and the result likely would be increased prices paid by producers for gathering services. The case was settled by requiring Shell to divest 171 miles of pipeline and related assets in the six areas. This divestiture restored all premerger gathering competition.

⁶² Shell Oil Co., FTC Dkt. No. C-3843 (Oct. 1, 1998) (consent order). The assets were divested to NorAm Field Services Corp. in February 1999.

b. Phillips Petroleum/ANR and Phillips Petroleum/Enron

The Commission also challenged two acquisitions of gathering assets by Phillips Petroleum in 1995 and 1997. The most recent involved gathering systems owned by ANR Pipeline Company and located in Oklahoma. ⁶³ Phillips, through a subsidiary, planned to acquire ANR's gathering assets in the Anadarko Basin in northwest Oklahoma. The Commission found that competition would be harmed in five Oklahoma counties where Phillips and ANR were the only, or two of very few, companies that provided gas-gathering services in each of the areas. The Commission required Phillips to divest approximately 160 miles of natural gas pipeline in a transaction that would permit the buyer to operate the assets in its current business.

The earlier Phillips transaction reviewed by the Commission involved gathering systems owned by Enron Corporation in three counties in the Texas Panhandle and in the immediately adjoining area in Beaver County, Oklahoma. 64 As in the later case, Phillips and Enron were the only, or two of a very few, choices available to certain gas and oil producers in the Panhandle area. To settle the case, the Commission prohibited Phillips from acquiring 830 miles of pipe and related assets.

c. Duke Energy/Phillips Petroleum

In 2000, Duke Energy and Phillips Petroleum proposed to merge their respective natural gas gathering and processing businesses into a new company called Duke Energy Field Services. In addition, Duke proposed to acquire the gas gathering and processing assets in central Oklahoma owned by Conoco and Mitchell Energy & Development. The total value of the transactions was more than \$6 billion.

The Commission determined that the merger would have serious anticompetitive consequences in several counties in Kansas, Oklahoma, and Texas. ⁶⁵ In seven relevant geographic markets, gas producers were limited in their choice of gas-gathering services and were only able to turn to Phillips or Duke or relatively few other gatherers. The postmerger HHIs were typically over 5,000, although in one market the HHI was approximately 2,200. It was unlikely that new entry would remedy the anticompetitive effects of the merger.

⁶⁵ Phillips Petroleum Co. (ANR), FTC Dkt, No. C-3728 (Dec. 15, 1997) (consent order). The assets were divested to KN Gas Gathering, Inc., a subsidiary of KN Energy, Inc., in September 1997.

⁶⁴ Phillips Petroleum Co. (Enron), FTC Dkt. No. C-3634, 120 F.T.C. 1129 (Dec. 28, 1995) (consent order).

⁶⁵ Duke Energy Corp., FTC Dkt. No. C-3932 (May 5, 2000) (consent order). The assets were divested to Oneok Gas Processing, LLC in August 2000.

Under the terms of the order settling the case, Duke divested 2,787 miles of its pipeline systems in these markets. Most of the assets, 2,250 miles of pipeline, were part of a pipeline owned by a joint venture in which Duke was a part owner. Duke divested its interest to its joint venture partners. The remaining 530 miles of pipeline were required to be divested to a Commission-approved buyer.

3. Processing

In gas processing, fractionation plants separate "raw mix" natural gas into higher-value "purity products," such as ethene, propane, normal-butane, iso-butane, and natural gas, which are used in the manufacture of petrochemicals and gasoline and as fuel sold to customers. Raw mix is what remains after methane is separated from crude natural gas for use as a separate product. After the purity products are removed from the raw mix through fractionation, the remaining natural gas is transported through pipelines to distribution companies. In general, natural gas producers, which sell purity products as part of their overall natural gas business, are either vertically integrated into fractionation or purchase fractionation on an as-needed basis from independent firms.

Fractionation is an essential step in the production process, and one for which there is no substitute. The geographic market for fractionation depends on such factors as the relative proximity of fractionation plants to customer groups, availability and suitability of storage capacity and pipeline infrastructure (both from wellhead to fractionation plant and from fractionation plant to customers), and relative proximity of fractionation plants to customers of purity products. Markets tend to be highly concentrated due to significant economies of scale. Entry is difficult because of large sunk costs, significant scale economies, environmental difficulties, and the need for a custom-designed and custom-built plant.

a. NGC/Chevron

The Commission has been attentive to the preservation of competition in the processing of natural gas products, as shown by the review of a transaction between NGC Corporation and Chevron. 66 In 1996, NGC sought to purchase assets from a subsidiary of Chevron, including a fractionation plant in Mont Belvieu, Texas. Mont Belvieu was an important hub for the fractionation of raw-mix natural gas liquids and the subsequent sale of fractionated specification products. Producers of raw-mix natural gas liquids throughout much of Texas, New Mexico, western Wyoming, and western Colorado had no good alternative to Mont

⁶⁶ NGC Corp., FTC Dkt. No. C-3697 (Dec. 31, 1996) (consent order). NGC divested its Mont Belvieu assets to Koch Hydrocarbon Co. on December 31, 1996.

Belvieu. The Mont Belvieu market was highly concentrated, and new entry was unlikely.

NGC and Chevron were direct competitors in the fractionation of natural gas liquids in Mont Belvieu. The transaction would have eliminated this direct competition and increased the likelihood both that NGC would unilaterally exercise its market power and that NGC would collude with other market participants. Prior to the transaction, NGC had ownership interests in two facilities: Mont Belvieu I and Gulf Coast Fractionators. By acquiring Chevron's Warren facility, NGC would have reduced from three to two the number of independent processors in Mont Belvieu. The case was settled by an order requiring NGC to divest its interest in Mont Belvieu I within six months. With respect to the Gulf Coast facility, NGC was required to give up its management role and to refrain from participating in future decisions on pricing or capital expansion. The consent agreement likely increased the amount of competition in the market because it increased from three to four the number of plant operators in the market.

4. Transportation (Pipelines)

Competition in the transportation of natural gas products remains an area of significant concern. There are no economical substitutes for pipeline transmission of natural gas. In certain geographic areas, concentration may be relatively high. Economies of scale may dictate that a market can most efficiently be served by a relatively few large capacity pipelines. Entry may be difficult due to large sunk investments, the need for regulatory approvals, scale economies, and a long construction period.

