

1996

Deregulation of the Energy Industry

Elisabeth Pendley

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Pendley, Elisabeth (1996) "Deregulation of the Energy Industry," *Land & Water Law Review*: Vol. 31 : Iss. 1 , pp. 27 - 77.

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University of Wyoming

College of Law

LAND AND WATER LAW REVIEW

VOLUME XXXI

1996

NUMBER 1

DEREGULATION OF THE ENERGY INDUSTRY

*Elisabeth Pendley**

Part 1. Deregulation Of The Natural Gas Industry	30
Regulation By Deregulation	30
Part 2. Deregulation Of Natural Gas Pipelines	32
Pipeline Market Centers Or Market Hubs	32
New Pipeline Market Centers Or Market Hub Services	35
Uniformity At Market Centers	36
New Pipeline Transportation Services	37
Pipeline Capacity Release	38
New Pipeline Storage Services	40
Pipeline Rate Zones, Cost-Based Rates or Market-Based Rates	43
Part 3. Deregulation of the Local Distribution Company	45
Increased Oversight Role of State Commissions	46

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State Commissions Review Gas Purchasing Practices	47
Integrated Resource Planning	49
Incentives	50
Local Distribution Company (LDC) Marketing Affiliates	51
Unbundling at the State Level	52
Unbundling And Rebundling The Core/Non-Core Customers	54
New Services	56
The Canadian Experience	58
 Part 4. Deregulation of the Electric Industry	 60
Competition, Competition, Competition	61
Square Peg, Round Hole?	62
Round Peg, Round Hole	64
The Electric Mega-NOPR	66
Electricity As A Commodity	67
Generation	68
Transmission: Functional Unbundling	69
Stranded Costs	70
Distribution: Deregulation At The Local Level: Retail Wheeling-Poolco-Buy/Sell	72
State/Federal Jurisdiction	74
Deregulation Of The Energy Industry	76

INTRODUCTION

Historically, the natural gas industry and the electric industry have been regulated by the Federal Energy Regulatory Commission (F.E.R.C.). The price producers charged for their gas was regulated. The price interstate pipelines paid for the gas as well as the transportation rate they charged were regulated. Local distribution company rates were regulated by state commissions. The prices for the generation, transmission, and distribution of electricity were regulated both at the federal and the local level.

In recent years, the energy industry moved away from regulation by the F.E.R.C. to (de)regulation by competition and market based prices. This process of regulating by deregulation began when producers were able to charge non-regulated contract prices for the sale of gas and when interstate pipelines opened their pipelines to third party shippers.

F.E.R.C.'s natural gas restructuring rule finalized the structural changes in the (de)regulation of the natural gas industry. By requiring

pipelines (1) to separate (unbundle) their sales and transportation services, (2) to provide comparable transportation services for all gas supplies, (3) to offer access to pipeline storage, and (4) to allow shippers both temporary or permanent capacity release, the evolution to competition in the natural gas industry was complete.¹

Practically speaking, F.E.R.C. transformed pipelines into exclusively transporters of natural gas. The response to F.E.R.C.'s mandate to unbundle was dramatic. Pipeline companies unbundled sales from transportation services, opened interstate transportation capacity and pipeline storage capacity to access by any qualified shipper, offered unique and competitive pipeline services, and centralized the purchasing of natural gas at market hubs using electronic trading systems.

When pipelines stepped out of the merchant role, local distribution companies (LDCs) accepted this new responsibility. Regulatory review shifted from the F.E.R.C. to state commissions. Many of the deregulation issues faced at the federal level are now being repeated at the local level: unbundling and rebundling, prudent gas purchase practices, market affiliates, incentive rates, and integrated resource planning.

Enlightened by its experience deregulating the natural gas industry, F.E.R.C. has now turned to the electric industry with the intent of bringing comparability, open access transmission, market based rates, unbundled services, and direct access to electric power customers. Mindful of both physical and statutory differences between the natural gas and the electric power industries, F.E.R.C. issued the electric Mega-NOPR which commits the Commission to reliance on market driven factors.² The Mega-NOPR affects only the transmission of power to wholesale customers (big industrial plants), not retail customers (residential homeowners). However, F.E.R.C. expects that opening wholesale competition will force the unbundling of the electric industry at the local level and in time, lower the cost of electricity for all customers.

The deregulation of the energy industry marks a critical turning point in the history of the natural gas industry and the electric power industry. This paper explores the impact that regulating by deregulation has on the natural gas industry and the application of this experience to the electric power industry.

1. See *infra* text accompanying note 3.

2. See *infra* text accompanying note 181.

PART 1. DEREGULATION OF THE NATURAL GAS INDUSTRY

Regulation By Deregulation

After the surpluses and shortages of natural gas supplies in the 1970s and the clamor of producers for less federal control in the 1980s, heretical talk of "regulating" the natural gas industry by deregulation³ crept into the halls of Congress and the Federal Energy Regulatory Commission (F.E.R.C.). Two magical words: "market-based rates" and "competition" were announced and would drive the deregulation of the natural gas industry.⁴

The first actions were the Natural Gas Wellhead Decontrol Act of 1989⁵ and F.E.R.C.'s Open Access Transportation Order (Order No. 436) in response to the Act.⁶ The Natural Gas Wellhead Decontrol Act freed the price of producers' gas at the wellhead from the multi-tiered pricing restrictions imposed by the Natural Gas Policy Act of 1978.⁷ Now producers were able to charge non-regulated contract prices for the sale of gas from the wellhead.

3. "Regulating" the natural gas industry by deregulation would allow competition and market place rates to set the price for natural gas rather than the Federal Energy Regulatory Commission.

4. The unbundling of the pipeline industry began with Order No. 436 which "encouraged" pipeline companies to open their pipelines to third party shippers. Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol, Order No. 436, 50 Fed. Reg. 42408 (Oct. 18, 1985) (F.E.R.C. Stats. & Regs. [Regulations Preambles 1982-1985] ¶ 30,665, at 31,481-482 (1985)) *vacated and remanded*, Associated Gas Distributors v. F.E.R.C., 824 F.2d 981 (D.C. Cir. 1987), *cert. denied*, 485 U.S. 1006 (1988), *readopted on an interim basis*, Order No. 500, 52 Fed. Reg. 30334 (Aug. 14, 1987) (F.E.R.C. Stats. & Regs. [Regulations Preambles, 1986-1990] ¶ 30,761 (1987)) *remanded*, American Gas Association v. F.E.R.C., 888 F.2d 136 (D.C. Cir. 1989), *readopted*, Order No. 500-H, 54 Fed. Reg. 52344 (Dec. 21, 1989), F.E.R.C. Stats. & Regs. [Regulations Preambles 1986-1990] ¶ 30,867 (1989), *reh'g granted in part and denied in part*, Order No. 500-I, 55 Fed. Reg. 6605 (Feb. 26, 1990), (F.E.R.C. Stats. & Regs. [Regulations Preambles 1986-1990] ¶ 30,880 (1990)) *aff'd in part and remanded in part*, American Gas Association v. F.E.R.C., 912 F.2d 1496 (D.C. Cir. 1990), *cert. denied*, 111 S. Ct. 957 (1991). (Order No. 436); [hereinafter Order No. 436].

5. Natural Gas Wellhead Decontrol Act of 1989, 15 U.S.C.A. § 3301 (West 1982 & Supp. 1995).

6. Order No. 436, *supra* note 4.

7. Natural Gas Policy Act of 1978 (NGPA), § 311, 15 U.S.C. § 3371 (1988). The major provisions of this Act related to:

"a single national market for gas sales, eliminating the jurisdictional sale-nonjurisdictional sale distinction; extension of price controls on gas until January 1, 1985 . . . ; a national price ceiling for gas escalated with inflation and annual increases until 1985, with special provisions for gas sold under existing intrastate contracts, sales under rollover contracts, high cost natural gas, and stripper well natural gas; incremental pricing of natural gas to industrial users in order to insulate residential consumers from price increases and presidential authority to allocate gas in emergencies."

HOWARD WILLIAMS AND CHARLES MEYERS, MANUAL OF OIL AND GAS TERMS, (Matthew Bender ed., 1991).

The F.E.R.C. Open Access Transportation Order encouraged pipeline companies to open their pipelines voluntarily to third party shippers. While this was a "voluntary" undertaking, F.E.R.C. provided sufficient carrot-and-stick incentives for pipeline companies to comply with the order, and third party shippers (producers, marketers, aggregators) began to transport gas on these open access pipelines.⁸

While both the Wellhead Decontrol Act and voluntary open access transportation provided increased supply options, these changes were not enough to bring about the federal regulators' vision of market-based rates and competition. This would be accomplished by the issuance of F.E.R.C.'s natural gas restructuring rule (Order No. 636) in the spring of 1992.⁹

As stated in Order No. 636, the rule

will finalize the structural changes in the Commission's regulation of the natural gas industry. This rule will therefore reflect and finally complete the evolution to competition in the natural gas industry. . .[T]his promotion of competition among gas suppliers will benefit all gas consumers and the nation by ensur[ing] an adequate and reliable supply of [clean and abundant] natural gas at the lowest reasonable price.¹⁰

Order No. 636 unraveled the regulated gas industry and in the words of F.E.R.C. Chair Elizabeth Moler, "[T]here is no going back."¹¹ The restructuring of the natural gas industry was greeted by pipeline companies initially with angst and animosity; given to hyperbole, some pipeline company executives cried that Order No. 636 was a Pearl Harbor attack on the industry.

To achieve the regulators' vision, Order No. 636 required pipelines to separate (unbundle)¹² their sales and transportation services and to

8. Order No. 436, *supra* note 4.

9. Pipeline Service Obligations and Revisions to Regulations Governing Self Implementing Transportation; and Regulations of Natural Gas Pipelines After Partial Wellhead Decontrol, Order No. 636, 57 Fed. Reg. 13,267 (April 16, 1992) (3 F.E.R.C. Stats. & Regs. Preambles ¶ 30,939 (April 8, 1992)); *order on reh'g*, Order No.636-A, 57 Fed. Reg. 36,128 (August 12, 1992) (3 F.E.R.C. Stats. & Regs. Preambles ¶ 30,950 (August 3, 1992)) *order on reh'g*, Order No. 636-B, 57 Fed. Reg. 57,911 (December 8, 1992), (61 F.E.R.C. ¶ 61,272 (November 27, 1992)), *appeal pending sub nom.* Atlanta Gas Light Co., *et al.* v. F.E.R.C., No. 92-8782, (11th Cir. Aug. 13, 1992). [hereinafter Order No. 636].

10. *Id.* See also Harold, Walker, FORTNIGHTLY, *Paying The Piper*, Apr. 15, 1994, at 33; (Order No. 636, 3 F.E.R.C. Stats. & Regs. Preambles at ¶ 30,391).

11. Elizabeth Anne Moler, *There is No Going Back*, FORTNIGHTLY, Oct. 15, 1993, at 51.

12. Prior to the issuance of Order No. 636, pipeline companies charged a bundled rate for natural gas; this bundled rate included the purchase of gas and its transportation. In some instances,

provide comparable transportation services for all gas supplies, whether purchased from the pipeline or a third party.¹³ Order No. 636 required pipelines to offer open access pipeline storage on a non-discriminatory basis and to create capacity release programs to allow firm shippers to release their capacity temporarily or permanently.¹⁴

Order No. 636 transformed pipelines exclusively into transporters of natural gas.¹⁵ Even though F.E.R.C. assured pipeline companies that Order No. 636 was not meant to force them out of the merchant role, in reality, no major pipelines continued as merchants. In those instances where the company remains a merchant, the sale of gas is usually handled by a marketing affiliate or subsidiary of the company. The era of pipeline as merchant is defunct; the era of pipeline as transporter has dawned.

PART 2. DEREGULATION OF NATURAL GAS PIPELINES

In response to the Order No. 636 mandate, the natural gas pipeline industry has changed dramatically. Pipeline companies have unbundled sales from transportation services, and opened interstate transportation capacity and pipeline storage capacity to access by any qualified shipper on a firm or interruptible basis.¹⁶ Market hubs developed; unique and competitive pipeline services are offered;¹⁷ natural gas is traded as a commodity.

Pipeline Market Centers Or Market Hubs

The market center or market hub is defined as a "reliability center" where "many pipelines meet in a reasonably small geographic region."¹⁸ This

the bundled rate might also include gathering and processing costs. Separating sales service from transportation service required the pipeline companies to price each service separately and allowed customers to choose only those services they required.

13. Order No. 636, *supra* note 9.

14. *Id.*

15. *INGAA's Annual Pipeline Survey Shows Continuing Decline In Pipeline Sales As Demand For Carriage Grows*, FOSTER NATURAL GAS REPORT, June 30, 1994, at 27. In fact, Interstate Natural Gas Association of America's (INGAA) annual pipeline survey "documents the transition between the pre-636 era of bundled gas service and the unbundled post-636 world." The survey showed pipeline sales dwindling to 10% of all 1993 gas volumes delivered, with the decreases in pipeline sales "balanced by an increase in firm transportation, and to some extent, by the first released firm transportation flowing from the capacity release market." *Id.*

16. Order No. 636, 3 F.E.R.C. Stats. & Regs. Preambles, at 30,426. See 18 C.F.R. § 284.1(a).

17. See *infra* text accompanying note 49.

18. F.E.R.C.'s OEP Director Richard O'Neill Recommends Self-Regulation Of Regional Gas Market Hubs Operating Within Geographical Limits, FOSTER NATURAL GAS REPORT, May 12, 1994, at 12 [hereinafter *O'Neill*].

concept has brought gas marketing sophistication to the natural gas industry. Market hubs encourage market based rates and increase post-636 competition by increasing reliability and trading opportunities; the role of market hubs in the natural gas industry is described as follows:

[L]inked by electronic trading systems displaying near-real time market data. . . market hubs] form a nationwide clearing house in which any seller across North America would be able to offer supplies to the highest bidders, any buyer could find a smorgasbord of gas supplies and select the source best suited to his needs, and any shipper on equal footing with all other players could obtain the services he needed to efficiently move purchased volumes to end users.¹⁹

Because market hubs embody the regulatory vision of competition, F.E.R.C. has actively encouraged market centers by: (1) prohibiting rate design or tariff language which frustrates market centers, (2) preferring fully unbundled services which has made market centers easier to develop, and (3) creating a complementary capacity release market.²⁰

The proliferation of market centers is the first stage of an industry metamorphosis. Currently more than forty²¹ existing and proposed market centers are located at "natural pooling points" with multiple pipeline interconnections sitting midstream between major gas supply and market areas on underutilized interstate gas transportation systems with downstream sales capability and access to upstream supply areas.²² This large number of market centers will not continue. "Shakeout is imminent. Competitive pressures are increasing. . . [T]he numbers will dwindle down to a handful."²³ With market centers or market hubs appearing nationwide, competition will be especially fierce in the initial stages of development.²⁴

19. *Id.* at 28.

20. *Id.* at 12. Not everyone would agree with this analysis of F.E.R.C.'s supportive role: "F.E.R.C. failed to keep its promise not to inhibit development of the centers. Production area hubs are a casualty of F.E.R.C.'s inability to resolve . . . production area rate zone rates. . . Production area rate hubs are eroding as market zone hubs proliferate." *Texas Conference Portrays Market Centers As The Standard For Natural Gas Transaction Business In The Future; Participants Debate Definitions, F.E.R.C.'s Role, And Impact Of Competition*, FOSTER NATURAL GAS REPORT, May 12, 1994, at 14 [hereinafter *Texas Conference*].

21. Approximately one and one-half years ago, Coopers and Lybrand counted about fifteen existing and planned market hubs. That number has burgeoned from fifteen to twenty-six to forty in a very short period of time! A.D. Koen, *U.S. Natural Gas Hubs Symbolize Order 636 Marketing Evolution*, OIL & GAS JOURNAL, Sept. 5, 1994, at 27 [hereinafter *U.S. Natural Gas Hubs*].

22. *U.S. Natural Gas Hubs*, *supra* note 21, at 30.

23. *Id.*

24. Already plans for one market hub have been dropped. On August 22, 1994, Mid Louisiana

Numerous pipeline companies have applied for and received authorization from F.E.R.C. for market centers. Each application is very individual, listing various geographical areas and pipeline interconnects and offering a variety of competitive services.²⁵

However, F.E.R.C. has rejected an enhanced hub application from Northern Illinois Gas Co. and Southern California Gas Co. which would have extended their services to include their capacity rights on other pipelines.²⁶ F.E.R.C. rejected this off-system service stating that the application violated the shipper-must-have-title rule, evaded capacity release procedures, and was a return to now illegal buy/sell transactions.²⁷

Market hubs are evolving into natural gas "supermarkets" where gas services are increasingly bought and sold and will be integrally related to short-term markets.²⁸ Market hubs will become the primary pricing points for the industry and may supplant utilities' formal monthly spot gas bidding

Gas Co. withdrew its proposal to reduce rates on a four-mile lateral in order to encourage its use as a market hub. Compliance with the conditions imposed by the F.E.R.C. would require additional expenditures; "given the speculative nature of the new business estimated to be generated by its (market hub) proposal," Mid Louisiana Gas Co. withdrew its proposal. Mid Louisiana Gas Co. "Order Accepting and Suspending Certain Tariff Sheets Subject to Refund and Conditions and Rejecting Certain Tariff Sheets," Docket No. RP94-322-000, 68 F.E.R.C. ¶ 61,229 (Aug. 12, 1994). *Mid Louisiana Drops Plan To Use T-32 Lateral As Market Hub Due To Additional Costs Required To Comply With F.E.R.C. Authorization*, FOSTER NATURAL GAS REPORT, Aug. 25, 1994, at 1.