Pipeline cases account for the bulk of the Commission's work in the natural gas area. There appear to be substantial economies of scale in operating large pipeline networks, and deregulation in the natural gas industry, particularly under Order 636, has enabled pipeline companies to pursue those efficiencies. With entry difficult and time-consuming, the quickest and cheapest way of capturing those efficiencies is often through merger. The challenge to the Commission is to differentiate efficiency-enhancing mergers from those that pose significant anticompetitive risk.

Often a merger will combine potential efficiencies and anticompetitive effects. When this happens, crafting a remedy that will preserve the former while ameliorating the latter can be difficult. Thus, the Commission has begun to use more conduct remedies in pipeline cases in an effort to allow the merging firms to become more efficient while still

protecting consumers from higher prices. The remedies in a number of recent pipeline cases, including Williams/MAPCO,⁶⁷ El Paso/Coastal,⁶⁸ and El Paso/PG&E,⁶⁹ contained significant conduct constraints on the postmerger firms, while still allowing efficiencies to be realized. In the past, the Commission might have required complete divestiture of all overlapping assets in each of these cases, thus severely diluting potential merger efficiencies. Of course, the Commission still insists on divestiture where a conduct remedy is likely to be ineffectual.

a. Questar Corp./Kern River Gas Transmission Co.

As suggested in our discussion of the *El Paso* case, ⁷⁰ competitive concerns often arise where a firm may acquire a potential rival. These cases fall under the potential competition doctrine, which prevents acquisitions of rivals whose potential entry currently constrains the market ("perceived potential competition") or that may be planning to enter the market ("actual potential competition"). ⁷¹ One such case was Questar Corporation's attempt to purchase a 50 percent interest in the Kern River Gas Transmission Company from Tenneco⁷² where Kern River was actively planning to enter the market as a direct competitor to Questar.

This case involved the natural gas market in Salt Lake City, Utah, and environs. Questar is an integrated energy company, with substantial activity in three lines of business: exploration and production of both oil and natural gas; interstate transmission of natural gas by pipeline; and local gas distribution. Questar's pipeline is called a "hub and spoke" system, rather than a "long-line" pipeline, because it has multiple interconnects to several other interstate pipeline systems and has access to major producing areas. Questar was the only pipeline serving large industrial customers in the Salt Lake City area, which generally bypassed the local utility and purchased gas directly from other sources. Those customers used Questar's pipeline services to transport the gas either

⁶⁷ See infra note 74 and accompanying text.

⁶⁸ See infra note 79 and accompanying text.

⁶⁹ See infra note 77 and accompanying text.

⁷⁰ See supra notes 41-47 and accompanying text.

⁷¹ The Supreme Court has held that the acquisition of a firm that is not currently in the market may violate the antitrust laws if that firm is a potential competitor because it will enter soon (actual potential competitor) or because firms in the market perceive it to be a competitor and adjust their behavior accordingly in an attempt to keep it out or make entry more difficult (perceived potential competitor). See United States v. Marine Bancorporation, 418 U.S. 602 (1974); United States v. Falstaff Brewing, 410 U.S. 526 (1973); United States v. Phillips Petroleum Corp., 367 F. Supp. 1226 (C.D. Cal. 1973), aff'd mem., 418 U.S. 906 (1974).

⁷² FTC v. Questar Corp., No. 2:95CV 1137S (D. Utah 1995) (transaction abandoned).

directly to their facilities or to the local utility, from which they purchased local transportation service.

Questar sought to acquire a 50 percent stake in Kern River Gas Transmission Company. Kern River was jointly owned by Tenneco and the Williams Companies, and it operated another interstate pipeline that began in the Rocky Mountain supply area near Opal, Wyoming, and extended in a southwesterly direction through Wyoming, Utah, and Nevada, ending in California. The pipeline ran through the Salt Lake area, and Kern River was planning to build a lateral pipeline to serve industrial customers in competition with Questar.

The FTC concluded that Kern River was already having an effect on the market, before any lateral hookups were even built. It was actively soliciting customers, and Questar, in response, reduced prices to certain customers. Thus, the Commission found that potential entry was having precisely the kind of effect one might expect: Questar's monopoly position was clearly threatened, if not already eroded.

The potential competition theory involved primarily the perceived potential entry theory, but there was also an element of actual potential entry. Kern River was an actual potential entrant in that it was actually planning to enter, and entry would have had a significant procompetitive effect on the market. There was also evidence that Kern River was perceived as a potential entrant at an earlier stage. Theory predicts that a threat of entry can induce an incumbent firm to engage in limit pricing—i.e., moderate prices—to discourage entry. There was evidence of that in this case.

Having strong evidence of both kinds of effects made the case appear particularly compelling. Unlike the other cases discussed in this article, these competitive concerns could not be resolved through a settlement. Questar offered a settlement, which in effect would have been a joint venture in which it would acquire a 50 percent interest in the Kern River pipeline but Williams would have a large degree of independence in its decisions on where to enter. However, this settlement would have been too regulatory, and did not address the adverse effect of the acquisition on Questar's incentives to compete aggressively against the new entrant, including Questar's incentives to discount on its own pipeline. The Commission filed suit seeking a preliminary injunction, and the parties promptly abandoned the transaction. The 50 percent interest in Kern

⁷³ See Richard G. Parker & David A. Balto, The Evolving Approach to Merger Remedies, Antitrust Rep., May 2000, at 16.

River that Questar tried to buy was later acquired by the Williams Companies and Kern River's competitive independence was maintained.

b. Williams Companies/MAPCO

In 1998, the Commission challenged the acquisition of MAPCO Inc. by the Williams Companies. Williams operated natural gas processing plants in Wyoming and pipelines that supply propane to the upper Midwest. One of MAPCO's principal businesses was the production, shipment, and sale of natural gas liquids, such as propane, butane, and natural gas. The case is notable for the conduct remedies that eliminated potential anticompetitive problems without requiring any divestiture.

Propane is shipped by pipeline from production centers in Kansas and Canada to terminals in the upper Midwest. Retail propane dealers pick up propane at these terminals for delivery to end users. Important uses for propane in the local markets at issue in this case included residential heating and agricultural crop drying.

Williams and MAPCO owned pipelines and transported propane to terminals that served customers at various locations in Iowa, Illinois, Wisconsin, and Minnesota. In several areas, terminals supplied by Williams and MAPCO pipelines were the only, or almost the only, sources of propane. The proposed acquisition would have created competitive problems in three distinct markets, including transportation of propane by pipeline, propane terminal operations in parts of Iowa and southern Minnesota, and transportation of raw-mix natural gas liquids by pipeline from southern Wyoming to New Mexico, Texas, Oklahoma, and Kansas.

In propane markets, MAPCO owned both pipelines for the transportation of propane and local terminals where propane was made available to distributors. The primary competing terminal owner in the relevant geographic markets in Iowa and southern Minnesota was Kinder Morgan Operating L.P., which obtained its propane over Williams's pipelines. The merger would have eliminated Williams and MAPCO as competitors in the transportation of propane to these areas, according to the FTC. After the merger, Williams would have been able to control the supply of propane to Kinder Morgan terminals and would have had the incentive to discriminate against Kinder Morgan in favor of its own terminals.

To fix the perceived competitive problems in pipeline transportation and terminals, a conduct remedy was negotiated. The consent order imposes an obligation to continue serving Kinder Morgan terminals. Williams agreed to a long-term lease of its pipeline to Kinder Morgan

⁷⁴ The Williams Companies, Inc., FTC Dkt. No. C-3817 (June 17, 1998) (consent order).

so that Kinder Morgan would have access to propane supplies, and also eliminated a joint tariff and tariff division agreement under which Williams and Kinder Morgan previously had transported propane on the interstate pipeline. Continuation of the joint tariff would have facilitated collusion on pricing and terms. The consent agreement ensured that Kinder Morgan had pipeline capacity to get propane to its terminals and made collusion between Kinder Morgan and Williams through joint tariffs less likely. The consent agreement also restricted Williams's ability to acquire additional propane assets in the area. For a period of ten years, Williams is barred from purchasing assets for pipeline transportation or terminaling of propane in Iowa or within seventy miles of the Iowa border without notifying the Commission.

The chief concern with respect to raw mix transportation was one of potential competition. Williams owned two gas processing plants in Wyoming, from which raw mix was shipped by MAPCO pipelines to fractionation plants. MAPCO owned the only pipelines that transported raw mix from natural gas processing plants in southern Wyoming to fractionation plants in Texas, New Mexico, Kansas, and Oklahoma. Williams was a constraint on MAPCO's pricing for raw-mix transportation because it was a potential entrant. Indeed, MAPCO was reacting to the threat that Williams would build its own pipeline with plans to expand capacity and lower tariffs. The effect of the proposed transaction was to eliminate the threat of entry by Williams and to make it unlikely that any unaffiliated pipeline would be permitted to connect with Williams's processing plants. As a result, owners of the raw mix in Williams's plants would face a monopoly bottleneck for transportation of their product. Another conduct remedy solved this competitive problem by requiring Williams to agree to any request from an existing or proposed pipeline to connect its Wyoming processing plants to the pipeline.

c. El Paso Energy/Sonat

The 1999 merger of El Paso Energy and Sonat combined two major competitors in the markets for the transportation of natural gas in the east-central Gulf of Mexico, west-central Gulf of Mexico, eastern Tennessee, and northern Georgia. 75 The FTC negotiated divestitures in order to eliminate the overlaps and restore the competitive status quo.

Both El Paso and Sonat had substantial pipeline interests in the westcentral Gulf, an area off the western Louisiana coast. El Paso owned a

⁷⁵ El Paso (Sonat), FTC Dkt. No. C-3915 (Jan. 6, 2000) (consent order). El Paso divested the Sea Robin Pipeline to Trunkline Gas Co. (owned by CMS) in March 2000, ETNG to Pan Energy (owned by Duke) in March 2000, and the Destin Pipeline interest to BP Amoco in April 2000.

50 percent share of Stingray Pipeline, a large natural gas transmission system extending more than 100 miles into the eastern Louisiana Gulf, where it competed with Sonat's Sea Robin Pipeline. Both Stingray and Sea Robin transported natural gas from wells in this area of the Gulf to shore.

The Commission found that both firms were also significant rivals in the east-central Gulf, an area off the eastern Louisiana coast. Sonat owned the Southern Natural Pipeline and had a one-third interest in the Destin Pipeline. El Paso's Tennessee Gas Pipeline, and Vosca Knoll Gathering Company (VKGC), an El Paso-controlled pipeline, were direct and substantial competitors transporting natural gas out of the eastern Louisiana Gulf to shore.

Finally, according to the FTC, both companies competed in transporting natural gas into eastern Tennessee and northern Georgia, including transporting gas for local distribution companies serving Atlanta, Chattanooga, and Knoxville. Due to the cost of developing and placing natural gas pipelines, entry into the marketplace by additional competitors in any of the relevant markets would not have been timely or sufficient to prevent the anticipated anticompetitive effects of the merger.

The Commission's consent required El Paso to divest Sonat's Sea Robin Pipeline and Sonat's one-third ownership interest in the Destin Pipeline. To address competitive concerns in the southeastern onshore consuming areas, the order required El Paso to divest East Tennessee Natural Gas (ETNG), the El Paso pipeline system that serves customers in eastern Tennessee and northern Georgia. The order also contained ancillary provisions that would apply to El Paso's operation of VKGC in the event that Sonat's Destin interest was sold to a natural gas producer. Such a sale could result in Destin being less than fully competitive in certain instances in which the producer elected to serve its own producing interests by reserving one part of the Destin system at the expense of independent producers seeking access to certain other parts of the Destin Pipeline. ⁷⁶