25. The first pipeline to apply for hub services was National Fuel Gas Supply, requesting authorization for parking, wheeling and imbalance resolution; F.E.R.C. granted this request on January 12, 1994 subject to the outcome of a technical conference. National Fuel Gas Supply Corp., "Order Accepting and Suspending Tariff Sheets, Subject to Refund and Conditions, Rejecting Other Tariff Sheets, and Establishing a Technical Conference," Docket Nos. RP94-80-000, *et al.*, 66 F.E.R.C. ¶ 61,031 (Jan. 12, 1994). *See also* Pacific Gas Transmission Company, Docket No. RP94-145-000, "Order Accepting and Suspending Tariff Sheets Subject to Refund, and Establishing a Technical Conference," 66 F.E.R.C. ¶ 61,356 (Mar. 25, 1994); CNG Transmission Corporation, Docket Nos. RP94-213-000, *et al.*, "Order Accepting and Suspending Tariff Sheets, Subject To Refund And Conditions, And Consolidating Proceedings," 67 F.E.R.C. ¶ 61,349 (June 20, 1994); Southern California Gas Company, "Order Extending Time For Action," Docket No. RP94-16-000, 69 F.E.R.C. ¶ 61,097 (Oct. 27, 1994); *CMS Gas Transmission and Storage Co., Tejas Power Corp., St. Clair Pipelines, and Enron Gas Services Corp. - Grands Lacs Market Center*, FOSTER NATURAL GAS REPORT, Apr. 21, 1994, at 30; K N Interstate Gas Transmission Co., Docket Nos. RP95-35-000, *et al.*, "Order Accepting And Suspending Tariff Sheets, Subject To Refund And Conditions," 69 F.E.R.C. ¶ 61,287 (Dec. 2, 1994); *Tejas Power Partners With Four Corporations To Form Market Hub Chain*, FOSTER NATURAL GAS REPORT, Jan. 5, 1995, at 28.

26. Northern Illinois Gas Co. and Southern California Gas Co., "Order On Petition For Rate Approval And Order Amending Statement Of Operating Conditions," Docket No. CP92-481-000, *et al.*, 70 F.E.R.C. ¶ 61,099 (Jan. 30, 1995).

27. Historically, the shipper held title or could show proof of ownership of the natural gas which was being shipped. *See also Rejecting Hub Plans Could Hurt Efficiency*, GAS DAILY, Mar. 3, 1995, at 1; *F.E.R.C. Rules That Hub Providers May Not Extend Services Beyond Their Own Facilities*, FOSTER NATURAL GAS REPORT, Feb. 2, 1995, at 4.

28. *Growing Role Of Storage Projects And Market Centers Predicted For California Gas Markets*, FOSTER NATURAL GAS REPORT, July 28, 1994, at 12.

programs.²⁹ When fully implemented, real time metering will boost the demand for hub services. In addition, a two-tier hub structure will emerge: primary hub points in major production/market areas and regional or satellite hubs in secondary production/market areas.³⁰

New Pipeline Market Centers Or Market Hub Services

In order to be successful, the hub or market center must offer flexible buying and selling, the availability of long term contracting and hourly trading, uniform electronic markets, futures trading, and capacity release transactions.³¹ "Hub operators are expected to offer unique services to users, services such as wheeling, . . . title transfer, displacement delivery, parking, inverse parking and imbalance penalty management . . . Hub operators will be the future market-makers, featuring full service menus."³²

Another hub service which is becoming more widely used is electronic trading systems. With an electronic market hub trading network, traders can track gas price differentials among all the hubs and buy gas daily in a transaction-intensive manner at any hub linked to the net.³³ In time, large regional hubs will be tied together by a unified electronic trading network; a master hub electronic trading system is in the future.³⁴ Many believe that including all large regional hubs on the network will lower gas costs volumetrically.³⁵

29. *Id.*

30. *Id.*

31. O'Neill, *supra* note 18, at 12.

32. While these services may vary from pipeline to pipeline, the following are the most common new hub services.

Parking - delivery of gas into the hub and "parking" or short-term storage at the hub for a very short term - (one or more days);

Parked Quantity Delivery - transportation of parked quantities of gas from the parking point to an identified delivery point;

Loaning - removal of gas from the hub and its return one or more days later;

Wheeling - simultaneous receipt of gas into the hub and delivery of gas out of the hub through displacement or exchanges at different receipt and delivery locations;

Pooling - aggregation of gas at the pool;

Authorized Imbalance - hub operator (transporter) will advance gas to shippers who will return the volumes to the hub operator at a later date or upon notice from the operator.

PIPE LINE INDUSTRY, Jan., 1994, at 13.

33. U.S. *Natural Gas Hubs*, *supra* note 21, at 32. "The electronic data interchange could provide arbitrage opportunities on a national basis so shippers could wheel gas to various parts of the country . . . And if we could include main hubs in Canada and the border crossing points between the U.S. and Mexico, maybe we could start creating our vision of what an international electronic hub trading system ought to provide in terms of information and services." *Id.*

34. *Id.*

35. *Id.*

Uniformity At Market Centers

Uniformity of gas terms and flexibility to move gas from one pipeline system to another are essential to the success of market hubs.³⁶ To facilitate the use of market centers by shippers, pipeline industry leaders should develop uniform tariff language for industry terms such as: gas day,³⁷ nomination deadlines,³⁸ daily balancing,³⁹ electronic bulletin boards,⁴⁰ real time measurement and flow control,⁴¹ data interchange, and environmental monitoring.⁴²

Although F.E.R.C. is concerned with uniformity of standards at market centers, it has not attempted to "regulate" uniformity. F.E.R.C. Commissioner Santa wondered if the Commission "should initiate proceedings to change rates, terms and conditions believed to discourage hubs, scrutinize pipeline rate design with respect to its effect on market centers, or insist on greater uniformity of pipeline business practices and standards" rather than allowing the pipeline industry to develop the uniformity of gas terms at the market centers or hubs.⁴³ Santa also consid-

36. Interstate Natural Gas Association task force has recommended steps to assist integration of the deregulated natural gas industry. *INGAA Details Ways To Improve Gas Grid Integration*, OIL & GAS JOURNAL, Mar. 20, 1995, at 122.

37. Gas day is typically defined in a pipeline's tariff as a period of twenty-four consecutive hours beginning and ending at 8:00 a.m., unless otherwise agreed to by the parties.

38. A nomination deadline is the time period by which a shipper must notify the pipeline of the volumes of natural gas which it intends to transport on the pipeline. Monthly nomination deadlines vary according to the pipeline but typically are between three to five days before the first day of the month. In connection with pipeline restructuring, various pipelines moved monthly nomination deadlines closer to the first day of the month in order to accommodate customer demands that pipelines allow for greater flexibility in the timing of nominations.

39. If a balance of receipts and deliveries is not maintained, Seller may impose one or more imbalance charges as described in the pipeline tariff. Daily balancing is the process by which a pipeline insures that receipt of natural gas equal deliveries of natural gas on a daily basis.

40. Electronic Bulletin Boards (EBB) are interactive electronic systems maintained by a pipeline through which customers or potential customers and a pipeline can communicate with each other, typically concerning matters such as available upstream capacity, requests for service, the posting of released capacity, the submission of bids for released capacity, or the posting of other operational notices.

41. Real time measurement and flow control allow a pipeline to receive information concerning the volume of gas currently flowing on the pipeline. Real time measurement also allows pipelines to track the ownership and billing status of current flowing gas. The availability of real time information is essential if a pipeline wishes to require that shippers comply with the pipeline's daily nomination and balancing requirements.

42. F.E.R.C. Order No. 563 "Standards for Electronic Bulletin Boards Required Under Part 284 of the Commission's Regulations," Docket No. RM93-4, 3 F.E.R.C. Stats. & Regs. ¶ 30,988 (Dec. 23, 1993), set standards for the operation of electronic bulletin boards. Electronic Data Interchange (EDI) and other communications standards will "foster arbitrage" between hubs, and make EBBs more customer friendly. The Gas Industry Standards Board (GISB) will also foster uniformity and standardization within the industry. *Texas Conference*, *supra* note 20, at 14.

43. *Commissioner Santa Discusses What's Ahead For F.E.R.C., Both Near Term And Long*

ered applying the regional transmission group (RTG) electric concept to the gas industry; F.E.R.C. would accept the hub group's tariff filings setting out rules for doing business at a hub.⁴⁴ "This would achieve consistency in the operation of the multiple pipelines that access a hub without the need for heavy handed regulatory intervention."⁴⁵

According to F.E.R.C. Office of Economic Policy Director Richard O'Neill, F.E.R.C.'s policy is to "let the market develop the market centers."⁴⁶ However, neither Commissioner Santa nor O'Neill closed the door on F.E.R.C. intervention.⁴⁷ If market forces inhibit the development of market centers and therefore inhibit competition, F.E.R.C. will define uniform tariff terms for pipelines using market centers.⁴⁸

New Pipeline Transportation Services

In addition to the exotic new services offered at market centers or hubs, pipelines are competing for customers by revising their current tariffs to allow greater flexibility for firm transportation and for interruptible transportation.⁴⁹ Such transportation services include hourly scheduling flexibility,⁵⁰ paper-pooling points,⁵¹ and enhanced transportation rights.⁵²

Term, FOSTER NATURAL GAS REPORT, July 21, 1994, at 1. F.E.R.C. has received at least one filing requesting that it address the creation of market centers, contending that "*de facto* development of a market center policy is not enough." The City of Hamilton, Ohio has requested that F.E.R.C. designate Lebanon, Ohio as a market center and require the five interconnecting pipelines (ANR Pipeline Co., Columbia Gas Transmission Corp., CNG Transmission Corp., Texas Eastern Transmission Corp., and Texas Gas Transmission Corp.) to modify their tariffs to remove any impediments to the development of Lebanon as a market center. *City of Hamilton Seeks Policy Statement Designating Lebanon, Ohio As Gas Market Center As One Step Toward 'More Proactive' F.E.R.C. Role*, FOSTER NATURAL GAS REPORT, May 26, 1994, at 16.

44. *Commissioner Santa Discusses What's Ahead For F.E.R.C., Both Near Term And Long Term*, FOSTER NATURAL GAS REPORT, July 21, 1994, at 1.

45. *Id.*

46. O'Neill, *supra* note 18, at 12.

47. The GAO Report "Natural Gas Regulation: Little Opposition to F.E.R.C.'s Recent Policies On Transportation-Related Services" (GAO/RCED-95-39) concludes that it is too early to determine what F.E.R.C.'s regulatory role should be, if any. *GAO Reports Relatively Little Or No Industry Opposition To Recent F.E.R.C. Regulatory Policies Regarding Pipeline Gathering Affiliates, Market-Based Storage Rates and Market Hubs*, FOSTER NATURAL GAS REPORT, Jan. 12, 1995, at 33.

48. *Id.*

49. Tennessee Gas Pipeline Company filed tariff sheets last year to provide new hourly scheduling flexibility service for interruptible transportation. Tennessee Gas Pipeline Company, "Order Accepting Tariff Sheets Subject To Conditions," Docket No. RP94-187-000, 67 F.E.R.C. ¶ 61,316 (June 14, 1994).

50. The new hourly scheduling flexibility for interruptible transportation service allows a shipper to change its nominations with 60 minutes prior notice at any time of the day to reflect changes in quantities to be delivered under the transportation contract related to qualified receipt and delivery points. This new service will meet the needs of electric generator customers who need short notice transportation service to meet their fluctuating peak load. Koch Gateway Pipeline Co. has implement-

Pipeline Capacity Release

To increase transportation volumes, F.E.R.C. envisioned a robust secondary transportation market engineered by its capacity release program.⁵³ Under Order No. 636, capacity release allowed customers who hold contracts for firm pipeline capacity to release it (either temporarily or permanently) for use by other parties.⁵⁴ The customer's ability to release unused capacity would "minimize the net cost of firm transmission capacity to their ratepayers The capacity-related revenues generated by such transactions are then credited against the bills rendered to the original capacity holder under the pipeline's contract."⁵⁵

What F.E.R.C. expected and what F.E.R.C. is getting are proving to be two different things. Increased capacity release transactions will affect market hub operations; however, minimal reliance on capacity release among pipeline companies and most local distribution companies exists, and more short term capacity release transactions have occurred than long term ones.⁵⁶

ed ten paper pooling points which will allow customers to purchase gas at receipt points and bring the gas to a pool without being charged a transportation rate, except for gathering charges if applicable. Koch Gateway Pipeline Co., "Order On Third Compliance Filing And Granting And Denying Request For Rehearing," Docket No. RS 92-26-007, *et al.*, 65 F.E.R.C. ¶ 61,338 (Dec. 16, 1993).

51. *Id.* Koch Gateway Proposes To Establish Pooling Service, FOSTER NATURAL GAS REPORT, Apr. 14, 1994, at 21. Koch's paper pooling points apply transportation charges to the movement of gas from the pool to a delivery point on an interruptible basis. A firm shipper with a primary receipt point in a specific pooling area could assign primary receipt point capacity within pooling areas to a pooling customer supplying it gas at the pooling points. The pooling customer could then use that capacity to serve the firm customer's transportation needs. Questar Pipeline Co. filed revised tariff sheets to implement a new Receipt Point Group (RPG) service concept which provides additional flexibility to firm transportation customers by allowing customers who hold firm primary capacity to nominate all or any portion of that capacity to any other available receipt point within the RPG; F.E.R.C. adopted this proposal. Questar Pipeline Company, "Letter Order," Docket Nos. RP94-210-000, *et al.*, 67 F.E.R.C. ¶ 61,218 (May 20, 1994).

52. Questar Pipeline Company, "Letter Order," Docket Nos. RP94-210-000, *et al.*, 67 F.E.R.C. ¶ 61,218 (May 20, 1994). Questar Proposes New Service Providing Firm Shippers Greater Flexibility To Nominate Alternate Receipt Points In Same Area, FOSTER NATURAL GAS REPORT, Apr. 28, 1994, at 19. Texas Eastern Transmission Corp. proposed to implement tariff sheets providing "enhanced transportation rights" to its customers in its market zones, allowing customers to deliver gas in one market zone without limiting the customer's capacity rights in a downstream market zone. F.E.R.C. accepted this "enhanced transportation" proposal subject to refund and a technical conference. Texas Eastern Transmission Corporation, "Order Accepting And Suspending Tariff Sheets, Subject To Refund And Conditions, And Establishing A Technical Conference," Docket No. RP94-357-000, 68 F.E.R.C. ¶ 61,385 (Sept. 29, 1994).

53. Order No. 636, *supra* note 9.

54. *Id.*

55. *Gas Capacity Release: Opportunity or Pitfall?* FORTNIGHTLY, Dec. 1, 1993, at 25.

56. Relying on a study performed by Hadson Gas Systems, the following information was uncovered about capacity release: 1) 6 percent of the total natural gas volumes transported over

In particular, F.E.R.C. must address these capacity release issues: "(1) the requirement to post releases in excess of 30 days;⁵⁷ (2) the requirement that the shippers have title to the gas. . . ; (3) the current price cap (the pipeline's maximum firm transportation (FT) rate);"⁵⁸ and (4) pipelines' ability to acquire available transportation and storage capacity on other pipelines.⁵⁹

Disappointed with the lack of enthusiasm for capacity release, F.E.R.C. agreed to review the Order No. 636 capacity release mechanism by issuing a list of questions⁶⁰ and by inviting a number of gas

the past six months have been moved through released capacity; 2) four pipelines (El Paso Natural Gas Co., Pacific Gas Transmission Co., Columbia Gas Transmission Corp., Natural Gas Pipeline Co. of America) have accounted for 55 percent of the capacity released; 3) most capacity releases are prearranged for a short term; 4) a "gray market" has developed which involves transactions that make use of regulated firm transportation rebundled with unregulated sales of gas to serve markets that otherwise would rely on either interruptible or released firm transportation service; 5) there is a lack of participation in capacity release transactions by many large LDCs; 6) affiliate related capacity releases play a relatively minor role, amounting to less than 5 percent of the national total volume released; and 7) pipelines' discounted IT service has directly competed with capacity released to the same markets by their LDC customers. The Hadson study is entitled: *The Rumble of Bundles: A Review of Experience Under the Capacity Release Experiment. Hadson Executive Analyzes Capacity Release Programs In The Interstate Gas Market*, FOSTER NATURAL GAS REPORT, Sept. 1, 1994, at 1; *Capacity Release Yields Bargains, But Business Isn't Brisk Everywhere*, INSIDE F.E.R.C., Aug. 29, 1994, at 1; *Order No. 636 Capacity Release Program Gets Critical Airing At Gas Industry Conference*, FOSTER NATURAL GAS REPORT, Sept. 8, 1994, at 2 [hereinafter *Order No. 636 Capacity Release*].

57. Initially, F.E.R.C. refused to alter the definition of a short term prearranged capacity release of one month or less when it denied Natural Gas Pipeline Co. of America's request. See Natural Gas Pipeline Co. of America, "Order Accepting Certain Tariff Sheets, Subject to Conditions, And Rejecting Other Tariff Sheets," Docket No. RP94-255-000, *et al.*, 67 F.E.R.C. ¶ 61,385 (June 23, 1994). Chair Moler stated that the industry should continue to "play the release game before we change the rules." *Moler Suggests That Less Regulation May Be The Best For Gas Market*, INSIDE F.E.R.C., Sept. 12, 1994, at 11.

58. *Order No. 636 Capacity Release*, *supra* note 56, at 3. The F.E.R.C. refused to alter the definition of a short term prearranged capacity release to one month or less when it denied Natural Gas Pipeline Co. of America's request in Docket No. RP94-255. Natural Gas Pipeline Co. of America, *et al.*, "Order Accepting Certain Tariff Sheets, Subject to Conditions, and Rejecting Other Tariff Sheets," Docket No. RP94-255-000, *et al.*, 67 F.E.R.C. ¶ 61,385 (June 23, 1994). However this position was changed in Order No. 577 and Order No. 577-A. See *infra* note 62.

59. *Pipeline Seeks Uniformity On Capacity Rights*, GAS DAILY, Mar. 6, 1995, at 1.

60. Among the fourteen Capacity Release Outreach Questions, the following were asked: "What are the strengths and weaknesses of the program? What needs to be changed? Has the lack of uniform operational rules on different pipelines hindered capacity release transactions involving multiple pipelines? Are price caps on released capacity necessary? Has the lack of uniform operational rules on different pipelines hindered release transactions involving multiple pipelines? Is there a perception that prearranged deals are preferable over bidding? What would be the effect of permitting the sale of capacity directly between shippers without posting and bidding? Why are buy/sell, and bundled capacity/gas transactions, the so-called 'gray market,' being used as an alternative to the capacity release program?" *Staff Solicits Industry Views on Workings Of Capacity-Release Program*, INSIDE F.E.R.C., Oct. 3, 1994, at 1. *F.E.R.C. Staff To Hold Information Meetings With Industry Groups To*

industry members to informal discussions on the topic.⁶¹ On January 12, 1995, F.E.R.C. issued a proposed rulemaking that altered the short term prearranged capacity release to thirty days. This rule would end the large number of release transactions which involved the pairing of a twenty-nine day prearranged release with a one day deal with the same terms to avoid the bidding process.⁶² This is the first substantive change to the capacity release rules outlined in Order No. 636.

New Pipeline Storage Services

To enhance competition, Order No. 636 unbundled pipeline storage capacity allowing access by any qualified shipper.⁶³ Many independent pipelines and "storage" marketers are assessing available storage and are considering installing or expanding seasonal and peaking gas storage facilities in supply and market areas.⁶⁴ With storage now playing a vital role

Find Out How Capacity Release Program Is Working Prior To Scheduling Public Conference, FOSTER NATURAL GAS REPORT, Oct. 6, 1994, at 9.

61. These informal meetings occurred in October and November, 1994. INGAA suggested that the revenue crediting requirement for Interruptible Transportation (IT) volumes be eliminated; that calendar-month prearranged deals be allowed; that the complaint procedure should be used by F.E.R.C. to address Electronic Bulletin Board (EBB) posting issues; and that pipeline affiliates should be treated no differently than other marketers who participate in the secondary market. "Recommendation of the Rate & Policy Analysis Committees on the Capacity Release Market," INGAA White Paper, Oct. 12, 1994.

62. Release Of Firm Capacity On Interstate Natural Gas Pipelines, "Notice Of Proposed Rulemaking," Docket No. RM95-5-000, 70 F.E.R.C. ¶ 61,019 (Jan. 12, 1995); *F.E.R.C. Proposes Capacity Release Changes*, ENERGY DAILY, Jan. 13, 1995, at 4; *Industry Responds to Capacity Release Change*, GAS DAILY, Feb. 24, 1995, at 2; *F.E.R.C. Issues Notice Of Proposed Rule To Make Prearranged One Month Capacity Releases Exempt From Posting And Bidding Requirements*, FOSTER NATURAL GAS REPORT, Jan. 12, 1995, at 1. F.E.R.C. issued Order No. 577 making this change to capacity release. Order No. 577, 70 F.E.R.C. ¶ 61,359 (Mar. 29, 1995); Order No. 577-A, Ordering Granting Rehearing, 71 F.E.R.C. ¶ 61,254 (May 31, 1995).

63. Order No. 636, 3 F.E.R.C. Stats. & Regs. Preambles at ¶ 30,426; see 18 C.F.R. § 284.1(a) (Apr. 8, 1992). Since Order No. 636 allowed pipelines to retain only enough storage and transportation capacity to maintain operational control of the interstate transportation system and to provide no-notice service, access to storage is now available to producers and end users. Indeed, the American Gas Association states that more than "3 tcf of working gas will be in storage for the coming winter peak demand periods" and that "[s]torage withdrawals this winter are expected to account for about 5% of U.S. interstate gas pipeline non-peak month throughput, firm transportation volumes 71%, interruptible transportation 17%, and no-notice and pipeline system gas the balance." *F.E.R.C. Order 636 Spawns Flurry Of U.S. Gas Storage Projects*, OIL & GAS JOURNAL, Oct. 1993, at 21 [hereinafter *Flurry Of U.S. Gas Storage*].

64. Historically, storage was built for seasonal use under a rate based system; a "one size fits all" seasonal storage facility which some believe is overbuilt in the market area but high deliverability storage is under built in both the market and producing areas. *F.E.R.C. Order 636 Spawns Flurry Of U.S. Gas Storage Projects*, OIL & GAS JOURNAL, Oct. 1993, at 21 [hereinafter *Flurry Of U.S. Gas Storage*]. *Avoca Natural Gas Storage Open Season Extended*, FOSTER NATURAL GAS REPORT, Feb. 17, 1994, at 30. High deliverability storage such as salt dome storage - currently a small percentage of total storage capacity - will increase significantly as it can cycle completely up to ten times a year.

in the supply chain, it is entirely possible that "storage capacity could become a commodity as valuable as gas."⁶⁵

While F.E.R.C. has not directly addressed the interplay between market centers and storage, the pipeline industry has linked the two through hub agreements. Like hubs, storage facilities can provide balancing services, short-term inventory balancing, incremental supplies and demand, and operational flexibility for shippers.⁶⁶ "It is arguable that these hub services are rebundled storage services. . . ."⁶⁷

F.E.R.C. has authorized market-based rates for storage services.⁶⁸ The first market area storage project to seek and obtain approval of negotiated rates was Avoca Natural Gas Storage.⁶⁹ F.E.R.C. determined that:

- (1) a salt dome storage facility would be in the public convenience and necessity; (2) Avoca can provide peak period supply, balancing and gas price arbitrage in competition with similar services already provided by conventional and LNG storage in the area; and (3) Avoca will be unable to exercise

65. *Flurry Of U.S. Gas Storage Projects*, *supra* note 63, at 21.

66. *Texas Conference Portrays Market Centers As The Standard For Natural Gas Transaction Business In The Future; Participants Debate Definitions, F.E.R.C.'s Role, And Impact Of Competition*, FOSTER NATURAL GAS REPORT, May 12, 1994, at 14. One such example is the proposed Alberta Energy Partnership storage and market center project. Development of this 2,500 acre \$5 million project would "provide an independent gas storage alternative for California non-core customers who traditionally have had to rely on the storage services of the state's two major public utilities. . . . A number of other HUB and market center services would be offered to satisfy the requirements of the California gas marketplace." *Alberta Energy Partnership Exploring Kern County, California Gas Storage Project And Market Center*, FOSTER NATURAL GAS REPORT, Mar. 31, 1994, at 20.

67. *Alberta Energy Partnership Exploring Kern County, California Gas Storage Project And Market Center*, FOSTER NATURAL GAS REPORT, Mar. 31, 1994, at 20.

68. Historically, F.E.R.C. authorized cost based rates — rates based on the pipeline's cost of service. However, F.E.R.C. may authorize market based rates — rates set by competition if market forces can keep prices at reasonable levels. Among these are Koch Gateway Pipeline Co. out of its Bistineau Storage Facility in Webster Parish, Louisiana (42.5 Bcf); Bay Gas Storage Co. Ltd. in association with a new salt dome storage cavern being constructed jointly with Olin Corp. in Washington County, Alabama (1.5 Bcf); Richfield Gas Storage System from underground storage in Morton County, Kansas (3.5 Bcf); Petal Gas Storage Co. in Mississippi (1.6 Bcf); and Transok, Inc. (4.0 Bcf) *F.E.R.C. Grants Preliminary Approval Of Avoca's Market-Based Storage Services In Consumption Area Based On Extensive Evaluation Of Competitive Conventional Storage And LNG Alternatives*, FOSTER NATURAL GAS REPORT, June 30, 1994, at 4 [hereinafter *Preliminary Approval*]. *F.E.R.C. Approves Koch Gateway's Request To Charge Negotiated Rates For Unbundled Storage Service*, FOSTER NATURAL GAS REPORT, Mar. 31, 1994, at 6 [hereinafter *F.E.R.C. Approves Koch Gateway*]. Recently an intrastate pipeline, Llano Inc.'s market based transmission and storage rates were approved by F.E.R.C. *Intrastate Seeks Market-Based Rates For Storage And Transportation*, INSIDE F.E.R.C., Oct. 17, 1994, at 11.

69. *Preliminary Approval*, *supra* note 68, at 4. Avoca Natural Gas Storage, "Preliminary Determination On Non-Environmental Issues," 68 F.E.R.C. ¶ 61,045 (July 8, 1994); Avoca Natural Gas Storage, "Order Issuing Certificates," 68 F.E.R.C. ¶ 61,333 (Sept. 20, 1994).

market power because it is small relative to the alternatives available to customers, because market concentration for short-term peak supply services is low, and because other factors temper Avoca's ability to exercise power where market concentration for other services is high."⁷⁰

Several applications for market based storage rates have run aground at the F.E.R.C. absent evidence of lack of market power. Neither Michigan Consolidated Gas Co. nor Cove Point LNG Limited Partnership were successful in their bid for market-based storage rates.⁷¹ Not all certificate applications for storage facilities request market based rates. F.E.R.C. approved Young Gas Storage Co. Ltd.'s application to develop and operate a natural gas storage field at cost-based rates.⁷²

Recognition of the important role storage will play has encouraged numerous pipelines to consider adding storage projects to their future plans. Both Southern California Gas Co. and Pacific Gas & Electric Co. have proposed unbundled storage programs in California for non-core customers. The storage program will offer load balancing, basic long term contract, short term and off-season storage services.⁷³ Alberta Energy Partnership is considering development and operation of the Ten Section Hub. The project would be located near all five California pipeline sys-

70. For additional market-based storage applications, see Ouachita River Gas Storage Co.'s application to construct and operate an underground storage facility at market based rates. Ouachita River Gas Storage Company, L.L.C., "Preliminary Determination On Nonenvironmental Issues," Docket No. CP94-38-000, 68 F.E.R.C. ¶ 61,402 (Sept. 30, 1994); and Koch Gateway Pipeline Company's application to charge market based rates for production area unbundled storage service. The Koch application was embraced enthusiastically by the F.E.R.C. Commissioners "generally agreeing that the Koch Gateway's market power analysis could serve as a model for other entities seeking to implement negotiated rates." *F.E.R.C. Approves Koch Gateway*, *supra* note 68, at 6; Koch Gateway Pipeline Company, "Order On Market-Based Contract Storage Rates," 66 F.E.R.C. ¶ 61,385 (Mar. 31, 1994).

71. Michigan Consolidated Gas Company, "Order Granting In Part Approval Of Rate Petition," 68 F.E.R.C. ¶ 61,090 (July 19, 1994). *See also F.E.R.C. Grants MichCon's Request To Charge State-Approved Rates For Transportation Service, But Denies Market-Based Rate For Storage Service*, FOSTER NATURAL GAS REPORT, July 14, 1994, at 11. Cove Point LNG Limited Partnership, "Order Denying Price Cap Proposal, Denying Rehearing, Granting Clarification, Authorizing Abandonments, And Issuing Certificates," Docket Nos. CP94-59-000, *et al.* 68 F.E.R.C. ¶ 61,377, (Sept. 28, 1994); "Order Denying Reconsideration," 69 F.E.R.C. ¶ 61,292 (Dec. 5, 1994). *See also F.E.R.C. Approves Recommissioning Of Cove Point LNG Facilities But Nixes Market-Based Rates Absent Evidence Of Lack Of Market Power*, FOSTER NATURAL GAS REPORT, July 28, 1994, at 7.

72. Young Gas Storage Company, Ltd., "Order Issuing Certificates And Granting And Denying Rehearing," 66 F.E.R.C. ¶ 61,280 (Mar. 3, 1994). *F.E.R.C. Issues Certificate For Young Gas Storage Project In Colorado; Increases Authorized Equity Return On Rehearing From 12.25 Percent To 12.75 Percent*, FOSTER NATURAL GAS REPORT, June 16, 1994, at 23.

73. *Growing Role Of Storage Projects And Market Centers Predicted For California Gas Markets*, FOSTER NATURAL GAS REPORT, July 28, 1994, at 12.

tems and serve as a market center for the western regions of the U.S., Canada, and Mexico.⁷⁴

Storage has become a vital part of the gas supply chain. Pipelines', producers', marketers' and aggregators' portfolios will include a menu of storage services. Local distribution companies and large industrial customers will buy storage in order to manage their own portfolios of gas supplies. In the future, storage will be traded electronically and storage will become part of the futures market.

Pipeline Rate Zones, Cost-Based Rates or Market-Based Rates

A number of pipelines have found that a complex multi-tiered rate structure hinders the ability to compete at market centers; pipelines are filing revised tariff sheets to simplify their rate structure.⁷⁵ F.E.R.C.'s Economic Policy Director O'Neill believes that rate zone boundaries will develop at and around the market centers.⁷⁶

Another issue which has been raised by applications for market hub rates or storage service rates at F.E.R.C. is whether F.E.R.C. will authorize market-based rates or cost-based rates. Although F.E.R.C. generally authorizes rates based on the cost of service (cost based rates); F.E.R.C. "is not required to adhere rigidly to a cost-based determination of rates"⁷⁷ and has flexibility in selecting a ratemaking methodology.⁷⁸ F.E.R.C. may consider rates reached as a result of competition (market-based rates) where it can "demonstrate that market forces could be relied upon to keep prices at reasonable levels."⁷⁹

However, F.E.R.C. has exhibited a reluctance to approve market based rates for transportation. K N Interstate Gas Transmission Co. applied for market-based rates for its Buffalo Wallow market hub.⁸⁰ If grant-

74. *Alberta Energy Partnership Exploring Kern County, California Gas Storage Project And Market Center*, FOSTER NATURAL GAS REPORT, Mar. 31, 1994, at 20.

75. For example, NorAm Gas Transmission Company filed tariff sheets to change from its current complexity of postage stamp transportation rates to three additive rate zones on NorAm's throughway system and to establish a market lateral surcharge designed to recover the costs of such facilities only from those customers who use them. NorAm Gas Transmission Company, "Order Accepting And Suspending Tariff Sheets Subject To Refund And Conditions, And Establishing A Technical Conference And Hearing Procedures," Docket Nos. RP94-343-000, *et al.* 68 F.E.R.C. ¶ 61, 272 (Aug. 31, 1994).

76. O'Neill, *supra* note 18, at 12. An example of these rate zone boundaries was applied by National Fuel Gas Supply Corp. at Ellisburg-Leidy.

77. *Farmers Union Central Exchange, Inc. v. F.E.R.C.*, 734 F.2d 1486, 1501 (D.C. Cir. 1984) (quoting *F.E.R.C. v. Pennzoil Production Company*, 439 U.S. 508, 517 (1979)).

78. *Permian Basin Area Rate Cases*, 390 U.S. 747, 790 (1968).

79. *Farmers Union*, 734 F.2d at 1510.

80. K N Interstate Gas Transmission Co., "Order Rejecting Tariff Sheets And Providing For

ed by F.E.R.C., this application would have been the first time market-based rates for transportation services would have been approved. Instead, F.E.R.C. rejected the proposed market-based transportation tariff sheets stating that K N had not shown that it lacked significant market power.⁸¹ When K N Interstate Gas Transmission Co. reapplied for cost-based transportation rates, F.E.R.C. granted this revised application.⁸²

F.E.R.C. also denied Ouachita River Gas Storage Co.'s request to provide interruptible hub services at market-based rates, since Ouachita had not demonstrated a sufficient lack of market power. F.E.R.C. grappled with "how its framework for analysis of market power might apply to an application for market-based rates for hub services"⁸³ and decided that the company must show that "sufficient good alternatives to its proposed services are available in sufficient quantity to prevent Ouachita River from exercising market power."⁸⁴

F.E.R.C. continues to be uncomfortable with market-based transportation rates; however, F.E.R.C. did ask the industry for comments on achieving non-traditional, market-based and incentive rates.⁸⁵ It is uncertain, though, what evidence F.E.R.C. will accept as conclusively proving lack of market power.

In conclusion, the era of pipeline exclusively as transporter has dawned. And along with this new role has come the creation of market hubs offering flexible buying and selling, the availability of long term contracting and hourly trading, uniform electronic markets, futures trad-

Further Procedures," Docket No. RP94-328-000, 68 F.E.R.C. ¶ 61,401 (Sept. 30, 1994). F.E.R.C. expressed concern that extensive business arrangements with affiliates and the existence of captive customers did not lend itself to light-handed regulation. F.E.R.C. stated that K N had not documented the effect the non jurisdictional services (title transfers, electronic trading) would have on jurisdictional services and that requiring daily balancing and a daily variance charge contradicted the need for additional flexibility in negotiating terms and conditions with prospective shippers. *Id.*

81. *Id.*

82. K N Interstate Gas Transmission Co., Docket Nos. RP95-35-000, *et al.* "Order Accepting And Suspending Tariff Sheets, Subject To Refund And Conditions," 69 F.E.R.C. ¶ 61, 287 (Dec. 2, 1994).

83. *Commission Says No To Market Based Rates For Associated Interruptible Hub Service*, FOSTER NATURAL GAS REPORT, Oct. 6, 1994, at 3.

84. Commissioner Santa mused, "What if Ouachita River demonstrated good alternatives for 50 of the 72 interconnect paths but then offered rate caps or some other means to mitigate its market power with respect to the interconnect paths for which there was no good alternative?" *F.E.R.C. Has Mixed Feelings About Planned Ouachita River Storage Project*, INSIDE F.E.R.C., Oct. 10, 1994, at 15.

85. *Alternatives To Traditional Cost-Of-Service Ratemaking For Natural Gas Pipelines*, "Request For Comments And Alternative Pricing Methods," Docket No. RM95-6-000, 70 F.E.R.C. ¶ 61,139 (Feb. 8, 1995); "Market-based rates for pipelines may result in a barrage of litigation before the pipelines finally lose the battle . . . market analysis for pipelines would be extremely complex and costly and would likely result in findings of significant market power for most pipeline markets." *Utilities Warn F.E.R.C. To Go Easy With Market Rates*, GAS DAILY, Mar. 1, 1995, at 3.

ing, and capacity release transactions. Unique pipeline transportation services have appeared.

F.E.R.C.'s vision of replicating wellhead competition and introducing competition into the pipeline segment of the natural gas industry is complete. But how will the benefits of competition reach the consumer? Currently small gas producers, many local distribution companies, and small end users are not directly using market hubs since they lack transportation capacity and do not ship large volumes of gas on hub facilities.⁸⁶ Even though F.E.R.C. has no jurisdictional control over local distribution companies, it is reasonable to assume that the various state commissions will use F.E.R.C. deregulation of the pipeline industry as a template to deregulate the gas industry at the local level.

PART 3. DEREGULATION OF THE LOCAL DISTRIBUTION COMPANY

The deregulation of interstate natural gas pipelines has dramatically impacted state commissions and the local distribution companies (LDCs) they regulate.⁸⁷ Prior to the deregulation of interstate natural gas pipelines, state commissions relied on the F.E.R.C. to review pipeline gas costs—costs which were then passed through to the LDCs. With the pipelines now functioning as transporters of gas, LDCs are responsible for gas supply and must justify gas supply costs to the state commissions. In turn, the state commissions must determine whether it will review LDC gas costs or adopt a light handed regulatory approach similar to the F.E.R.C. and allow market-based gas costs.

In time, LDCs will mimic deregulated pipelines and terminate or severely curtail their historic gas sales service,⁸⁸ offering unbundled transportation, storage, capacity release, and administrative and financial services.

86. *U.S. Natural Gas Hubs*, *supra* note 21, at 30.

87. "Order No. 636 pulled the bundled merchant service 'safety net' out from under local distribution companies. Now responsibilities are shifting from the pipelines to the LDCs, who must manage their interstate pipeline capacity and the markets behind their city gates," according to F.E.R.C. Commissioner Santa. *Santa: LDCs Turning Leaner And Meaner Under 636*, GAS DAILY, Feb. 28, 1995, at 2.