⁷⁶ To avoid the anticompetitive result that would occur if the Destin interest were sold to a natural gas producer, the order required El Paso to cause VKGC to adhere to benchmarks established by competition between VKGC and Destin. Specifically, the order required El Paso to cause VKGC to allow any shipper to obtain access to VKGC, which would be at the shipper's expense if any construction of pipe were required, and to allow any other pipeline to interconnect with VKGC, at the expense of the pipeline requesting the connection. The order also prohibited El Paso from engaging in discrimination in scheduling, rates, and terms and conditions of service on VKGC. The connecting pipeline can elect to submit a dispute regarding the terms and conditions of a connection to binding arbitration. El Paso (Sonat), Analysis of the Draft Complaint and Proposed Consent Order to Aid Public Comment at 4.

d. El Paso/PG&E

El Paso's \$800 million acquisition of two gas subsidiaries of PG&E raised competitive issues in three separate natural gas areas—pipelines, local distribution, and gathering systems. Both El Paso and PG&E owned substantial pipeline, distribution, and gathering assets in Texas. There were overlaps in each product market, which encompassed three separate geographic markets. El Paso owned 35 percent of the Oasis Pipe Line Company, whose pipeline runs from the Permian Basin in west Texas and southeastern New Mexico through San Antonio and Austin to Houston. Even a minority ownership interest can raise competitive concerns if the minority owner can veto some contracts or pipeline expansions. The PG&E assets included a pipeline that paralleled Oasis, as well as a 50 percent interest in a pipeline that runs from the Permian Basin to Dallas.

These overlapping interests would have resulted in anticompetitive effects in three relevant markets, according to the FTC. The first was the market for transporting natural gas out of the Permian Basin. Concentration in this market was high—six firms owned a total of ten pipelines leading out of the Basin, and after the merger El Paso would have controlled almost one-half of the capacity. These figures understate the competitive impact of the merger because the markets served by the merging firms' pipelines, central Texas and Houston, are more attractive than the markets served by the other pipelines, namely, the Midwest (low prices and new pipelines from Canada being constructed), Oklahoma (low prices), and California (pipeline already at capacity). Thus, the FTC found that El Paso and the PG&E assets were each others' closest competitors, and after the acquisition, according to the FTC, El Paso would have been able to exercise unilateral market power after the merger.

The second market was the market for delivery of natural gas to gas and electric utilities serving central Texas, which is composed of the area within a forty mile radius of San Antonio and Austin, the eighth and twenty-first largest cities in the United States. This is also a pipeline market, but is analyzed from the perspective of the buyer rather than the sellers. There is no production in this area—all natural gas must be imported into this market from existing pipelines. At the time of the merger, only four pipelines served municipal and power plant customers in this area, and after the acquisition El Paso would have been able unilaterally to exercise market power. There were significant barriers to

⁷⁷ El Paso (PG&E), FTC Dkt. No. C-3997 (Jan. 30, 2001) (consent order).

entry, since building a pipeline requires a complex regulatory process and the cost of a pipeline is between \$500,000 and \$1 million a mile.⁷⁸

The FTC sought divestitures to restore competition to both relevant markets. El Paso was required to sell its 35 percent interest in Oasis to the remaining owners, Aquila and Dow Pipeline, and also sold a 50 percent undivided interest in a pipeline from the Permian Basin to central Texas. The order contained provisions requiring an operating agreement between El Paso and Duke for the co-owned pipeline that would enable both partners to buy and sell natural gas independently, would allow any unused capacity to be used by the other party, and would prevent El Paso, as the operator, from discriminating against Duke. The order also prohibits any changes in the governance provisions of the operating agreement without prior approval of the Commission. In addition, either party can expand the capacity of the pipeline without permission of the other. The divestitures would give producers in the Basin the option of using Duke to transport natural gas to central Texas as a replacement for PG&E, while El Paso would remain as a competitor in this market. The divestitures gave the buyers in central Texas a new alternative in Duke while retaining the El Paso presence through the joint venture, which actually reduced the post-merger HHI.

e. El Paso/Coastal

The \$16 billion acquisition of Coastal by El Paso, the largest natural gas merger in history, raised competitive issues in numerous markets, including both gathering and transportation services. El Paso and Coastal were two of the four largest interstate pipelines in the United States, accounting for between 30–35 percent of gas shipped in the country. To resolve its competitive concerns, the Commission negotiated divestiture of over 2,500 miles of pipeline in eleven pipeline systems.

The FTC's analysis in the gathering market was relatively straightforward, although it included an innovative conduct remedy. Both firms had major gathering assets in the central and west central Gulf of Mexico. The lowest postmerger HHI level would have been 3,600, with most gathering areas over 5,000. In each area, the merged firm would have been able to exercise unilateral market power by increasing prices and reducing services. Premerger competition was partially restored by

⁷⁸ The third relevant market in this case was for gas gathering from a production field on Matagorda Island in Texas. At the time of the merger, there were only two gathering systems operating on Matagorda. One was owned by El Paso and the other was owned by PG&E. The order required the divestiture of the PG&E pipeline to Panther Energy and restored the premerger competitive situation.

⁷⁹ El Paso (Coastal), FTC Dkt. No. C-3996 (Jan. 29, 2001) (consent order).

requiring divestiture of some El Paso assets. However, divesting certain El Paso assets would break apart an integrated system, raising the costs of operating the divested assets, and probably leading to higher prices. Therefore, in the case of the El Paso Tarpon and Green Canyon assets, the order required the parties to establish a \$40 million development fund to finance construction of new pipelines to restore competition in areas where El Paso- and Coastal-controlled pipelines would remain as dominant players without such construction.

The other interesting part of this case related to the transportation services market, where, due to significant ongoing deregulatory efforts and changes in the competitive landscape, the Commission identified more precise product markets than are usually found in pipeline cases. Pipeline transportation markets are still important relevant markets, and indeed were used in other parts of this case. However, in two Midwest markets (Milwaukee and Evansville), the Commission believed that a transportation market would be overly broad in light of recent efforts by FERC to deregulate the sale of pipeline transportation.