88. Historically, most LDCs offered only three types of service: residential, firm non residential, and interruptible gas sales service. Except during supply shortages in the 1970s, LDCs did not offer customers the option of transportation, balancing, and storage service for customer-owned gas. Moreover, rates for firm and interruptible sales service to industrial customers were set above cost of service, causing industrial customers to subsidize residential service. This was justified on the basis that industrial customers placed a higher value on the gas. Until recently, this price discrimination between rate classes and bundling of sales with transportation service continued with little complaint from industrial customers because federal authorities kept LDC wholesale gas costs—the bulk of LDC total costs—at low levels compared to alternate fuels. Louis Monacell, *Unbundling Natural Gas Service: Lessons From Virginia*, FORTNIGHTLY, May 11, 1989, at 9 [hereinafter Monacell].

Repercussions from the deregulation of the pipeline industry have altered completely the LDC's sales service (residential, firm, firm non residential and interruptible). Competition is appearing at the local level. With this competition, the LDC will face more risk, more responsibility for gas supply, variable costs of gas transportation and storage, threat of pipeline bypass, and loss of large loads.⁸⁹ To be successful, the LDC now must face the challenge of deregulation and expand beyond its historic sales service role. To be competitive, the LDC must add new services, marketing affiliates, gas procurement and management, pipeline hubs, storage projects, capacity release, transportation, curtailment, and pooling of resources to its current portfolio of services.⁹⁰

Increased Oversight Role of State Commissions

Now that the LDC "can assemble a portfolio of gas supplies, firm transportation, and storage arrangements which are tailored to their individual needs rather than purchasing a 'one size fits all' bundled service package from their pipeline supplier, the LDCs [can] reduce their costs by purchasing only services they need and [so exercise]. . . control over [their] destiny."⁹¹ However, with this increased LDC control comes increased LDC responsibility and risk. Indeed, F.E.R.C.'s lessening of control over pipelines at the federal level has increased regulatory oversight at the local level. The increased oversight role of the state commissions began once the pipelines unbundled, with some state commissions angered by the abdication of F.E.R.C.'s regulatory role and the resulting increased responsibility at the local level.⁹²

89. Competition will jeopardize the industrial load which has historically subsidized the LDC residential forcing prices to increase dramatically to the residential core customer. *Order 636 May Add 34 Cents Per Mcf To Residential Consumers' Bills* from 1993 through 1995 according to the Energy Information Administration in the recent article in *INSIDE F.E.R.C.*, Feb. 28, 1994, at 13.

90. Stephen Huntoon, *636 to the Burnertip?* *FORTNIGHTLY*, July 1, 1994, at 22 [hereinafter Huntoon]. These new services are "unbundled"; basically, "the customer is entitled to choose any, all or none of its gas related services and only pay for those it wants . . . an a la carte approach can save the customer money by allowing him to choose only those services he believes he needs." *Elizabethtown Gas Seeks New Jersey State Board Of Commissioners' Approval Of Additional Unbundled Services*, *FOSTER NATURAL GAS REPORT*, Mar. 31, 1994, at 15. Order No. 636, *supra* note 9.

91. *PIPELINE INDUSTRY*, Jan., 1994, at 13.

92. A number of state commissions and associations have filed a joint brief requesting that the U.S. Court of Appeals for the District of Columbia Circuit reverse and remand Order No. 636, *et al.* Among other issues, the petitioners state that SFV rate design eliminated pipeline incentives for productive efficiency and attack the position that MFV rate design is unjust and unreasonable; petitioners contend that F.E.R.C. should have mitigated GSR costs through the abrogation or modification of jurisdictional contracts or disallowance of some portion of gas supply realignment (GSR) cost recovery from consumers; petitioners also claim that the F.E.R.C. failed to provide a reasoned explanation for preempting state commission jurisdiction over the assignment by LDCs of their capacity entitlements

The same issues addressed by F.E.R.C. are now reappearing at the state level: competition, partial or complete deregulation, market-based rates, market affiliates, incentive plans, unbundling, and new services.⁹³ Paramount among state commission concerns is the fear that deregulation will result in poorer services and higher rates for the consumer.⁹⁴ In an attempt to alleviate this concern, state commissions immediately began by participating in the Order No. 636 proceedings at the F.E.R.C. level "to try to mitigate cost shifting to core distribution customers."⁹⁵

State Commissions Review Gas Purchasing Practices

State commissions fear that the LDC core customers⁹⁶ will pay the costs for unbundling. The LDC "will still be the sole supplier for bundled gas and will continue to be subject to state public utility regulation. The size of the core market is expected to shrink as Straight Fixed Variable (SFV) transportation rate and full passthrough of transition costs make core distribution service more expensive."⁹⁷ Sophisticated noncore customers will leave the LDC, and contract individually for gas supply, bypass, or use alternate fuels to supplement their gas load. Non-core customers will use LDC facilities to transport gas only.⁹⁸

on interstate pipelines. *United Distribution Companies, et al. v. Federal Energy Regulatory Commission*, Joint Brief For Petitioners: Pennsylvania Public Utility Commission, Public Utilities Commission Of The State Of California, Illinois Commerce Commission, State Of Indiana, Office Of Utility Consumer Counselor, Iowa Utilities Board, Public Service Commission of the Commonwealth Of Kentucky, Maryland Office Of People's Counsel, Missouri Public Service Commission, New Jersey Board of Public Utilities, Public Service Commission of the State of New York, Ohio Office Of the Consumers' Counsel, Pennsylvania Office Of Consumer Advocate, Public Service Commission Of West Virginia, Consumer Advocate Division, Public Service Commission Of Wisconsin, The National Association Of State Utility Consumer Advocates, And The National Association Of Regulatory Utility Commissioners; United States Court Of Appeals For The District Of Columbia Circuit, Nos. 92-1485, *et al.*, Mar. 14, 1995 (on file with the *Land and Water Law Review*).

93. See *supra* note 69.

94. State commissions must now embark on a thorough analysis of the need for LDC regulatory reform to allow "more reliable, flexible, efficient and customer service (oriented LDCs)." *NARVC/DOE Gas Panelists Agree That Smooth LDC Operations So Far in 1994 Clear Path for State Regulations to Forge More Flexible Rules*, FOSTER NATURAL GAS REPORT, Feb. 24, 1994, at 16. [hereinafter *Clear Path for State Regulations*].

95. *Id.*

96. Typically, the core customer is served under the LDC's firm sales service tariff, is heat sensitive, uses low volumes of natural gas and has no alternate fuels available — the small residential customer. In contrast, the non core customer takes sales service under a flexible rate schedule, has installed dual fuel equipment, and takes interruptible or firm transportation service — the small commercial or industrial customer. Typically, the small commercial or industrial customer uses more gas than the residential customer. If the LDC serves only the core customer, the LDCs' rates will rise when its customer base shrinks.

97. FOSTER NATURAL GAS REPORT, Feb. 24, 1994, at 10.

98. The New York Public Service Commission listed non core customer criteria: service by contract not tariff, direct customer participation in commodity and capacity markets, alternative fuel

Prior to deregulation, the LDC purchased both gas supplies and transportation from the pipeline and paid for the bundled service. Since the LDC is no longer tied to the pipeline for gas supplies, and may purchase gas from a supplier other than the pipeline, for the first time the LDC is strictly accountable for their gas purchasing policies. Not only is the LDC responsible for choosing their suppliers and for portfolio diversification, they are now answerable to the state commissions for a hindsight review of these decisions. "[C]oncepts of reliability and portfolio diversification and how a portfolio lowers risks in a quantitative manner are simple, technical problems. . . . Without a way to quantify reliability, there can be no rational basis to agree on the 'prudence' of paying for reliability."⁹⁹ Without the F.E.R.C. purchase gas adjustment (PGA) approval process,¹⁰⁰ state commissions question their ability to review utility filings. The LDC must convince the state commissions that its gas supply choices were the most prudent choices it could make.¹⁰¹ State commis-

capability and minimum volume (5,000 dth) or minimum purchase conditions (\$10,000 annually.) *New York Public Service Commission Will Evaluate Report Of Staff On Competitive Market Options For The State's Natural Gas Utilities*, FOSTER NATURAL GAS REPORT, May 26, 1994, at 9.

99. *Id.*

100. Prior to the issuance of Order No. 636, pipeline companies sold natural gas and transported it to their customers for a bundled rate. The cost of gas often was the largest percentage and the most volatile cost of the bundled rate. Purchased gas adjustment (PGA) filings were made at the F.E.R.C. stating the volumes purchased and the price. After review, the F.E.R.C. accepted these costs as prudent. Once approved at the federal level, natural gas companies could then 'pass through' these gas purchase costs to their customers. When Order No. 636 mandated that pipeline companies separate their sales service from their transportation service, F.E.R.C. discontinued its review of PGA filings. The obligation to determine the prudence of purchased gas costs shifted to the state commissions.

101. Many state commissions, including Colorado, are reconsidering the gas cost adjustment (GCA) or purchase gas adjustment (PGA) filings to determine if (1) the GCA/PGA is still necessary; (2) if the GCA/PGA cost components are accurate and the costs should be passed through to the consumers; and (3) if the level of review at the state commission is sufficient now that F.E.R.C. is no longer scrutinizing purchase gas costs at the federal level. "In The Investigation Of Gas Cost And Purchased Gas Adjustment Clauses For Regulated Gas Utilities," Colorado Public Utilities Commission, Docket No. 931-701G, Dec. 9, 1993.

The Colorado Public Utilities Commission refused to eliminate the current GCA/PGA filings but instead scheduled informal conferences to "develop modifications to the GCA filing and review procedures" which will assist the commission in its new oversight role of substantively reviewing these filings. "Commission Order Closing Investigation And Ordering The Development Of Modifications To The Gas Cost Adjustment And Purchase Gas Adjustment Filing And Review Process," Colorado Public Utilities Commission, Docket No. 931-701G, Apr. 12, 1995.

The New Jersey state commission considered whether "review of specific purchased gas costs [should] be abandoned in favor of benchmark regulation, such as performance based regulation." *Commissioner Donald Santa Raises Natural Gas Issues Facing State Regulators In Keynote Address To New Jersey Gas Summit Conference*, FOSTER NATURAL GAS REPORT, July 21, 1994, at 4. At least one state commission (New York Public Service Commission) is reviewing three different approaches for reviewing LDC gas purchasing practices: "pre-approvals, contemporaneous indexing, and post hoc prudence assessments." *New York Public Service Commission Will Evaluate Report Of Staff On Competitive Market Options For The State's Natural Gas Utilities*, FOSTER NATURAL GAS

sions "retain the essential task of making sure that the obligation to serve does not get lost in the pushing and shoving of competition."¹⁰²

Of fundamental concern to all LDCs is the issue of state commissions actively participating in both a pre-review and a post-review of LDC gas supply decisions. Seeking security in this volatile gas market, LDCs support the prior approval of supply and capacity portfolios. F.E.R.C. Commissioner Jim Hoecker agrees. Prudence review standards and procedures "have historically held gas management to a standard of care, if not 'clairvoyance,' that will foil peak market responses in the future. Distributors should no longer be held exclusively to long term firm supply commitments and the premium those arrangements entail."¹⁰³

Integrated Resource Planning

Many state commissions are demanding Integrated Resource Planning (IRP). Long range least cost demand side management (DSM) and supply side forecast planning are an attempt to assert a "pre-review" of gas costs and gas supply expenditures.¹⁰⁴ Utilities are hopeful that a "pre-review" or "pre-approval" of gas costs and gas supply expenditures will decrease the need for audits or hearings. To date, LDCs have filed DSM programs in at least sixteen states with IRP dockets opened in at least eleven states.¹⁰⁵

However, state commissions have rejected generic natural gas DSM and IRP standards in various states because (1) the review of purchased gas adjustment filings accomplishes the same thing as IRP, (2) competition makes IRP incentives less necessary to ensure lower gas prices,¹⁰⁶

REPORT, May 26, 1994, at 20. Without question, pre-approval of the contract portfolio would give the utility a sense of security by "publicly and procedurally committing the commission." Adam Jaffe and Joseph Kalt, *Insight On Oversight*, FORTNIGHTLY, Apr. 15, 1994, at 24-25.

102. See *Clear Path for State Regulations*, *supra* note 94, at 4.

103. Commissioner Hoecker Outlines State And Federal Roles In Coming To Terms With New Economic Circumstances Of Natural Gas Industry, FOSTER NATURAL GAS REPORT, June 16, 1994, at 4.

104. Integrated Resource Planning (IRP) relies on long range least cost demand side management (DSM) and supply side forecast planning to conserve energy and lower energy consumption.

105. *Third Survey of State Developments Shows More Utility Commissions Support Rate and Business Incentives for LDCs*, FOSTER NATURAL GAS REPORT, Oct. 27, 1995, at 11 [hereinafter *Third Survey*].

106. The Colorado Public Utility Commission ended its IRP docket for natural gas utilities when it concluded that generic IRP gas standards were generally opposed. Three reasons were listed by the Commission: (1) natural gas production is a competitive industry; (2) there was no substantial evidence that there is cost effective demand-side management measures for natural gas; (3) there are pending dockets which allow parties to raise issues relating to the prudence of utility purchases of natural gas and the utilities' incentives to purchase the least cost natural gas. "Re: Investigation Into The Development Of The Gas Rules Concerning Integrated Resource Planning," Colorado Public Utilities Commission, Docket No. 92R-287G, May 26, 1994. The IRP issues, in particular supply side man-

and/or (3) the regulatory process may not be an appropriate public intervention vehicle or an effective policy instrument for achieving IRP objectives.¹⁰⁷ Some state commissions have reviewed gas IRP options and have concluded:

[T]hat the need exists for pro-competitive, incentive based policies in the gas sector and that an IRP process should focus more attention on the supply side of LDC operations [Furthermore,] PUCs [Public Utility Commissions] should consider moving toward less regulation to facilitate the movement toward greater competition in the energy industry A participatory or interventionist IRP process can either impede competition, especially when customer choices are obstructed, or be ineffective or redundant when customers have options to override the intended purposes.¹⁰⁸

Thus, the IRP process is no longer seen as the panacea for all natural gas supply concerns.

Incentives

State commissions must consider rate incentives for unbundled LDCs, especially for those LDCs which continue to provide gas sales service to their core customers. Tailoring incentive plans on an individual basis will meet the unique concerns of each LDC. LDCs should actively lobby against state commission attempts to create "generic" incentive plans.

Incentive plans vary from state commission to state commission: retention of a percentage of net revenues, performance based regulation, revenue caps, discounts, and cash incentives.¹⁰⁹

agement, will be reviewed in the Colorado PUC investigation of gas costs and purchased gas adjustment clauses. *See supra* note 101.

107. Not all state commissions are enamored with the IRP process. In an article entitled *A Real Loser*, Illinois Commissioner Ruth Kretschmer states "the reality is that gas IRP is not cost-effective. In fact, it's a clear loser." Ruth Kretschmer and Larry Mraz, *FORTNIGHTLY*, Mar. 1, 1994, at 17. *Third Survey*, *supra* note 105, at 11.

108. *Id.* at 10-11.

109. The New York Public Service Commission is considering whether it should allow the LDC to retain 15% of the net revenues or credits from capacity release and other pipeline services, with 85% passed along to its customers. *New York Public Service Commission Will Evaluate Report Of Staff On Competitive Market Options For The State's Natural Gas Utilities*, *FOSTER NATURAL GAS REPORT*, May 26, 1994, at 9 [hereinafter *New York Public Service Commission*].

Massachusetts Department of Public Utilities issued a generic notice of inquiry and order requesting comments on incentive regulation for natural gas companies to consider performance based

Local Distribution Company (LDC) Marketing Affiliates

Another issue which the state regulators must consider is how to deal with LDC market affiliates.¹¹⁰ Many LDCs will contemplate the formation of an unregulated market affiliate to compete with aggregators and producers. Questions similar to those F.E.R.C. grappled with will arise at the state commission level: Should states adopt an Order No. 497 marketing affiliate-type rule? Is there a potential for cross subsidies? Should core customers bear the risk of the marketing affiliate's offsystem activities if they don't share in the commensurate benefits where the affiliate is profitable? Is there discrimination or favoritism in the LDC's treatment of the marketing affiliate?¹¹¹

regulatory processes. *Third Survey, supra* note 105, at 5. The Commission posits that "incentive regulation ties a utility's level of cost recovery to a predetermined performance indicator or mix of indicators, or to external indices such as a price level or expected productivity levels. It also recognizes the legitimacy of profit as an important motivator for utilities as long as customers benefit beyond levels likely under current regulation . . . three general approaches to incentive regulation: (1) use of a broad-based or narrowly-targeted incentives, (2) price caps, and (3) rate of return bandwidth." *Id.*

The California Public Utilities Commission has approved a tailor made base rate incentive plan for San Diego Gas & Electric Co.; this plan includes (1) a five year review cycle, (2) a cap on revenues subject to changes in inflation, customer growth and productivity, (3) regressive revenue sharing, and (4) performance incentives.

The Georgia Public Service Commission is reviewing plans to promote new business for utilities, including discounts and cash incentives for targeted businesses. For example, "United Cities Gas Co., is currently operating an incentive plan that is applied to new customers that bring an annual load of at least 27,000 Mcf and to existing customers that raise their load by 13,500 Mcf. A 40% discount on marginal cost is attributed to the eligible customer in the first year, 30% in the second year, 20% in the third year, and 10% in the fourth year." *Id.* at 9.

However, at least one state commission (Connecticut Department of Public Utility Control) concluded that it was premature to implement a gas cost incentive mechanism. Indeed, the Connecticut Department of Public Utility Control required utilities to submit a load duration curve, a load factor calculation and a capacity utilization factor for the twelve month period as part of the annual PGA deferred gas cost filing; this additional information might be used as performance standards for future incentive type gas supply cost mechanisms. *Connecticut Regulatory Commission Issues Decision On LDC Issues Stemming From Order No. 636; Determines Need For Unbundling Of LDC Services And Prescribes Mechanisms For Recovery Of Transition Costs*, FOSTER NATURAL GAS REPORT, July 28, 1994, at 13.