Under Order 636, FERC permits shippers holding pipeline capacity to resell or release that capacity in competition with the pipeline. However, shippers do not release capacity at times when pipeline capacity is constrained, which makes an "all pipeline transportation" market inappropriate. Instead, the Commission evaluated these geographic markets as long-term firm transportation markets—in other words, as markets for natural gas transportation services that require the pipeline to guarantee for one year or more that it will transport a specified daily quantity of natural gas from one destination to another, without interruption. In these markets, pipelines do not offer firm transportation for less than one year. Gas utilities and electric power plants that cannot risk interruption of service in markets with capacity constraints and high peak-day requirements cannot risk buying service other than long-term firm transportation.

In Milwaukee and Evansville, El Paso's MGT Pipeline competed directly with Coastal's ANR Pipeline. In Evansville, the merger would have reduced the number of competing interstate pipelines from three to two. In Milwaukee, the FTC concluded that the merger would have allowed the postmerger firm to deny potential competitors of ANR timely access and competitive prices for transportation of stored gas necessary to meet peak demand. The order restored competition in these two markets, according to the FTC, by requiring El Paso to divest the MGT Pipeline, but the analysis proceeded under two relevant markets—"long-term firm transportation" and "tailored services." In Milwaukee, the

Commission examined the effects of the merger in a tailored service market. Tailored services allow customers to adjust natural gas supply to rapidly changing conditions. The gas utilities in Wisconsin face fluctuating gas requirements. These requirements are met by using storage located in Michigan. Effective access to the storage requires transportation services that allow rapid withdrawals from storage with little notice given to the pipelines. Thus, access to storage requires a tailored service, for which there is no alternative.

5. Local Distribution

Local distribution companies (LDCs) are monopolies within their own geographic markets. Thus, any horizontal mergers in this sector would raise only potential competition issues. It is not clear under what circumstances the Commission would bring a case against the merger of two LDCs. A merger between an LDC and a natural gas marketer would also be horizontal, but, because entry into marketing seems relatively easy, probably would not raise antitrust concerns. To date, there has not been any horizontal merger activity in this sector. Most of the transactions in this area have been vertical unbundling transactions in which LDCs have divested upstream activities in order to become distributors to all competing suppliers.

B. VERTICAL (CONVERGENCE) MERGERS

The Commission is seeing an increasing number of what are sometimes referred to as convergence mergers. Typically, in these mergers an incumbent electric utility purchases natural gas (or other fuel) facilities of some type to become, or enhance its role as, a provider of both electricity and natural gas in a particular area. These mergers can be either vertical, involving an acquisition of either an upstream or downstream participant in the production process, or horizontal, involving the acquisition of a competitor.⁸⁰ In either case, there may be significant cause for concern that the merger will change the incentives of the parties and encourage them to exercise market power in ways that they might not have been able to without the merger.

For example, a competitive concern in a convergence merger could arise if an electricity generating company acquires market power over the supply of fuel to its generating competitors or potential competitors. Such an acquisition could enable the generating company to raise its

⁸⁰ The Commission has investigated several horizontal convergence mergers involving natural gas and electric retail distribution, but no enforcement actions have been brought thus far.

rivals' input costs or restrict their supplies and put them at a competitive disadvantage. In turn, the now-vertically integrated generating company could either raise the price of its electricity output or sell more of its own output since its competitors now have higher costs. Thus, convergence mergers can distort the market in two ways: first, customers will pay higher prices, which can distort consumer choices; and second, the acquiring company can favor its own generating facilities while other, more efficient plants may stand idle.

A second anticompetitive possibility is that the acquisition may give the generating company access to proprietary information about its competitors' costs. Since fuel costs are a substantial portion of generating costs, knowledge of competitors' fuel costs could give the firm an advantage in bidding situations. With access to this type of information, the firm could increase its price with confidence that it is still likely to win the bidding. Recent Commission cases have addressed both concerns.

A further concern, as illustrated by the *Occidental Petroleum* matter, ⁸¹ is that firms in regulated industries may pursue vertical mergers as a means to evade rate regulation and raise prices above competitive levels. The Department of Justice's 1984 Merger Guidelines, ⁸² still the last word on federal antitrust review of vertical mergers, addressed the problem of a regulated firm acquiring an unregulated input supplier. The Guidelines note that

[n]on-horizontal mergers may be used by monopoly public utilities subject to rate regulation as a tool for circumventing that regulation. The clearest example is the acquisition by a regulated utility of a supplier of its fixed or variable inputs. After the merger, the utility would be selling to itself and might be able arbitrarily to inflate the prices of internal transactions. . . . As a result, inflated prices could be passed along to consumers as "legitimate" costs. 83

For example, an electric power company subject to rate regulation may acquire one of its fuel suppliers, often a firm in the natural gas industry. The merged company would then have the incentive to inflate the internal transfer prices for the gas, expecting to pass the costs on to the final consumers as part of the rate base. If the downstream market is not fully competitive, the higher prices may be sustainable. Therefore, the merger might create both the incentive and the legal ability to raise prices. A regulatory solution may be inadequate here, as "regulators may have

⁸¹ See supra note 52 and accompanying text.

⁸² U.S. Dep't of Justice, Merger Guidelines (1984), reprinted in 4 Trade Reg. Rep. (CCH) ¶ 13,103.

⁸³ Id. § 4.23.

great difficulty in policing these practices, particularly if there is no independent market for the product (or service) purchased from the affiliate."84

The Commission has investigated several of these convergence-type mergers in the last few years, as described below.

1. CMS Energy Corp./Duke Energy Co.

A 1999 enforcement action involved the purchase by CMS Energy Corporation of the Panhandle Eastern Pipeline and Trunkline Pipeline from a subsidiary of Duke Energy Co. 85 CMS is the holding company for Consumers Energy Co., a gas and electric utility company serving large parts of Michigan and the franchised monopoly provider of local gas distribution services to residential, commercial, and industrial customers. Both pipelines, as well as three others owned by ANR Pipeline, Great Lakes Transmission, and Michigan Consolidated Gas, interconnect to Consumers's distribution system.