110. F.E.R.C. Order No. 497 defined an affiliate as "another person which controls, is controlled by, or is under common control with, such person" and defines marketing as "a sale of natural gas to any person or entity by a seller that is not an interstate pipeline. 18 CFR §161.1 *Inquiry Into Alleged Anticompetitive Practices Related To Marketing Affiliates of Interstate Pipelines*, Order No. 497, 53 Fed. Reg. 22,139 (June 14, 1988), F.E.R.C. Stat. and Regs., Regulations Preambles 1986-1990, ¶ 30,820 (1988), order on rehearing, Order No. 497-A, 54 Fed. Reg. 52,781 (Dec. 22, 1989), F.E.R.C. Stat. and Regs., Regulations Preamble 1986-1990, ¶ 30,868 (1989), order extending sunset date, Order No. 497-B, 55 Fed. Reg. 53,291 (Dec. 28, 1990), F.E.R.C. Stat. and Regs., Regulations Preambles 1986-1990, ¶ 30,908 (1990), order extending sunset date and amending final rule, Order No. 497-C, 57 Fed. Reg. 9 (Jan. 2, 1992), F.E.R.C. Stat. and Regs. ¶ 30,934 (1992), reh'g denied, 57 Fed. Reg. 5,815, 58 F.E.R.C. ¶ 61,139 (1992) *aff'd in part and remanded in part*, *Tenneco Gas v. F.E.R.C.*, 969 F.2d 1187 (D.C. 1992), order on remand and extending sunset date, Order No. 497-D, 57 Fed. Reg. 58,978, F.E.R.C. Stats. and Regs. ¶ 30,958 (1992).

111. *Commissioner Donald Santa Raises Natural Gas Issues Facing State Regulators In Keynote*

One area in which market affiliate issues arise is in offering rebundled sales service (gas supply plus transportation) to customers. Eligibility to market gas through unregulated affiliates in their own service territories raises state commission concerns. Worried about possible abuse, some commissions restrict the LDCs by disallowing the use of market affiliates in the parent's service territories.¹¹²

With no expectation that F.E.R.C. will repeal Order No. 497, state commissions will be tempted to use the F.E.R.C. order as a template for state regulation. This type of regulatory oversight at the state level will inhibit competition. State commissions must be encouraged to use a complaint procedure—if a complaint is lodged by a third party, the state commission will investigate and, if necessary, resolve market affiliate concerns.¹¹³

Unbundling at the State Level

Smaller local distribution company customers behind the city gate are the only major segment of the natural gas industry left to deregulate fully.¹¹⁴ The pressure to unbundle at the local level will be insurmountable for the LDCs and for the state commissions. Indeed, the question is no longer “if” unbundling will occur at the LDC level, but “when.”¹¹⁵ Many unbundling enthusiasts believe that the “unbundling

Address To New Jersey Gas Summit Conference, FOSTER NATURAL GAS REPORT, July 21, 1994, at 4 [hereinafter *Commissioner Don Santa*].

112. *New York Public Service Commission*, *supra* note 109, at 20.

113. The Wyoming Public Service Commission has its complaint procedure set out in Section

114. *Complaints*, of the Commission's Rules of Practice and Procedure. Section 114 (a) states that “Any person, municipality, public utility or the Attorney General may file a complaint regarding any matter under the Commission's jurisdiction.” Section 114 outlines the steps to take for both formal and informal complaints. Wyo. Pub. Serv. Comm'n Reg. § 114 (1994).

114. David Pruner, *U.S. Gas Market Adapting To Commoditization; Electricity Likely To Follow Similar Course*, OIL & GAS JOURNAL, Mar. 13, 1995, at 66 [hereinafter Pruner].

115. Pennsylvania regulators are urged to “permit gas utilities to depart from their merchant role and give customers more competitive gas purchase choices based on market-driven prices and services.” *Panel Votes To Bring 636 To State Level*, GAS DAILY, May 4, 1994, at 5. “The New York State Public Service Commission will . . . hear opinions on taking Order 636 to a state level.” *N.Y. Commission To Hear Ideas On Unbundling*, GAS DAILY, June 8, 1994, at 4. Staff at the Ohio Public Utilities Commission concluded, “the intrastate natural gas industry can no longer operate in a paternalistic manner whereby regulatory edict decides which uses and which consumers of gas are entitled to preferential treatment under varying circumstances and conditions. The LDCs, while retaining upstream capacity and commodity planning and acquisition responsibility for a yet to be fully defined captive or core class of consumers, can no longer conduct operations in the black box fashion of a previous era Staff recommended that it relieve LDCs of a firm obligation to provide commodity in the event of a failure in the transportation of gas supply and adopt . . . a best efforts only obligation.” *Survey Of States Uncovers No Radical Effort To Reform LDC Regulations This Winter, But Ideas For Local Responses To F.E.R.C.'s Restructuring Of Natural Gas Pipelines Are Being Ex-*

of services, each priced at the cost of service, best achieves the goals of promoting financially strong utilities, fair rates to all classes of customers, efficient utility management, and the filtering down of benefits of upstream competition."¹¹⁶

Unbundling at the local distribution company level will begin with open access transportation and continue with the unbundling of LDC storage with storage capacity held by industrials or an aggregator.¹¹⁷ In addition to firm and interruptible transportation and storage service, LDCs will offer released firm transportation, various seasonal peak and off-peak services and emergency transportation.¹¹⁸

LDC open access transportation allows third party shippers to move gas on the LDC distribution transportation system.¹¹⁹ New Mexico was the first state commission to encourage open access transportation, followed closely by Colorado.¹²⁰ Basically, the LDC open access transportation tariffs on file with the state commissions mirror the pipeline-filed F.E.R.C. open access transportation tariffs, promising nondiscriminatory transportation of third party gas at a set transportation rate. Since gas aggregators and marketers have the most to benefit from open access transportation at the local level, it is not surprising that gas aggregators or marketers are confirmed proponents of gas

pled, FOSTER NATURAL GAS REPORT, Feb. 10, 1994, at 8 [hereinafter *Survey Of States*]. Wisconsin Public Service Commission is leaning toward "let[ting] the free market decide," and therefore taking steps "to expand operations beyond their franchise territories and are competing for outside industrial customers." *Id.* at 16; *Election Forces States To Quickening Unbundling Pace*, GAS DAILY, Feb. 14, 1995, at 1.

116. "Unbundling of services at cost-based rates offers the prospect of achieving to a greater degree the policy objectives of regulation. All classes of customers would be treated fairly by being charged rates based on cost of service. If a wide menu of unbundled services is offered, customers would be able to determine what types and levels of service they want. Most importantly, unbundling allows alternate-fuel and gas-on-gas competition to put pressure on LDCs to reduce their costs and rates for all customers and to be innovative in their development of new types of services and in their gas supply acquisition strategies." Monacell, *supra* note 88, at 15.

117. *Unbundling At LDC Level Will Feature New Set Of Problems*, NARUC Told, INSIDE F.E.R.C., Aug. 3, 1992, at 13.

118. *Id.*

119. In fact, transportation by the LDCs has increased dramatically according to the American Gas Association (AGA); "A large percentage of the medium to large LDCs currently offers some type of transportation service The percentage of volumes delivered to commercial, industrial and electric utility customers as transportation climbed steadily from 42.7% in 1988 to 46.6% in 1989, 50.6% in 1990, 53.7% in 1991 and 56% in 1992. *AGA Finds LDC Transportation On Up-swing, Firm Supply Predominating*, INSIDE F.E.R.C., Oct. 31, 1994, at 19. AGA figures for 1993 continue to show increased transportation by the LDCs.

120. Open Access Transportation, NMPUC Rule 660; Open Access Transportation, Colo. PUC 4 CCR 723-1; *Pennsylvania PUC Adopts Guidelines For Treatment Of Order 636 Transition Costs Flowed To LDCs And Proceeds With Development Of Intrastate Natural Gas Transportation Rules In Post-636 Era*, FOSTER NATURAL GAS REPORT, Nov. 4, 1993, at 14.

utility unbundling and service options to small commercial, industrial end users and groups of residential end users.¹²¹

Unbundling And Rebundling The Core/Non-Core Customers

The most difficult problem faced by the LDCs and state commissions is the LDCs' continuing obligation to serve its customers.¹²² Conservative analysts encourage the unbundling of LDC services for non-core customers to allow non-core customers the economic benefits of market priced competition.¹²³ They conclude that unbundled services should be offered to non-core customers, with individual circumstances determining whether such services are offered at cost or at market prices. If services to the non-core customers are unbundled, ideally no state regulatory oversight of gas purchases would exist, as the competitively priced market will replace state regulation.

However, regulatory oversight of gas purchases made for core customers remains essential and indeed, "must necessarily increase in scope."¹²⁴ LDCs are burdened with the duty to serve the core market.

We will never achieve a level playing field contested by like players if one of the players has to bear a load which the others shun: the core. . . . The issue. . . is severely complicated by the cumbersome burden of the market participant with core responsibilities and the social interest in the survival of that entity. . . . [P]roper. . . regulation turns on recognition that the marketplace has. . . [distinguished] between. . . [the core and non-core markets]. . . .¹²⁵

Former F.E.R.C. Commissioner Charles Stalon challenges this position. He advocates that "state regulators. . . rethink an LDC's obligation to serve." This obligation "needs to be modified dramatically, with an eye toward eliminating it after the new industry structure is seasoned."¹²⁶ But

121. *State Commissions Tiptoe Toward Gas Utility Market Innovations*, FOSTER NATURAL GAS REPORT, July 7, 1994, at 10 [hereinafter *State Commissions Tiptoe*].

122. Marketers or aggregators do not have the public utility's statutory obligation to serve customers. Marketers or aggregators have a contractual arrangement with their customers.

123. FOSTER NATURAL GAS REPORT, Feb. 10, 1994, at 11; FOSTER NATURAL GAS REPORT, Feb. 24, 1994 at 16; FOSTER NATURAL GAS REPORT, Mar. 3, 1994, at 31.

124. *New York Public Service Commission*, *supra* note 109, at 20; *Regulators See Need For Utilities To Continue Bundled Service Option*, GAS UTILITY REPORT, Feb. 17, 1995, at 1.

125. *Gas Utility Incentive Rate Mechanisms In California Differentiate Core And Non-Core Customer Mix, Fessler Tells NARUC/DOE Conference*, FOSTER NATURAL GAS REPORT, Feb. 17, 1994, at 3.

126. *In The Post-Order 636 Industry, LDCs Should Concentrate*, INSIDE F.E.R.C., Feb. 14, 1994, at 6 (quoting Former Commissioner Charles Stalon in N.Y. Public Service Commission proceeding (No. 93-G-0932)).

it is not simply a matter of removing the LDC obligation to serve.¹²⁷ Current F.E.R.C. Commissioner Donald Santa raises an additional issue: "If an LDC decides to exit the gas merchant business. . . would state regulators release the LDC from its obligation to be the supplier of last resort and, if so, then who will be?"¹²⁸

Every state commission will eventually deal with the issue of unbundling as LDCs will watch their competitors and imitate them. State commissions will be presented with unbundling issues whether they have initiated proceedings of their own and may emulate resolutions adopted by other state commissions or F.E.R.C.¹²⁹

Not wishing to be limited to the unbundled options, some LDCs prefer the rebundled option — optional merchant-bundled services. Swimming against the unbundling tide, two LDCs have "asked for complete pricing flexibility in the large volume market" by proposing programs which would "wrap together released capacity with gas supply to serve larger end users."¹³⁰ The LDC, acting as agent for optional merchant bundled services, would combine a capacity release and a pooling program, purchase gas, and arrange for transportation to the burner tip, so-called "one stop shopping."¹³¹ The LDC would buy competitively priced gas for both the pool and its own system supply requirements, with the lowest cost gas going to system supply needs and the higher priced supplies to the pool.¹³² At the same time, it would acquire firm capacity on upstream pipelines that either the LDC or another party is releasing.¹³³ Then the

127. Stalon also questions whether "LDC ha[s] a continuing obligation to provide sales service to a customer that wants only transportation service; or what will be the response to pressures to mandate that LDCs offer transportation on terms comparable to that embedded in retail sales service; and what will be the response when an LDC seeks to recover transition costs, or stranded costs, associated with gas supply that were intended for a customer that no longer wants to purchase from the distributor?" FOSTER NATURAL GAS REPORT, Mar. 3, 1994, at 31.

128. *Commissioner Donald Santa*, *supra* note 111, at 4.

129. *NARUC's Winter Meeting Held In Washington, D.C. Features F.E.R.C. Commissioner Don Santa And Others Reporting On Initiatives To Facilitate The States' Grasp Of Expanding Competitiveness Of Retail Natural Gas Market*, FOSTER NATURAL GAS REPORT, Mar. 3, 1994, at 31.

130. *New York LDCs Propose Bundling Released Capacity With Gas Supply*, INSIDE F.E.R.C., July 5, 1993, at 3. Some LDCs want to offer bundled services to those customers not interested in customized service. *Maryland Moves Forward On LDC Unbundling*, GAS DAILY, Feb. 16, 1995, at 1.

131. Several companies have expanded this concept to include "one stop energy shopping" by adding oil and liquids marketing and the marketing of electric power. *CNG Executive Has Big Plans For 'One Stop (Energy) Shop'*, ENERGY DAILY, Jan. 20, 1995, at 1; *Transco Establishes Power Marketing Unit; Initial Operations In Eastern U.S.*, INDEPENDENT POWER REPORT, Dec. 30, 1994, at 8; *Petroleum Marketer Forms Power Marketing Division For California*, INDEPENDENT POWER REPORT, Sept. 23, 1994, at 6.

132. *Id.* See *Petroleum Marketer Forms Power Marketing Division for California*, INDEPENDENT POWER REPORT, Sept. 23, 1994, at 6.

133. *Id.* See *Transco Establishes Power Marketing Unit; Initial Operations in Eastern U.S.*,

LDC could schedule the gas to its city gate and if requested by the pool customer, to the burner tip. As agent it would receive all bills for gas supply and released capacity and would send the pool customer a single bill for the whole service.¹³⁴

Streaming is a form of rebundling which allows the LDC to dedicate specific gas supplies to certain customers or markets. Many LDCs claim that "streaming is necessary to participate effectively in competitive markets. However, core customers must be assured of no adverse impact, must be shown to be better off, and must be protected from undue discrimination."¹³⁵

The issue of unbundling at the local distribution company level is currently before the Wyoming Public Service Commission in an application filed by K N Energy, Inc. to set up a "pilot program to allow choice between gas suppliers."¹³⁶ Dr. Curtis Cramer, an economics professor at the University of Wyoming, supports retail natural gas competition but stated that while "deregulation could reduce costs to consumers, there is also a risk that the PSC would simply be inviting competitors to come into the local distributing companies' existing markets and take the best customers."¹³⁷

New Services

In order to be competitive, the LDCs must rethink the services they historically offered (residential, firm non-residential, and interruptible gas sales service) and consider offering new, additional unbundled services.

INDEPENDENT POWER REPORT, Dec. 30, 1994, at 8.

134. *Id.* at 4. See *supra* note 132.

135. *New York Public Service Commission Will Evaluate Report Of Staff On Competitive Market Options For The State's Natural Gas Utilities*, FOSTER NATURAL GAS REPORT, May 26, 1994, at 19.

136. K N Energy, Inc. "In The Matter Of The Application Of K N Energy, Inc. For Authority To Initiate A Choice Gas Service Program Whereby Customers Can Choose Among Competing Gas Suppliers In A Competitive Market Place And to Make Certain Related Changes In K N's Tariff," Docket No. 30004-GT-95-37, Sept. 8, 1995. The application is summarized as follows:

This Application seeks to initiate a program for unbundling K N's natural gas supply services at the retail level in order to allow customers the opportunity to select among competing gas suppliers. The sale of natural gas supplies as a commodity would be unbundled from K N's transportation and delivery services in a way that would make it economical and easy for small customers to participate. K N further proposes to make changes to its existing transportation tariff and to provide a more equitable method for the recovery of transition costs associated with moving from a regulated environment to a competitive marketplace.

Id. Hearings on the pilot program will be held before the Wyoming Public Service Commission in January with a Commission decision possible by April 1996. *Natural Gas Deregulation Poses Opportunities, Risks*, CASPER STAR TRIBUNE, Sept. 13, 1995, at B1 [hereinafter *Natural Gas Deregulation*].

137. *Natural Gas Deregulation*, *supra* note 136.

Regulators are actively encouraging LDCs to offer new services. For example, the New Jersey Board of Regulatory Commissioners' guidelines required LDCs (1) to eliminate any minimum volume restrictions, (2) to remove alternative fuel requirements, (3) to allow the aggregation of small customer transportation availability, (4) to offer storage balancing and standby services, and (5) to offer a mechanism for notifying in-state customers of available interstate capacity.¹³⁸ In response to these guidelines, LDCs filed new natural gas transportation service options, without size limits or alternative fuel requirements.¹³⁹ Since New Jersey Natural Gas Co. won commission approval to unbundle transportation services from sales, it has implemented a menu of services including firm transportation, interruptible transportation, supply aggregation, storage and balancing, and interruptible sales. It removed any minimum volume restrictions, and alternate fuel requirements, and it was permitted to aggregate when feasible to make small customer transportation available.

Threatened by the loss of its historic customer base, and pressed to compete with aggregators and marketers, many LDCs will (in addition to their sales service) offer additional services to attract and/or keep customers.¹⁴⁰

138. *Third Survey*, *supra* note 105, at 10.

139. *Id.*

140. These additional services may include the following:

Market-based pricing of LDC balancing services for transportation customers. The balancing charges will be capped at the utility's undiscounted fully embedded cost until questions about market power are answered. *State Commissions Tiptoe*, *supra* note 121, at 10.

Flexible contract rates for gas;

Gas marketing programs for excess capacity in nonpeak periods;

Aggregation and Pooling—One modified natural gas supply pool tariff for onsystem transportation customers aggregates on behalf of qualified customers commingled gas supplies, from each interstate pipeline, that may be purchased either on a short term or long term basis. The supplies may be coupled with interruptible transportation service or firm transportation service secured through capacity release for delivery to the city gate. Pool customers are free to purchase from the pool or from other marketers/brokers depending on which option is the least cost supply alternative. One unique element of the proposed service is an "un-firm quoted price and customer nomination procedure provided through an 800 toll free telephone number . . . the actual price will be slightly higher or lower than the requested price but the change will not be significant." *Id.* at 14.