Prior to its acquisition of Panhandle Eastern and Trunkline, Consumers purchased gas for transport across the various interstate pipelines and competed with other companies in the sale of natural gas to customers across its local distribution system. State regulation required Consumers to provide unbundled transportation over its distribution system. As a customer of interstate transportation, Consumers had the incentive to purchase gas from multiple pipelines that interconnected to its system in order to keep transportation costs low and effectively compete for sales to end users. The FTC concluded that this incentive changed with the acquisition. Once Consumers owned two interstate pipelines, its incentive was to restrict access to its distribution system by pipelines that it did not own, in order to raise transportation prices on the Panhandle Eastern and Trunkline pipelines. These transportation rates are regulated by FERC, but, prior to the merger, competition between the five lines kept the rates substantially lower than the allowed maximum. The effect of higher interstate transportation costs would have been to increase costs for natural gas customers. Increased costs would have had particular impact on industrial customers that generate their own electric power using natural gas. These customers could have been forced to purchase electric power directly from Consumers because the higher cost of natural gas would make self-generation uneconomical.

From the FTC's perspective, the consent order settling the case was designed to prevent the restriction or elimination of interconnection

⁸⁴ Id

⁸⁵ CMS Energy Corp., FTC Dkt. No. C-3877 (June 2, 1999).

capacity for competing pipelines. The order establishes a "designated capacity" for each interconnection based on historical numbers. If gas cannot be delivered at an interconnect because capacity has fallen below historical levels, Consumers must permit delivery at another interconnect if the shipper can do so without incurring additional cost, or must provide the gas from its own supply for later replacement by the shipper once interconnect capacity becomes available. The order also requires Consumers to post on an electronic bulletin board various information concerning capacity of interconnects, planned shipments, and throughput, which will allow industry participants to monitor access to the system.

This remedy is particularly notable because it attempts to facilitate market mechanisms to protect competition. Sometimes the Commission's remedial options are quite limited. Structural relief is a possibility, meaning the Commission bars the transaction or requires a partial divestiture, but that may prevent the realization of efficiencies. On the other hand, the Commission could attempt to impose a regulatory solution. The antitrust agencies, however, are not well-equipped to monitor regulatory compliance. The Commission cannot replace FERC and the state regulators. Rather, the Commission must try to create mechanisms internal to the market that will help make competition work. In this case, part of the solution was to increase the transparency of the gas market by requiring that certain information be made freely available, so that industry participants would be able to monitor Consumers's compliance with its obligation to continue to provide capacity at the interconnects.

As analyzed by the FTC, this transaction demonstrates both the benefits and dangers of convergence mergers. By vertically integrating into interstate transportation, Consumers no doubt stood to enhance the efficiency of its natural gas operations. On the other hand, the merger gave Consumers the incentive to exercise power that it already possessed—the ability to restrict access to its pipelines—where before it lacked a reason to do so. Consumers also stood to benefit from its dual participation in the electric and gas industries. By gaining some control over the price of gas available in the market, Consumers would have been able to limit the alternative sources of electrical power available to its large industrial customers. This case also demonstrates the potential for holes in regulatory jurisdiction, as neither FERC nor the Michigan Public Service Commission had the power to prevent Consumers from shutting off interconnection to other interstate pipelines.

2. PacifiCorp/The Energy Group PLC

Another recent convergence merger reviewed by the Commission was the proposed acquisition of The Energy Group PLC by PacifiCorp. While this was an electricity/coal convergence merger, it involved many of the same issues and concerns that characterize electricity/gas mergers. PacifiCorp provides retail electric service in seven western states. The Energy Group owns Peabody Coal, which produces about 15 percent of the coal mined in the United States and is also a power marketer that trades electric power throughout the United States.

To the FTC, a major competitive concern arising from this vertical merger was that PacifiCorp's control of two Peabody mines would enable it to raise its rivals' generating costs and, consequently, the wholesale price of electricity in the western United States. It so happened that the Peabody mines were the only viable sources of coal for certain electricity generating plants that, at the margin, set the wholesale price of electricity in the region during certain generating periods.⁸⁷ The FTC concluded that the merger would have frustrated the promise of new wholesale and retail competition brought about by the onset of deregulation in electricity markets. That concern exists in several markets undergoing deregulation, and it is important to pay close attention to mergers in those industries. The extraordinary opportunity for new competition should not be destroyed or diminished by anticompetitive alliances.

The proposed consent order required the divestiture of the coal mines. The Commission initially considered a settlement based largely on behavioral restraints. 88 On further consideration, however, it was believed this would be unsatisfactory, in large part because the Commission generally prefers structural relief that, once carried out, preserves competition through the operation of the market, not through ongoing "regulatory" policing by the Commission. 89 In the end, PacifiCorp withdrew its bid for The Energy Group in the face of competing offers from other buyers,

^{*6} PacifiCorp, FTC File No. 971-0091 (Feb. 18, 1998) (proposed consent order). The proposed consent order in *PacifiCorp* was withdrawn when the acquisition was abandoned.

⁸⁷ Because electric power cannot be stored, demand must equal supply on a continuous and instantaneous basis, making each period of time a separate product market with its own corresponding geographic market that may vary based on transmission congestion conditions.

⁸⁸ See Richard G. Parker, Senior Deputy Director, Bureau of Competition, Federal Trade Commission, Trends in Merger Enforcement and Litigation, Remarks Before the Annual Briefing for Corporate Counsel 14 (Sept. 16, 1998).

⁸⁹ See William J. Baer, Director, Bureau of Competition, Federal Trade Commission, FTC Perspectives on Competition Policy and Enforcement Initiatives in Electric Power, Remarks Before the Conference on the New Rules of the Game for Electric Power: Antitrust & Anticompetitive Behavior 7 (Dec. 4, 1997) ("The basic choice is between a structural approach to remedies, which is the antitrust preference, and a behavioral approach that seeks to govern conduct through the use of rules, which is more typical of a regulatory regime."); see also Andrew J. Sonderman, Behavioral or Structural Solutions: Prospects for a Deregulated Natural Gas Industry, 20 ENERGY L.J. 23 (1999).

and the Commission withdrew from the proposed consent decree before it became final.

3. Dominion Resources/Consolidated Natural Gas

In a convergence merger in 1999, Dominion Resources proposed to acquire for approximately \$5.3 billion Virginia Natural Gas (VNG), a subsidiary of Consolidated Natural Gas (CNG). Dominion, through its subsidiary Virginia Power, accounts for more than 70 percent of all electric power generation capacity in the Commonwealth of Virginia. VNG is the primary distributor of natural gas in southeastern Virginia. The FTC concluded that Dominion's control over VNG would have deterred entry into the electric power generation market in southeastern Virginia by companies unaffiliated with Dominion, as Dominion could exercise unilateral market power to raise the cost of entry and production or otherwise gain a competitive advantage.

The market for the delivery of natural gas in southeastern Virginia was also characterized by high barriers to entry. According to the FTC, it would be both costly and time-consuming for other natural gas transportation companies to extend pipelines from their existing network to southeastern Virginia. In addition, other pipelines near the area lacked sufficient excess capacity to support a new pipeline, while VNG had substantial excess capacity. Accordingly, new entry into the natural gas marketplace was unlikely to deter or counteract the anticompetitive effects of the transaction.

In this case structural relief was used to remedy the competitive problem identified by the Commission. The case was settled by requiring Dominion to divest VNG in accordance with the stipulation entered into between Dominion, CNG, and the staff of the Virginia State Corporation Commission.⁹⁰ Under the stipulation, Dominion had one year to divest VNG. Under the FTC's proposed order, any acquirer of VNG would be subject to the Commission's approval. If Dominion was unable to find a suitable purchaser, the stipulation required it to spin off VNG to its shareholders.⁹¹

4. Entergy/Koch

Another recent convergence merger highlights the issue of the appropriate remedy when a regulated utility gains control of its own fuel

⁹⁰ Virginia State Corporation Commission, Case No. PUA990020.

⁹¹ Dominion Resources, FTC Dkt. No. C-3901 (Dec. 9, 1999) (consent order). VNG was divested to AGL Resources, Inc. in September 2000. The FTC's order also prohibited any Dominion shareholder from receiving more than 5 percent of the voting shares of VNG. Under the terms of the FTC's order, the Commission could appoint an independent

supplier. 92 In cases where the efficiencies of the merger are inextricably intertwined with the potential for anticompetitive postmerger actions, a divestiture might not be the proper remedy. Where a conduct remedy can alleviate the anticompetitive concerns while allowing the integration from which efficiencies will flow, both concerns can be satisfied. As in CMS Energy/Duke, the Commission attempted to use a conduct remedy to improve transparency, and in this case, improve the ability of regulators to detect the evasion of rate regulation. 93

Entergy is a provider of retail electricity to customers in portions of Arkansas, Louisiana, Mississippi, and Texas. It also owns the local natural gas distribution utility in New Orleans and Baton Rouge, Louisiana. Koch is a marketer of natural gas, natural gas transportation, chemicals, petroleum products, minerals, and financial services. Included in its holdings is the Gulf South Pipeline, which serves parts of the states of Texas, Louisiana, Mississippi, Alabama, and Florida. In 2000, Koch and Entergy formed a joint venture, Entergy-Koch, LP, which acquired the Gulf South Pipeline, resulting in Entergy owning 50 percent of the pipeline serving its own regulated utilities in Louisiana and Mississippi. The FTC's competitive concern from this joint venture was that prices for electricity to consumers in areas of Louisiana and Western Mississippi, and for natural gas to consumers in New Orleans and Baton Rouge, would "rise as a result of Entergy passing on inflated costs for natural gas transportation to consumers and the difficulties that regulators will have in reviewing and challenging Entergy's purchase of natural gas transportation."94 Because Entergy had the exclusive right to sell electricity and natural gas in those markets, consumers would have no alternatives to potentially higher prices. Moreover, it would be difficult for state and local regulators to determine whether Entergy improperly incurred inflated costs of natural gas transportation because Entergy's purchasing decisions involved the consideration of multiple factors and were not transparent, and existing market benchmarks would have been inadequate to assist regulators in determining whether costs were prudently incurred. The FTC found that Entergy's ownership of the Gulf South Pipeline would have increased Entergy's incentive to evade regulation and made the regulators' task more difficult.

The Commission did not seek a structural remedy. Instead, it attempted to improve market transparency for both regulators and other

auditor to monitor Dominion's and CNG's compliance with their obligation to hold VNG separate and independent pending the divestiture.

⁹² Entergy, FTC File No. 001-0172 (Jan. 31, 2001) (proposed consent order).

⁹⁸ Entergy, Analysis of the Complaint and Consent Order to Aid Public Comment, at 2.

⁹⁴ Entergy, Complaint ¶¶ 29, 35.

market participants. The Commission's order recognizes Entergy's need to purchase a flexible, reliable, and economical gas supply by tailoring requirements to the duration of Entergy's contracts. Under both long-term (over three months) and short-term contracts, Entergy is required to prepare a written plan before requesting proposals for gas supply. This plan must include, among other things, a statement explaining the goals Entergy is attempting to achieve. These planning documents will allow state and local regulators to compare actual purchases with Entergy's forecasted gas supply requirements. Entergy is also required to post information about its gas supply requirements on its Web site.

The information and timing of the posts are dependent on the length of the contracts and the pace of market activity. For long-term contracts, Entergy must post a request for proposal (RFP) containing, among other things, the criteria that suppliers must satisfy to be eligible for consideration and the types of services, the amount of gas, and the duration of the contract. This proposal must be posted at least thirty days before any purchase under a contract whose term is one year or more, and at least fourteen days in advance of any purchase under a contract whose term is between three months and one year. These time frames provide suppliers with adequate time to prepare their bids, without causing unnecessary delay. Further, Entergy must provide RFPs to any potential supplier upon request.

The requirements are similar for short-term contracts. Information must be posted at least seventy-two hours before considering any proposal for a term of at least one month. Entergy must also create a log for all short-term purchases documenting the date, time, seller, and terms of all offers received, and indicating the selected proposals. For daily purchases, Entergy must publish its intention to purchase gas supplies at various receipt and delivery points. The information required is more limited, consisting of specific terms and conditions for which it seeks to purchase gas supplies, and does not require a planning document.

This conduct remedy should make Entergy's purchasing decisions transparent to both regulators and prospective suppliers. If it cannot hide payments to its own fuel supplier, Entergy will have a reduced incentive to attempt to inflate its costs for its retail operations in order to escape effective rate regulation.