Negotiated gas sales program;

Offpeak firm service for sales and transportation;

Firm transportation program that includes an initial allotment of 40 MMcf/d of capacity for delivery of gas purchased by small commercial and industrial customers from third party suppliers. Participating suppliers are required to accept, under prearranged capacity releases at maximum rates, a portion of the LDC's firm transportation capacity in interstate pipelines that is equivalent to their customers' peak day use. *Id.*

Prearranged transportation and storage capacity releases provided that the designated replacement shipper matches the highest bid in the interstate pipeline's bidding process. *Order 636 Implementation End-Users Concerns About Problems That Direct Assignment*, INSIDE F.E.R.C., Mar. 7, 1994, at 16.

It is no longer appropriate to ask the question, "Will local distribution companies deregulate?" Now the question is, "When?" Local distribution companies will grapple with the issues which plagued pipelines (unbundling, competition, market-based rates, market affiliates, open access transportation) and struggle with their position of gas supply provider of last resort. Faced with these deregulation issues, state commissions must decide whether to retain broad authority over the retail services by forcing the LDC to remain as principal aggregator and merchant or give up that authority to the unregulated market.¹⁴¹ State commissions will be tempted to adapt F.E.R.C. resolutions to these issues.¹⁴² Deregulation at the local level will accomplish the goal of competition from wellhead to burner tip by bringing the low-priced well head gas to the consumer.¹⁴³ It will also increase state commission regulation over LDC activity. The LDC's work is before them—they must convince state commissions that market-based regulation, *not* increased state commission regulation is the best way to accomplish F.E.R.C.'s goal.

The Canadian Experience

Many of these issues were raised and resolved almost ten years ago in Canada. The "Halloween Agreement" deregulated the Canadian natural gas industry by lifting the controls on natural gas commodity prices, allowing market forces to determine prices, and removing barriers between willing buyers and sellers.¹⁴⁴ This agreement forced TransCanada Pipe Line to eliminate its merchant function, unbundling its services in 1987. Eastern Canadian LDCs entered into pure transportation contracts with

Capacity release along F.E.R.C. Order No. 636 pipeline capacity release—release on a firm, offpeak firm, or recallable basis, and the term of each release would be set based on the utility's determination of the period over which the capacity will not be needed for other services.

Capacity release option of direct capacity assignment to LDCs' customers without going through the F.E.R.C. Order No. 636 bidding process.

Hedging, futures and swaps—In order to remain competitive, LDCs must utilize "financial instruments such as futures, options and swaps to provide ... supply security to its customers." *Id.* at 13. Most state commissions do not have specific rules prohibiting the hedging of gas supply or recovery of hedging costs. While it appears that most LDCs have not realized the economic benefit afforded them by engaging in futures, options, swaps and hedging, it is apparent that these financial tools will have to be added to the LDC's portfolio of services.

Electronic Data Services—use of the EBB to locate space on interstate pipelines and real time measurement to allow the sale/transport of gas for shorter periods.

141. Huntoon, *supra* note 90, at 25.

142. See Parts 1 and 2 of this article for a discussion of the F.E.R.C. directed resolutions to these deregulation issues.

143. Practically speaking, competition from wellhead to burnertip is competition from the point of production to the point of consumption.

144. Agreement Among The Governments Of Canada, Alberta, British Columbia and Saskatchewan on Natural Gas Markets And Prices, October 31, 1985.

TransCanada Pipe Line. The National Energy Board ordered "operating demand" capacity release to provide direct access for end users to supply in Western Canada.¹⁴⁵ Gas deregulation was implemented during a period of supply surplus. The new regulatory framework facilitated competition between end users' direct purchase and LDC system supply. This encouraged competition, and gas-on-gas competition was vigorous. The LDCs' traditional long term supply could not compete with short term direct purchase supply.¹⁴⁶

Similar to our experience, Canadian agents, brokers, and marketers were new players in the deregulated gas market—players who were dealing directly with the LDCs' customers.¹⁴⁷ The new players had market knowledge and access to information and communication technology; they offered new services—storage, load balancing, information and control systems, financial risk management.¹⁴⁸ Canadian LDCs were concerned that the new players would capture other segments of their business—billing, customer service, and appliance rental. Finally, Canadian LDCs concluded that direct purchase did not threaten their business so long as this supply security was not compromised.¹⁴⁹ At that point, many Canadian LDCs embraced the new players by forming broker/aggregator subsidiaries. Instead of competing with the new players, they recognized new business opportunities.

145. *Id.*

146. In 1985, Canadian LDC system supply equaled 100% of the volumes distributed; in 1995, Canadian LDC system supply equaled 40% of the volumes distributed. Interview with Jim Hamilton, Director of Policy Development Marketing, Consumer Gas Co. (Mar. 8, 1995).

147. In Ontario, there are two direct purchase options through which customers purchase pipeline capacity and obtain gas from nonutility suppliers: 1) the transmission option is used by large volume industrial customers who purchase their own pipeline capacity and manage their own gas supply; and 2) buy/sell option is used by all customer classes (approximately 250,000 residential customers). The buy/sell option works in the following manner:

A customer enters into a contract with a producer or an intermediary (broker or marketer) who agrees to supply gas to the utility at a specified delivery point as agent of the customer. Once the agency agreement is in place, the LDC is required to purchase the gas supply at a predetermined buy/sell reference price which is set by the Ontario Energy Board based on the utility's weighted average cost of gas less any relevant transportation and administrative charges. At the burner tip, the retail customer is charged the same bundled retail rate as the sales or system customer. [T]he distribution service provided by the utility is the same for all customers. A buy/sell customer, however, benefits when its agent is able to purchase alternate gas supplies at a lower cost than the utility's buy/sell reference price. The net gain is shared between agent and direct customer pursuant to terms of the agency contract."

Ontario's Direct Gas Purchase Program Includes Substantial Residential Customer Base, FOSTER NATURAL GAS REPORT, Feb. 23, 1995, at 11.

148. *Id.*

149. There were two direct purchase customers in 1986; this number increased to two hundred twenty-five thousand in 1995. Of that number, approximately 190,000 are residential customers. Speech Notes, Jim Hamilton, Director, Policy Development Marketing, Consumers' Gas Company (hereinafter *Speech Notes*).

The Canadian LDCs also faced the issue of their obligation to supply gas to end users. Even though Canadian LDCs do not have a statutory obligation to serve,¹⁵⁰ most acknowledged a “political” obligation to serve: public policy considerations dictate supplying residential customers and LDCs could not selectively shut off customers.¹⁵¹

The typical Canadian LDCs’ 1995 gas portfolio bears no resemblance to their portfolio prior to deregulation. Facing down the major deregulation issues, the Canadian LDCs have redefined the scope of their business and their risk. Their concern with the regulatory treatment of gas costs—gas price volatility, management, prudence review, and indexed supply contracts—has been met by the knowledge that a more competitive market place requires less regulatory intervention.¹⁵²

In conclusion, the Canadian natural gas deregulation experience illustrates the path that LDCs may take with the deregulation of natural gas pipelines in the United States. A review of the Canadian experience will teach us that LDCs can benefit by embracing their competitors, by increasing their transportation load and by charging market-based rates. To accomplish these positive goals, state commissions must give LDCs the appropriate business tools to compete in the unregulated market place: unbundled and discounted transportation rates, assignment of excess capacity and the end of subsidization of residential customers,¹⁵³ or incentive rates if the LDCs continue to serve core residential customers. Just as deregulation has shifted the responsibility from interstate pipelines to the LDCs, so has the responsibility for regulatory review shifted from the F.E.R.C. to the state commissions.

PART 4. DEREGULATION OF THE ELECTRIC INDUSTRY

The electric industry is one of the last major industries in the United States to be deregulated, following the telephone, airlines, and natural gas industries. With assets of \$185 billion, it is more than twice as large as the natural gas industry, encompassing 3000 utility companies. (There are only 300 natural gas LDCs!)¹⁵⁴

150. Public Utilities Act, R.S.O. ch. P. 52, § (1990) (Can.).

151. *Speech Notes*, *supra* note 149.

152. *Speech Notes*, *supra* note 149. Consumers’ Gas Company, Canada’s oldest and largest LDC, has adopted the following philosophy: (1) We make money by distributing gas, not buying and selling gas; (2) We should not be perceived as a barrier between the customer and cheaper gas; (3) We will acquire a portfolio of least cost gas at moderate risk for customers favoring LDC gas supply; (4) We will facilitate access by any customer to alternate supplies provided that the supply security is not threatened and no subsidy from system supply customers is required.

153. Mary O’Driscoll, *Utility Regulators Must Cut LDC Shackles, Says Hare*, ENERGY DAILY, Feb. 7, 1992, at 3.

154. David Pruner, *U.S. Gas Market Adapting To Commoditization; Electricity Likely To Follow*

Spurred on by its experience of deregulating the natural gas industry and by the electric power shortages during the winter of 1993-1994,¹⁵⁵ F.E.R.C. has begun the restructuring of the electric power industry.¹⁵⁶ Electric utility executives wonder if the deregulation of the electric industry will follow the pattern established by the F.E.R.C. for the deregulation of the natural gas industry.¹⁵⁷ F.E.R.C.'s natural gas unbundling experience will influence both the course and timing of electric power industry deregulation.¹⁵⁸

Competition, Competition, Competition

Electric utility executives decry the restructuring of the electric power industry, emphasizing the differences between the electric and natural gas

Similar Course, OIL & GAS JOURNAL, Mar. 13, 1995, at 66.

155. "The performance of the still-regulated electricity industry during the 1993-94 winter was almost as disappointing as the gas industry's performance during the winter of 1976-77. The P-J-M pool, serving the middle Atlantic states, avoided a catastrophic regional blackout only by implementing brownouts and rolling blackouts, and by convincing the federal government, the governments of several states, and virtually all private businesses in the region to cease all operations for a day." Richard J. Pierce, *The State Of The Transition To Competitive Markets In Natural Gas And Electricity*, 15 ENERGY L.J. 323, at 324-25 (1994).

156. F.E.R.C. began its restructuring of the electric industry on a case by case basis by requiring open access tariffs which provide comparable transmission service before granting the authority to conduct market based electric power transactions. Heartland Energy Services, Inc., Docket Nos. ER94-108-000, ER94-475-000, 68 F.E.R.C. ¶ 61,223 (Aug. 9, 1994); F.E.R.C. extended its comparability of service requirement to include a comparability of pricing—transmission pricing must meet the traditional revenue requirement, must reflect comparability, but may promote economic efficiency, fairness and practicality. *F.E.R.C. Powers Ahead With Plans For Competitive Electric Future . . .* ENERGY DAILY, Oct. 27, 1994 at 1. *See also*, Tex-La Electric Cooperative of Texas, Inc., Docket No. ER94-4-000, *et al.*, 69 F.E.R.C. ¶ 61,269 (Dec. 1, 1994); American Electric Power Service Corp., 67 F.E.R.C. ¶ 61,168 (May 11, 1994); El Paso Natural Gas Co., Docket Nos. RP88-184-015, *et al.*, 69 F.E.R.C. ¶ 61,155 (Nov. 3, 1994); Inquiry Concerning the Commission's Pricing Policy for Transmission Services Provided by Public Utilities Under the Federal Power Act, Docket No. RM93-19-000, 69 F.E.R.C. ¶ 61,086 (Oct. 26, 1994).

F.E.R.C. has already told Regional Transmission Groups (RTG) that they must meet these comparability standards set forth in the Mega Notice of Proposed Rulemaking (Mega-NOPR). Southwest Regional Transmission Assn., (Order Conditionally Approving Regional Transmission Group Filing) Docket No. ER94-1381, 69 F.E.R.C. ¶ 61,100 (Oct. 27, 1994) and Western Regional Transmission Assn., Order Accepting Compliance Filing, Docket No. ER94-1288, 71 F.E.R.C. ¶ 61,158 (May 16, 1995).

Stung by comments of a piecemeal approach to deregulation, F.E.R.C. has recently issued the electric Mega NOPR, Promoting Wholesale Competition Through Open Access Non Discriminatory Transmission Services By Public Utilities, 70 F.E.R.C. ¶ 61,357 (1995); *Recovery Of Stranded Costs By Public Utilities And Transmitting Utilities*, 4 F.E.R.C. Stats. & Regs., Proposed Regulations ¶ 32,507 (1994).

157. Mary O'Driscoll, *Take Your Medicine, Enron's Kinder Tells Electric Utilities*, ENERGY DAILY, Mar. 8, 1995, at 1; *PSJ's Rogers Expects Electric Comparability To Mirror Gas Industry*, ENERGY DAILY, June 10, 1994, at 3.

158. *Santa: F.E.R.C. No Moses, But Policies Are Guide For New Power Industry*, INSIDE F.E.R.C., Jan. 23, 1995, at 1 [hereinafter *F.E.R.C. No Moses*].

industries and expressing fears that restructuring will harm reliability, increase consumer rates, cause electric utility bankruptcies, and generally bring about the demise of the electric power industry.¹⁵⁹ Electric utility executives are resorting to the rhetoric of the early natural gas restructuring days; F.E.R.C. action amounts to a Pearl Harbor attack on the industry.

Unconvinced by these electric utility executive naysayers,¹⁶⁰ F.E.R.C.'s vision for the energy industry rests on competition. Indeed, "the common thread" that runs through all of (F.E.R.C.'s) initiatives in the post-Energy Policy Act era is "the goal to foster greater competition in wholesale power markets by means of open access to transmission."¹⁶¹

While F.E.R.C. admits that this is an evolutionary process, it plans to develop "rules of the road" for the restructured electric industry.¹⁶² If the deregulation of the electric industry mimics that of the natural gas industry, what specifically would that include? Since the goal for the electric industry is competition, the components which fostered competition in the natural gas industry will appear in the electric industry restructuring: comparability, open access transmission, transition costs, market-based rates, unbundled services, and direct access to customers. In response to deregulation, electric utilities will be streamlined, and downsized, merged, and acquired. Electric utilities will compete with power marketers for their traditional customers. State regulators will consider incentive plans and utility rate structure reform. Electricity will become a commodity.

Square Peg, Round Hole?

There are physical, statutory, and competitive differences between the electric power industry and the natural gas industry. However, are these differences so monumental that F.E.R.C. should abandon deregulation of the electric industry, or alter the path it found successful for the natural gas industry?

Fundamentally, physical differences between electric power and natural gas exist. Electricity is produced by generators varying in age, size, and fuel type; pooling of these units has allowed utilities to cut costs.¹⁶³ Electricity is currently limited to regional markets, flows at

159. Bruce Radford, *Price or Service?*, FORTNIGHTLY, Sept. 1, 1994, at 5.

160. F.E.R.C. *No Moses*, *supra* note 158, at 1.

161. *Id.*

162. ENERGY DAILY, Jan. 20, 1995, at 4 (quoting F.E.R.C. Commissioner Donald Santa, at the January 17 meeting of the Western Energy and Communication Association and Los Angeles Power Producers Association.).

163. Pooling "permits a utility peaking at a given time to use the temporary excess capacity of a

nearly the speed of light, and cannot be stored except at great expense.¹⁶⁴ Wholesale generation of electricity is priced competitively, but there is currently little transmission competition.¹⁶⁵ In comparison, natural gas is produced from standard wellhead equipment, commands a nationwide market, is traded as a commodity, and moves on the pipeline transportation grid at 15 to 25 miles per hour. It can be stored and is priced competitively both by the producer, the transporter, the marketer, and when possible, the distributor.¹⁶⁶

In addition to these physical differences, there are statutory differences. The F.E.R.C. regulates the electric industry under the Federal Power Act (FPA), amended by the Public Utility Regulatory Policies Act of 1978 (PURPA) and the Energy Policy Act (EPAAct).¹⁶⁷ It regulates the natural gas industry under the Natural Gas Act (NGA), amended by the Natural Gas Policy Act of 1978 and the Natural Gas Wellhead Decontrol Act of 1989.¹⁶⁸

While limits are placed on F.E.R.C. authority, and state jurisdiction is recognized by both the FPA and the NGA,¹⁶⁹ fundamental differences in F.E.R.C.'s jurisdictional and regulatory authority exist over electric transmission lines and natural gas transportation pipelines.¹⁷⁰ First, elec-

company peaking at a different time [E]ach intertied utility experiences a decrease in the quantity of generating and reserve capacity required to support the system." *Electricity: A New Regulatory Order?*, Congressional Research Service 102d Cong., 1st Sess. 71 (1991), at 67.

164. Donald F. Santa and Clifford S. Sikora, *Open Access And Transition Costs: Will The Electric Industry Transition Track The Natural Gas Industry Restructuring?*, 15 ENERGY L.J. 273, 278 (1994). [hereinafter *Santa*].

165. Office Of Technology Assessment, *Electric Power Wheeling and Dealing: Technological Considerations For Increasing Competition* 36-37 (1989); William L. Massey, *Transition To Competition: Federal Initiatives And Industry Opportunities*, ELECTRICITY J., Jan. 1993, at 28.

166. *Santa*, *supra* note 164.

167. Federal Power Act (FPA), 16 U.S.C. §§ 791a-825u (1988); Public Utility Holding Company Act (PUCHA), 15 U.S.C. §§ 79z to 79z-6 (1988); Energy Policy Act of 1992 (EPAAct), Pub. L. No. 102-486, §§ 711-31, 106 Stat. 2776 (1992).

168. Natural Gas Act of 1977 (NGA), 15 U.S.C. § 717 (1988); Natural Gas Policy Act of 1978 (NGPA), 15 U.S.C. §§ 3301-3432 (1988); Natural Gas Wellhead Decontrol Act, Pub. L. No. 101-160, 103 Stat. 157 (1989).

169. Section 201(a) of the FPA states that F.E.R.C. authority extends "only to those matters which are not subject to regulation by the States." Section 201(b) states that unless expressly reserved under part II or part III of the FPA, F.E.R.C.'s jurisdiction does not extend "over facilities used for the generation of electric energy or over facilities for the transmission of electric energy consumed wholly by the transmitter." 16 U.S.C. §§ 824f(a), 824b(1) (1988). Section 1(b) of the N.G.A. states that F.E.R.C. jurisdiction does not extend "to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas." 15 U.S.C. § 717(b) (1988).

170. *Santa*, *supra* note 164, at 288; PSI Energy, Inc., 55 F.E.R.C. ¶ 61254, at 61,811 (1991) ("The Commission does not have siting or certification authority with respect to transmission lines under Part II of the Federal Power Act [T]he Commission's authority is limited to review of the

tric utility construction—the siting and authorization of transmission facilities—is controlled by state not federal regulation.¹⁷¹ In comparison, F.E.R.C. authorizes interstate pipeline construction.¹⁷² Second, F.E.R.C. has the specific authority to order electric transmission service (with certain limitations), but F.E.R.C. can not order access to interstate natural gas transportation service.¹⁷³ Until recently, these statutory and regulatory differences have slowed the competitive evolution in the electric power industry. Bolstered by their experience of deregulating the natural gas industry, F.E.R.C. is unwilling to be thwarted by these physical and regulatory differences. Chanting the deregulation mantra of competition, comparability, and market-based rates, F.E.R.C. has focussed on the similarities of the electric power industry and the natural gas industry.

Round Peg, Round Hole

Without minimizing the differences, numerous similarities between the electric power industry and the natural gas industry exist. Both are energy industries, with a public service obligation. The players in the electric power industry deregulation are similar to those in the natural gas industry deregulation: bundled generator/transporter/distributor, independent generators, power marketers, state commissioners, and F.E.R.C. commissioners. Both comprise of three functions: generation (production), transmission (transportation), and distribution. Currently, the electric power industry is “bundled” or vertically integrated—similar to a pre-restructured natural gas company, with all three functions in one corporate entity.

Further, a monopoly exists at the transmission and distribution functions of the electric industry (similar to the bundled natural gas industry) which hinders competition.¹⁷⁴ Transmission and distribution functions remain effective monopolies and therefore “continue to be subject to traditional forms of regulation because (they) must be integrated in order to

rates, terms and conditions of jurisdictional agreements to ensure that they are just and reasonable and not unduly discriminatory or preferential.”); 16 U.S.C. § 824(a) (1988) (Federal regulation shall extend to part of electric utility business “which consists of the transmission of electric energy in interstate commerce and the sale of such energy at wholesale in interstate commerce” However, such federal regulation extends “only to those matters which are not subject to regulation by the states.”)

171. *Id.*

172. 15 U.S.C. §§ 717f(b), 717f(c), 717f(e), 717f(h) (1988).

173. Section 211 of FHA; Policy Statement Regarding Regional Transmission Groups, 3 F.E.R.C. Stats. & Regs. ¶ 30,976, at 30,869 (1993). “[S]ection 211 of the FPA . . . gave the Commission general authority to order electric utilities to provide transmission to, *inter alia*, other electric utilities.” *Id.* [EPA] has significantly expanded the Commission’s authority to order transmission services under section 211.

174. Santa, *supra* note 164, at 282.

achieve society's preferred level of reliability, and because economies of scale dictate that duplication is an inefficient way to provide the necessary services."¹⁷⁵ Faced with comparability, open access and unbundling, electric industry transition costs¹⁷⁶ will range between \$200 to \$300 billion dollars.¹⁷⁷

Convinced by these similarities, F.E.R.C. has set out to deregulate the electric industry in record time.¹⁷⁸ In some respects, the deregulation of the electric industry may be easier than the natural gas industry restructuring.

First, Congress has already made the decision to mandate equal access to transmission lines (the comparability "golden rule") and to create a competitive wholesale market. Second, most state PUCs have already made the decision to rely on competitive contracting as the primary vehicle for adding new generating capacity. Finally, the F.E.R.C. has already authorized firms to charge market-based wholesale electricity prices when it finds that the firms confront sufficient competition."¹⁷⁹

175. Santa, *supra* note 164, at 282. "[I]n theory, the fact that the transportation function is a monopoly means that transmission-owning electric utilities and natural gas pipelines are able to maintain market power in the transportation product market, and may exercise market power in the product markets for delivered gas or electricity as a result of transportation market power." *Id.*

176. Electric utility transition costs will arise from (1) utility assets, regulatory assets and other costs . . . made uneconomic as a result of competition in generation markets; and (2) loss of market to competing sellers with access to new purchasers through enhanced electric transmission services; and (3) contracts to purchase power from third parties at above market prices." *Id.* at 295 n.109.

177. Richard J. Pierce, *The State Of The Transition To Competitive Markets In Natural Gas And Electricity*, 15 ENERGY L.J. 323, 337 (1994) [hereinafter Pierce].

178. Deregulation of the natural gas industry occurred over a number of years: beginning with fully integrated companies (production, transportation, distribution) offering wellhead to burnertip services, the 1970s surplus and shortages, Natural Gas Wellhead Decontrol Act of 1979, the 1987 Order No. 436 voluntary open access on gas pipelines, Order No. 500, and culminating in 1992 with Order No. 636 which unbundled pipeline sales from pipeline transportation service. Using natural gas deregulation as a guide, many believe that the deregulation of the electric industry will be completed in less than five years. However, there are some who warn that the upheaval is so great, that the electric industry will do everything possible to delay the inevitable. Dennis Wamstead, *Production Costs Point To Competitive Winners—Moody's*, ENERGY DAILY, Nov. 1, 1994, at 3; Pierce, *supra* note 177, at 338-49.

179. Pierce, *supra* note 177, at 329; EPCA §§ 711-726; American Electric Power Service Corp., 67 F.E.R.C. ¶ 61,168 (May 11, 1994) (Order on Rehearing and Clarification) stated that an open access tariff must offer third parties access on a comparable basis, under the same terms and conditions as the transmission provider's use of the system and the cost of transmission must not be unduly discriminatory or anticompetitive. See also Jeffery D. Watkiss and Douglas W. Smith, *The Energy Policy Act of 1992: A Watershed For Competition In The Wholesale Power Market*, 10 YALE J. ON REG. 447 (1993); Paul Joskow, *Regulatory Failure, Regulatory Reform, and Structural Change In The Electrical Power Industry*, Brookings Paper On Econ. Activity, Microeconomics 125 (1989); *Environmental Action v. F.E.R.C.*, 996 F.2d 401 (D.C. Cir. 1993); *Town Of Norwood v. F.E.R.C.*, 962 F.2d 20 (D.C. Cir. 1992).

In the natural gas industry, F.E.R.C. broke through this transportation/distribution monopoly by mandating competition, through comparability of service and unbundling.¹⁸⁰ Convinced by its experience deregulating the natural gas industry that the transmission/distribution monopoly will be erased by introducing competition to mitigate market power, F.E.R.C. took its first step to deregulate the electric utility industry on March 29, 1995 with the electric Mega-Notice of Proposed Rulemaking (Mega-NOPR).¹⁸¹

The Electric Mega-NOPR

The electric Mega-NOPR "Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services By Public Utilities" and "Recovery Of Stranded Costs By Public Utilities And Transmitting Utilities" commits F.E.R.C. to a policy of reliance on market driven factors rather than regulatory control in its desire to restructure the electric industry.¹⁸²

As a basis for F.E.R.C.'s proposed rules, it states that:

We find that utilities owning or controlling transmission facilities possess substantial market power; that, as profit maximizing firms, they have and will continue to exercise that market power in order to maintain and increase market share, and will thus deny their wholesale customers access to competitively priced electric generation; and that these unduly discriminatory practices will deny consumers the substantial benefits of lower electricity prices.¹⁸³

As currently written, the proposal affects only the transmission of power to wholesale customers (big industrial plants), not retail customers (residential homeowners).¹⁸⁴ However, F.E.R.C. expects that opening wholesale competition may force the unbundling of the electric industry at the local level, and in time, lower the cost of electricity for all customers.¹⁸⁵

180. See *supra* text accompanying note 3.

181. Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities, Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Docket Nos. RM95-8-000 and RM94-7-001, Notice of Proposed Rulemaking, 60 Fed. Reg. 17,662 (Apr. 7, 1995), 4 F.E.R.C. Stats. & Regs. ¶ 32,514 (1995) (to be codified at 18 C.F.R. pt. 35) [hereinafter NOPR].

182. NOPR, *supra* note 181, ¶ 33,052.

183. *Id.*

184. *Id.* ¶¶ 33,078 and 33,081.

185. *Id.* ¶ 33,082.

The NOPR proposes specific changes. First, NOPR requires public utilities to file open access non-discriminatory transmission tariffs. These tariffs must provide point-to-point, network, and ancillary services. F.E.R.C. would set rates for service in the *pro forma* generic tariffs based on a standard formula, using company-specific Form 1 data.¹⁸⁶ Second, NOPR requires Public utilities to take transmission service for their own wholesale transactions under their open access tariff.¹⁸⁷ Third, NOPR allows the public utilities to have an opportunity to recover stranded investment associated with the open access tariff requirement. Recognizing that it would be unfair to penalize utilities for reliance upon past regulatory structure, F.E.R.C. would permit the recovery of "legitimate and verifiable" stranded investment from departing wholesale customers, provided that the utility could demonstrate "reasonable expectation" of continuing to serve a departing customer.¹⁸⁸ Taking note of its natural gas deregulation experience, the Mega-NOPR does not propose to terminate existing contracts but rather, proposes that all existing wholesale contracts remain in full force and effect until naturally terminated.¹⁸⁹

The key element in allowing market forces to work is the pricing terms and conditions under which transmission facilities are used. This Mega-NOPR addresses transmission access and transmission pricing;¹⁹⁰ it doesn't address generation or distribution. Support of this Mega-NOPR will vary depending on the utility's competitive generation prices and the position of the utility as a high price or low price producer of energy in an open transmission grid.¹⁹¹

Electricity As A Commodity

Energy must be viewed as a commodity. As natural gas has become a commodity, traded on NYMEX (New York Mercantile Exchange) and

186. Point-to-point rates would be "postage-stamp" rather than "distance sensitive." *Id.*; F.E.R.C. proposes a two step process for filing the open access tariffs: (1) each public utility which owns or operates a transmission system will be required to file an open access tariff in generic format to be effective sixty days after the effective date of the final rule; (2) Sixty-one days after the final rule becomes effective, utilities are free to propose Section 205 changes in the rates, terms and conditions in the generic tariff and customers are free to file Section 206 complaints seeking changes. *Id.* ¶ 33,146.

187. *Id.* ¶ 33,980.

188. *Id.* ¶ 33,117.

189. *Id.* ¶ 33,093.

190. *Id.* ¶ 33,078.

191. Initial comments on the NOPR were due on August 7, 1995 and reply comments were due on October 4, 1995. If the natural gas deregulation pattern is followed, the final order expected in the spring of 1996 will likely be quite similar to the March 29th NOPR, requiring mandatory unbundling of services and the provision of open access transmission services.

subject to derivatives,¹⁹² so will electricity.¹⁹³ "[A] spot market in electricity will evolve. . . [w]ith prices revealed; a commodity market will follow. With spot and commodity markets will come the power to reallocate risk and make capital investment more productive."¹⁹⁴

NYMEX is developing an electric futures contract.¹⁹⁵ An electric futures market will allow the purchase and sale of specified quantities of commodities for future delivery at a specific location.¹⁹⁶ Prices will be determined by competitive bidding. The actual transaction prices will be instantly disseminated throughout the world and serve as a benchmark for commodity value.¹⁹⁷ According to NYMEX, "introducing risk management tools into the electric industry is a natural outgrowth of the competition currently being fostered."¹⁹⁸ While F.E.R.C. insists that it does not have jurisdiction over derivative instruments in power markets, it is concerned about investment banking firms seeking marketer status so they can conduct derivative transactions—futures, options, and other risk-hedging mechanisms.¹⁹⁹

Generation

Currently, the electric power industry is a vertically integrated industry: generation, transmission, and distribution owned by one corporate entity. This structure is incompatible with competition. Therefore, competition and open access transmission will drive the unbundling of the electric utility industry into three separate entities—generation, transmission, distribution—causing a vertical disintegration of the electric utility industry.²⁰⁰ While the move to separate generation assets from their transmis-

192. Derivatives "are complex hedging instruments, such as futures, options, and swaps, used to defray the risk of changes in interest rates, stock prices, foreign-exchange rates and commodities prices." *Citizens, Lehman Bros. Form Venture For Power Marketing, Derivatives*, INDEPENDENT POWER REPORT, Sept. 23, 1994, at 7.

193. "The coming commoditization of electric power will unbundle price risk from electricity as a 'good.' If utilities don't do it, new market intermediaries will." Mango, Bob and John Woodley, *The Inevitable Commoditization Of Electric Power Markets*, FORTNIGHTLY, Nov. 1, 1994, at 27. [hereinafter Mango].

194. *Id.*

195. Lori A. Burkhardt, *NYMEX Prepares To Launch The Electric Future*, FORTNIGHTLY, July 15, 1994, at 39. See also Mango, *supra* note 193, at 27.

196. See Burkhardt, *supra* note 195.

197. *Id.*

198. *Id.*

199. *Moler Has Concerns On Derivatives, But Says F.E.R.C. Lacks Jurisdiction*, ELECTRIC UTILITY WEEK, Jan. 23, 1995, at 11; *Massey Urges F.E.R.C. Look At Derivative Instruments, Decide Whether To Worry*, ELECTRIC UTILITY WEEK, Jan. 16, 1995, at 2.

200. *N.Y. Sees End Of Vertical Integration; Backs Stranded-Investment Recovery*, ELECTRIC UTILITY WEEK, Jan. 9, 1995, at 5 [hereinafter N.Y.]; Richard J. Rudden, *Competition In The Electric*

sion and distribution units is supported by state commissions,²⁰¹ independent power producers,²⁰² and power marketers, it is feared by many vertically integrated investor owned utilities. Investor owned utilities foresee competition forcing unbundling, increased business risk, the spin off and downsizing of corporate entities, the need for unbundled market flexible rates, the erosion of their historic customer base once direct access or customer choice is attained at the distribution level, and the overriding concern of stranded costs.²⁰³

There have been a number of proposals to disintegrate the electric utility.²⁰⁴ Each recognizes the issue of transition costs. "[P]art of managing the regulatory transition to a more competitive environment is providing a mechanism for natural gas pipelines and electric utilities to recover legitimate costs incurred to honor sales obligations under the old regime."²⁰⁵ It is the issue of transition costs, which to a large extent, will shape the deregulation of the electric power industry.

Transmission: Functional Unbundling

The electric Mega-NOPR does not demand that a vertically integrated electric utility unbundle corporately.²⁰⁶ However, by demanding open access, comparable service and comparable pricing for transmission, it is

Markets, ENERGY DAILY, Oct. 28, 1994, at 1; FORTNIGHTLY, Oct. 1, 1994 at 38; *North American National Independent Power Groups Stress Separating Utility Functions*, INDEPENDENT POWER REPORT, June 17, 1994, at 8.

201. See *N.Y.*, *supra* note 200.

202. *AES: Real Reform Requires Splitting Generation From Transmission And Distribution*, ENERGY DAILY, July 12, 1994, at 1 [hereinafter AES].

203. *Id.*

204. *AES*, *supra* note 202. One plan suggested by an independent producer requires the utility "to sell off its generation assets, and to sign a long-term contract, which would include an immediate rate reduction of 5 percent to buy power from the purchaser. The utility would be allowed to sell its generation assets as a single entity, in packages or as individual units; it would be guaranteed at least book value for all of these assets [I]f the contract prices were set at a level that equaled the long-run marginal cost of generation . . . there would be no stranded asset cost charged to ratepayers. A long-term contract would increase the value of the plant to potential purchasers, and they would bid a higher price for the plant to the selling utility. After the contracts expire, the facilities must negotiate new contracts at competitive market rates and terms or must sell on the spot market." This plan would preclude direct access or retail wheeling - either would allow the customer to bypass these contracts for lower priced generation options. Richard A. Abdoo, *Wisconsin Electric's View Of A More Competitive Industry*, FORTNIGHTLY, Feb. 15, 1995, at 17. Wisconsin Electric envisions "splitting today's vertically integrated utilities into natural monopolies and competitive entities;" it also considered "re-regulated entities." *Id.* *NIEP Says Transmission Charges Best Way To Recoup Stranded Investment*, INDEPENDENT POWER REPORT, Dec. 16, 1994, at 5. The National Independent Energy Producers trade group wants utilities to divest themselves of generation assets, placing any unrecovered, stranded costs in transmission-related charges to be paid by all users of the transmission system. *Id.*

205. See *Santa*, *supra* note 164, at 295.

206. See NOPR, *supra* note 181, ¶ 33,080. "F.E.R.C. does note that many utilities might ultimately choose to disintegrate." *Id.*

pushing the electric utility into functional unbundling. Functional unbundling requires: (1) the transmission facilities owner take transmission services for all of its new wholesale transactions under the same tariff under which third parties take similar service; (2) open access tariffs must separately state rates for transmission and ancillary service components of each transmission service that it provides; and (3) the utility must rely upon the same electronic network as its transmission customers to obtain transmission information about its system.²⁰⁷

F.E.R.C. recognizes that the NOPR will necessarily establish two separate transmission arrangements: a wholesale transmission tariff filed with F.E.R.C. and retail transmission regulation governed by state commissions.²⁰⁸ Anticipating retail wheeling,²⁰⁹ F.E.R.C. will exercise jurisdiction over the sale of unbundled transmission capacity in interstate commerce but exercise no control over the sale of unbundled generation at retail.²¹⁰

Stranded Costs

Having learned first-hand of the upheaval caused by ignoring stranded costs until late in the deregulation of natural gas industry (Order No. 636),²¹¹ F.E.R.C. determined not to repeat that error again. In the Mega-NOPR, F.E.R.C. asserts its duty to address stranded costs.²¹² Having reassured the electric utility industry that they will be able to recover stranded costs, F.E.R.C. discussed three alternatives in the electric Mega-NOPR for allocation²¹³ and then chose to allocate the stranded costs di-

207. *Id.* ¶¶ 33,080-33,081.

208. *Id.* ¶ 33,081.

209. End users arranging for their local utility to purchase generation from a third party supplier of the end user's choice on terms negotiated by the end user, transmit that energy in interstate commerce, and then resell it as part of a bundled retail sale to the end user (buy-sell transaction). *Id.* ¶ 33,082.

210. *Id.*

211. In its initial attempt at deregulating the natural gas market, F.E.R.C. did not address the transition costs associated with the burden of uneconomic take-or-pay contracts negotiated by the pipelines during a natural gas shortage period in the 1970s. *Order No. 436, Regulation Of Natural Gas Pipelines After Partial Wellhead Decontrol*, III F.E.R.C. Stats. & Regs., Regulations Preamble ¶ 30,665 at 31,492-93 (1985), *vacated and remanded sub. nom.*, *Associated Gas Distributors v. F.E.R.C.*, 824 F.2d 981 (D.C. Cir. 1987), *cert. denied*, 485 U.S. 1006 (1988).