5. DTE/MichCon

A recent merger joined Detroit Edison, a supplier of electricity to southeastern Michigan, with Michigan Consolidated Gas Company

(MichCon), a natural gas utility serving areas throughout Michigan. 95 The companies' supply areas overlapped in southeastern Michigan, including the city of Detroit. This merger raised several interesting issues, including horizontal interfuel competition between electricity and natural gas, and raising rivals' costs.

The Commission found that the merger could potentially harm competition in three ways. First, those buyers in the overlap region who could self-generate their own electricity faced the choice of buying electricity from Edison or buying natural gas from MichCon and converting it into electricity. This class of customers included co-generators, municipalities that generated their own electricity (such as the city of Wyandotte), and companies that used various forms of distributed generation, including fuel cells and microturbines. MichCon had been aggressive in selling natural gas to self-generators. This set of customers would lose the competition between their electricity supplier and the supplier of the necessary input used to generate their own electricity.

The second entity that could be harmed by the merger was the city of Detroit. Detroit owns and operates its own electric utility, the Public Lighting Department (PLD), which distributes electricity to industrial, business, and public sector customers in Detroit. The PLD competed directly with Edison for non-residential customers. PLD had two sources of electricity: purchasing power at wholesale to be delivered by Edison, or generating its own requirements using gas delivered by MichCon. The merger would have eliminated competition in the city of Detroit between the distribution of electricity and the distribution of natural gas used to produce electricity, which would have facilitated Edison's ability to raise the costs of its rival, Detroit PLD.

The third potential competitive harm stemmed from direct horizontal competition between electricity and natural gas. The two products compete directly for certain commercial and industrial applications, including powering air compressors, commercial cooking, and various process applications. MichCon had aggressively targeted electricity users for such applications to switch to natural gas, and that competition would be lost through the merger.

The remedy in this case was quite innovative. A divestiture of either the MichCon or Edison assets would have been the same as blocking the merger. But if another competitor could be created without divesting the assets, competition would not be lost and the merger efficiencies could still be realized. The order settling the case required that certain

⁹⁵ DTE Energy Co., FTC File No. 001-0067 (Mar. 22, 2001) (proposed consent order).

MichCon assets be divested to Exelon, an energy company formed from the merger of the parent of Commonwealth Edison, the utility that serves Chicago, and PECO, a major utility operating in the Northeast. The assets had to be divested within five days of consummating the merger. The assets included an easement agreement and an auditor agreement that, together, would give Exelon rights to ship natural gas over the MichCon system, as well as sufficient protections to prevent MichCon from abrogating or diminishing those rights. In essence, the Commission established a new competitor by using the assets of one of the merging parties. The agreement also allowed any customer of Edison or MichCon in the overlap area to terminate its transportation or distribution contracts within two years, so that it could switch to Exelon without penalty.

6. Enova/Pacific Enterprises

The U.S. Department of Justice Antitrust Division also has recent experience with a convergence merger. In March 1998, the DOJ filed a complaint and proposed consent order resolving competitive concerns raised by the merger of Enova and Pacific Enterprises. Enova owns San Diego Gas & Electric Co. (SDG&E), a major electric utility in southern California. As described in the complaint, a subsidiary of Pacific "is virtually the sole provider of natural gas transportation services to plants in southern California that use natural gas to produce electricity" and is the "sole provider of natural gas storage services throughout all of California."

The potential anticompetitive effects of the merger stemmed from the regulatory structure in California. At the time of the merger, most electricity generated in California was sold on the California Power Exchange. Power is sold based on offers and bids for half-hour periods. The price charged to all buyers for all power bought during each period is that of the most expensive unit of power sold. During peak periods, that most expensive unit is usually from a gas-powered generator because these generators are the most expensive to operate and only come online when demand reaches high levels. This means that the ability to raise costs of gas generators can lead to substantial profits for owners of lower-cost generation assets. Because SDG&E owned low-cost generators, it could profit by reducing the supply of natural gas, thereby increasing costs of gas-powered generators and the overall cost of electricity from gas-powered generators during peak periods. Neither firm could have exploited this possibility before the merger, but the combined firm

⁹⁶ United States v. Enova Corp., No. 98-CV-583 (D.D.C.) (filed Mar. 9, 1998).

would have both the ability and incentive after the merger. According to the complaint, the increased profits from generation sales would more than make up for lost revenue from decreased transportation and storage of natural gas.

The consent agreement required the divestiture of the low-cost generation assets that would enable the combined company to exploit the California Power Exchange pricing system. Enova was given eighteen months to make the divestiture and was required to manage separately the generation assets until divested.⁹⁷

One interesting aspect of this case is that it involved the potential for the exercise of market power during limited but periodic periods of peak demand. This is different from the market power of a traditional monopolist with a generalized ability to charge a monopoly price for its products at all times. There are at least two implications of this potential for the exercise of periodic market power. First, this potential must be recognized when considering markets that change on an hourly or daily basis. A static picture of the market will not be sufficient. Second, markets must be carefully defined to make sure that the potential for abuse of market power is recognized. The Enova complaint showed a sophisticated understanding of the particular demand and supply characteristics of electricity, defining the market as the "provision of electricity in California during high demand periods." 98

V. CONCLUSION

An effective national energy policy is crucial to the efficient operation of the American economy and the maintenance of a high standard of living. This national policy is quite rightly set by the executive and legislative branches. Policy makers have clearly chosen the path of deregulation for the energy sector as a whole.

Central to the effectiveness of that national policy is antitrust enforcement as those industries become subject to market forces. Effective antitrust enforcement has a bigger impact than most realize in maximizing consumer welfare. Lax enforcement at this critical juncture, particularly in the merger area, will result in the accumulation and ultimate

⁹⁷ Enova also was limited from reacquiring such assets without prior approval by the Department or from exercising control of those or similar assets through management contracts

⁹⁸ Enova, supra note 96, at ¶ 19.

abuse of market power. The FTC's recent merger enforcement in the natural gas industry, with its acceptance of procompetitive merger efficiencies and innovative remedies designed to capture those efficiencies without also risking anticompetitive effects, shows the proper response of the agencies to deregulation in all energy industries.