212. F.E.R.C. first raised this issue in its original stranded cost recovery NOPR - issued months before the Mega-NOPR. *Recovery Of Stranded Costs By Public Utilities And Transmitting Utilities*, 59 Fed. Reg. 35,274 (July 11, 1994) (to be codified at 18 C.F.R. § pt. 35). F.E.R.C. uses the date, July 11, 1994, as a benchmark for determining old or new contracts. *Id.*

213. The three choices were as follows: (1) Do nothing, thereby allocating the burden to shareholders; (2) Allocate the stranded costs directly to the departing wholesale customer; (3) Allocate the costs over a wider group of customers - all customers, all transmission customers, or various other

rectly to the departing wholesale customer. This is exactly opposite of the position taken by F.E.R.C. in the deregulation of the natural gas industry.²¹⁴ F.E.R.C. then proposed to divide recovery of stranded costs into two categories: old wholesale power sales contracts (pre July 11, 1994) and new wholesale power sales contracts (post July 11, 1994).²¹⁵

F.E.R.C. proposes that recoverable stranded costs should be based on a 'revenues lost' approach rather than a hypothetical cost of service approach.²¹⁶ The utility has an obligation to mitigate its stranded costs by marketing stranded power supplies at competitive market value. Recoverable costs include not only the actual costs incurred by the utility in the expectation of continuing to serve the customer but also includes a return on equity at the rate which was previously approved by F.E.R.C. in the wholesale contract.²¹⁷

F.E.R.C. has refused to consider retail stranded cost determinations. It stated that it will only exercise authority to recover stranded costs occasioned by retail wheeling in the instance in which a state regulatory authority lacks the authority to do so. However, it asserts that it does have authority over stranded costs caused by 'retail-turned-wholesale' customers (municipalizations).²¹⁸

Comments filed on the original stranded cost NOPR preview the comments to be expected in August on the Mega-NOPR. Investor-owned utilities (IOU) state that "recovery of stranded costs would promote parity pricing."²¹⁹ Taking exception to F.E.R.C.'s position that it lacks jurisdic-

combinations. See NOPR, *supra* note 181.

214. F.E.R.C. justified spreading stranded costs over all existing transmission customers because its seven year delay in addressing transition costs had caused significant upheaval in the industry. See Order No. 636, *supra* note 6.

215. See NOPR *supra* note 181. F.E.R.C. will allow stranded cost recovery for contracts entered into after July 11, 1994 only if the contract contains explicit stranded cost recovery provisions. *Id.* Therefore, firm requirements customers will be responsible for planning their own power needs beyond the end of any particular contract term, and the wholesale supplier will be free at the end of such contract term to sell its power on the open market. F.E.R.C. will allow stranded cost recovery for contracts entered into prior to July 11, 1994 if the old contract includes a stranded cost provision or if the utility can demonstrate that it had a reasonable expectation of continuing to serve a departed customer. *Id.* A reasonable expectation standard will be decided on a case by case basis using a totality of the circumstances test. Factors such as whether the customer had access to alternate suppliers, the parties actual course of negotiation and performance, and communications regarding system planning will be used. *Id.*

216. *Id.*

217. *Id.*

218. F.E.R.C. will define local distribution facilities pursuant to Section 201(b)(1) of the Federal Power Act. 16 U.S.C. § 824(b)(1)(1988).

219. *Opposing Sides Remain Firmly Entrenched In Stranded-Cost Struggle*, INSIDE F.E.R.C., Feb. 6, 1995, at 8.

tion over stranded retail costs, the IOUs further conclude that costs associated with generation facilities—including stranded costs—could be included in F.E.R.C.-jurisdictional rates.²²⁰ However, the American Public Power Association states that, “[S]o-called stranded cost recovery is a matter that is already dealt with satisfactorily in existing contracts, and recovery of retail stranded costs should be dealt with by the states.”²²¹

Some state commissions view stranded costs as a state issue. They argue that federally mandated competition caused the decrease in generation and distribution assets—assets which are regulated by the states.²²²

*Distribution: Deregulation At The Local Level: Retail Wheeling-Poolco-Buy/Sell*²²³

With electric prices higher than the national average unbundling will appear at the local level. Retail wheeling—unbundling of electric power at the retail level—is a concept which is already being considered by a number of state commissions.²²⁴ Out in front, the California Public Utilities

220. *Id.*

221. Mary O'Driscoll, *FERC Learned The Wrong Lesson From Gas Deregulation*, *ENERGY DAILY*, Dec. 12, 1994, at 1.

222. “Stranded investment may be dealt with by a . . . mixture of . . . causing the utility to write-off, write-down or sell (at market value) some of its assets; recovering stranded investment through entry and exit fees on “defectors” from the utility; . . . recovering stranded investment in transmission and distribution charges on all consumers . . . ; and allowing utilities to find new profitable markets to offset their shares of the stranded investment, such as offering onsite generation services, cogeneration, DSM, . . . at a profit.” *Forum*, *FORTNIGHTLY*, Nov. 15, 1994, at 50 (quoting Marcia Weeks, Chairman, Arizona Corporation Commission).

223. *Retail Wheeling* provides direct access to power supply for all consumers. The California “Blue Book” retail wheeling proposal (“Proposed Policies Governing Restructuring California’s Electric Services Industry and Reforming Regulation, R.94-04-031, I.94-04-032, Apr. 20, 1994) would allow large customers with transmission levels above 50 kilovolts to buy their own electric power through retail wheeling. By 2002, all customers would be allowed to choose their electric supplier. The plan calls for an unbundling of services and rates and a division of customers into core and noncore groups. Customers may choose to receive bundled services from their certificated utility or to require only those services they need to receive electric power they purchase elsewhere. The California proposal couples market pricing for competitive services and performance-based ratemaking for existing services. California electric companies have found this controversial industry restructuring plan acceptable; although they want to push back the date for full retail wheeling from 2002 to 2008. *California Utilities Cautiously Embrace Restructuring Proposal Maybe It Isn’t Such A Bad Idea After All*, *ENERGY DAILY*, June 9, 1994, at 1 [hereinafter *Maybe*].

Poolco is an independent regional power pool company to manage the wholesale power market. Utilities would continue to own their own lines but *Poolco* would manage their use. *Poolco* would provide a spot power price and would flow the power through distribution companies to retail customers in the same bundled way customers now receive it. As each company joins *Poolco*, it would separate transmission grid assets from distribution assets, using a principle based on where system congestion can be created.

Buy/Sell is a transmission-distribution transaction which will allow eligible customers to choose from any supplier of electricity inside or outside California, including their local utilities.

224. Phillip S. Cross, *Retail Wheeling—Happy Motoring For State Regulators?*, *FORTNIGHTLY*,

Commission has proposed the "Blue Book" plan which will restructure the electric power industry, allowing direct access to all customers (regardless of their size) by 2002.²²⁵

Proponents of competition, direct access and therefore, retail wheeling are nonutility generators, power marketers,²²⁶ and large electric customers. Opponents of retail wheeling are utility management who fear the end of the regulated monopoly,²²⁷ conservationists and environmentalists

June 15, 1994, at 46; *Wheeling Update*, FORTNIGHTLY, Sept. 15, 1994, at 49; Bruce Radford, *Regulatory Dreams*, FORTNIGHTLY, Nov. 15, 1994, at 6. California has taken the lead on retail wheeling.

States whose state commissions or state legislature have addressed retail wheeling are as follows:

Connecticut (Retail Electric Transmission Service, Docket No. 93-09-29, Jan. 27, 1994; Final decision: retail wheeling would not serve the public interest because of excess generating capacity and potential stranded investment. September 9, 1994; Informal Roundtable Studies of Retail Wheeling Ordered, January 17, 1995, Docket No. 94-12-13);

Illinois (Changes in the Structure of the Electric Energy Industry, No.94-R1, April 20, 1994);

Massachusetts (Proposal to "Rent" Transmission and Distribution Access to Customers or Power Suppliers, DPU 94-162, *Mass. Energy Agency Puts Forward Retail Wheeling Plan*; *Wire Rental*, ELECTRIC UTILITY WEEK, Jan. 9, 1995, at 11.);

Michigan (Experimental Program for Consumers Power Co. and Detroit Edison Co.; Association of Businesses Advocating Tariff Equity, 150 PUR4th 409, 1994);

New York (Competitive Opportunities, Case 93-M-0229, August 9, 1994);

Nevada (State Legislature - Limited Retail Wheeling Statute, S.B. 231 — *Fears About State Reciprocity Have Killed The Prospects For Retail Wheeling This Year*; *Nevada Legislator Nixes Retail Wheeling, For Now*; *Fears About State Reciprocity Have Killed The Prospects For Retail Wheeling This Year*, ENERGY DAILY, Mar. 13, 1995, at 4; State Commission - Docket No. 94-6024);

Ohio (State Legislature - H.B. 676);

Texas ("Self Service Wheeling," Houston Lighting & Power Co., Docket No. 12138, Dec. 22, 1993);

Utah (PacifiCorp, No. 90-2035-01, June 1, 1993);

Vermont (Citizens Utilities Co., Docket No. 5625, March 28, 1994);

Wisconsin (Docket No. 05-EI-114).

Bruce Radford, *Regulatory Dreams*, FORTNIGHTLY, Nov. 15, 1994, at 6.

225. See *Maybe*, *supra* note 223.

226. Power marketers encourage competition alleging that limiting transmission access is an industry-wide problem requiring an industry-wide solution. Mary O'Driscoll, *Power Marketers Seek Generic Comparability Rule*, ENERGY DAILY, Feb. 17, 1995, at 1. F.E.R.C. determined that an affiliate will not be permitted to collect market-based rates for bulk-power sales unless its transmission owner has filed an open-access transmission tariff offering comparable services (Hermiston Generating Company, L.P., Docket No. ER94-950-000, 69 F.E.R.C. ¶ 61,035 (Oct. 13, 1994)). W. Lynn Garner, "Comparability" Required For Affiliate Bulk-Power Sales, FORTNIGHTLY, Nov. 15, 1994, at 63. Asserting that quarterly activity and affiliate activity reports inhibit competition, power marketer affiliates are seeking a "lighter" regulatory hand, more akin to their natural gas marketer affiliate brethren under Order No. 497. Mary O'Driscoll, *Utilities Look To Enter Power Marketing Business*, ENERGY DAILY, Nov. 7, 1994, at 1.

227. Understandably, utility management are concerned about the erosion of their traditional customer base, and stranded costs, including suggestions that stranded costs be 'shared' by wheeling customers, core customers, and utility shareholders. Kenneth W. Costello, Robert E. Burns, and Youssef Hegazy, *How State Regulators Should Handle Retail Wheeling*, FORTNIGHTLY, Feb. 15, 1995, at 26-28. However, the fear of retail wheeling "seems to be declining within the industry as more people realize that discount pricing and expanding customer bases are the keys to survival in the newly competitive power marketplace." *Survey Says Fear Of Retail Wheeling On Decline Within*

who fear the end of the electric power societal programs such as demand side management (DSM) and integrated resource planning (IRP).²²⁸

Unbundling of electric power at the local level will give rise to those issues which are also being faced by state commissions in the unbundling of the natural gas industry: competition, affiliate relationships, unbundled tariffs, market-based rates, stranded costs, incentive plans, integrated resource plans and demand side management, core and non-core customers, and the obligation to serve.

Of primary importance to the electric industry is the distribution company's obligation to serve. Competition and direct access alters the traditional obligation to serve. The obligation to serve is "the foundation for the concept of regulation. However, it presumes that the utility is a monopoly."²²⁹ Under the California Blue Book plan, utilities would retain their duty to serve customers who continue to receive bundled, tariffed utility service.²³⁰ But the duty to serve direct access customers would be modified to avoid seriously hampering a utility's ability to plan for and reliably serve its remaining customers.²³¹

State/Federal Jurisdiction

Electric power industry unbundling issues are compounded by the necessity to resolve state/federal jurisdictional conflicts allowing competition at the local level and full implementation of direct access proposals. Once unbundling of the vertically integrated electric power industry—driven by comparable service requirements and open access tariffs—occurs at the transmission level, F.E.R.C. will have to identify the line between state and federal jurisdiction over retail transmission. F.E.R.C. recognizes the need for redefinition of regulatory responsibilities between state and federal regulators: "Jurisdictional questions are very very difficult because historically we haven't had to define those boundaries."²³²

Utility Industry, ELECTRIC UTILITY WEEK, Jan. 16, 1995, at 5.

228. The surcharges and central planning necessary to support IRP and DSM have no place in a competitive market. However, conservationists and environmentalists' objectives will be met when competition encourages the use of fuel-efficient new generating technologies. Charles M. Studness, *Political Alliances And The Struggle Over Competition*, FORTNIGHTLY, Sept. 1, 1994, at 28; Eric Hirst, *Retail Competition May Put DSM Out Of Business*, FORTNIGHTLY, Sept. 15, 1994, at 14.

229. John G. Strand, *Retail Wheeling: A View From Michigan*, FORTNIGHTLY, Sept. 15, 1994, at 29, 33.

230. See *Maybe*, *supra* note 223.

231. *Id.* at 29. The proposal also requires a twelve month notice period for those customers who wish to return to bundled service status or for those bundled service customers who wish to return to direct access status.

232. Chris Newkumetg, *Moler Anticipates Sweeping Rule To Restructure Electric Industry*, IN-

The uneven application of federal/state authority over the transmission and sale of electricity increased jurisdictional issues. F.E.R.C.'s exercise of its new authority under the EPAct to order open access transmission on a comparability-of-service basis encourages competition in the electric industry.²³³ The FPA grants the F.E.R.C. authority to determine just and reasonable rates for the transmission of electricity in interstate commerce.²³⁴ However, F.E.R.C. is still prohibited from mandating retail wheeling, and it does not have power to authorize construction or expansion of transmission lines.²³⁵

The federal/state jurisdictional issue has spawned greater obligations for state regulators to revise traditional modes of regulation to accommodate the emergence of a robust, competitive, wholesale power market. However, the state commissions are not in agreement on how to redefine regulatory responsibilities between state and federal regulators. A Colorado Commissioner believes that "an orderly and equitable shift to a market-based electric service industry will require federal intervention."²³⁶ A Wyoming Commissioner believes that "regional and subregional groups—working together to tackle regional and subregional problems—offer better hope of good, rational solutions."²³⁷ An Ohio Commissioner believes that the federal/state joint board process should be used to develop federal/state policies based on contractual relationships.²³⁸ An Illinois Commissioner believes that the issues should be resolved by the states; ". . . restrict[ing] F.E.R.C.'s responsibility to interstate movement of energy, with all other questions (stranded investment, access charges,

SIDE F.E.R.C., Jan. 30, 1995, at 1.

233. Energy Policy Act of 1992 (EPAct), Pub. L. No. 102-486, §§ 711-31, 106 Stat. 2776 (1992).

234. Currently most electricity is transmitted as a bundled sales transaction giving little opportunity to resolve jurisdictional disputes over transmission rates. Courts have interpreted "interstate broadly to include any transaction within a single state if the transaction makes use of interconnected transmission lines in which the potential exists for commingling with electricity from an out-of-state source." Practically speaking, these holdings give F.E.R.C. "plenary power over virtually all electricity wholesales in the continental United States." Pierce, *supra* note 177, at 331.

235. Not everyone agrees that states have the authority to order retail wheeling. "The FPA grants the F.E.R.C. jurisdiction to regulate transmission of electric energy in interstate commerce, and several Supreme Court decisions have made it clear that all transmission of electric energy by utilities connected to interstate transmission grid is transmission in interstate commerce." FORTNIGHTLY, Nov. 15, 1994, at 55 (quoting Christine Alvarez, Commissioner, Colorado Public Utilities Commission); F.E.R.C. General Counsel Tomasky believes that it is a "question of interpretation." *Restructuring F.E.R.C., States Struggle To Find Common Ground As West Starts Restructuring*, ELECTRIC UTILITY WEEK, Jan. 23, 1995, at 8 [hereinafter *States Struggle*] (quoting Susan Temasky, General Council).

236. See *States Struggle*, *supra* note 235.

237. *Id.*

238. *Id.*

timing for retail wheeling, and so on) left to local government, where the impact of those decisions would be most keenly felt."²³⁹

The federal/state issue embroiled in the competitive realignment of the electric power industry will be tempered by the "new federalism" led by the Republican Congress which intends to give more policy responsibility to the states. Power sales are increasingly accorded the rights of the open market, the electric power industry is operating under new transmission access regulations, and the F.E.R.C. is acting as arbiter in debates over multi-million dollar wheeling transactions across state lines.²⁴⁰ Perhaps Congress will end this debate with legislation which delineates the boundaries of federal and state jurisdiction.

It is possible for F.E.R.C. and the states to work out these jurisdictional issues. Certainly, F.E.R.C.'s disclaimer of authority over retail wheeling in its open access transmission NOPR was a step forward. However, the courts may have to resolve the electric power jurisdictional issues by establishing a new "bright line test that confers on the F.E.R.C. plenary power over the rates and conditions of service for all transactions that use a high voltage transmission line. . . , including retail wheeling transactions and transactions that purport to involve only transmission from one point to another in a single state."²⁴¹ Perhaps nothing short of an amendment to the FPA giving F.E.R.C. the same powers with respect to transmission projects that it has under the NGA for gas pipeline projects will resolve the conflict.²⁴²

Deregulation Of The Energy Industry

The F.E.R.C. vision of competition and market-based rates in the natural gas industry discussed in Parts 1, 2, and 3 of this paper will be repeated in the deregulation of the electric power industry. Electric utilities will be disintegrated; generation, transmission, and distribution functions will be unbundled. In response to competition, electric utilities will downscale, spinoff, and spin down assets. Open access, comparability of service and rates will allow competition on wholesale transmission lines.

239. *Id.*

240. Mary O'Driscoll, *Electric Utilities Running Counter To The 'New Federalism' Trend*, ENERGY DAILY, Jan. 3, 1995, at 1.

241. Pierce, *supra* note 177, at 331.

242. *Id.* at 334. A related movement is afoot to increase competition in the electric power industry by repealing PUHCA (Public Utility Holding Company Act) and PURPA (Public Utility Regulatory Policies Act). *Libertarian Group With Ties To GOP Calls For Repeal Of PUHCA, PURPA*, ELECTRIC UTILITY WEEK, Jan. 9, 1995, at 5; *Industrials Draw Line In The Sand On PUHCA, PURPA*, ENERGY DAILY, Feb. 2, 1995, at 1.

Retail wheeling, poolco, or buy/sell arrangements will allow customers of all sizes direct access to more inexpensively priced electric power. Electricity, like natural gas, will become a commodity offered on NYMEX with futures trading. By reviewing the process followed by the F.E.R.C. in the deregulation of the natural gas industry, the path through the deregulation of the electric power industry will become evident.