Regulatory Reform and the Economics of Contract Confidentiality:

The Example of Natural Gas Pipelines

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eregulation of any industry carries with it a host of challenges, not only for industry participants, but for regulators and customers as well. One such challenge relates to the information needs of the market: in a market in which the tailoring of transactions to fit customers' diverse needs is desirable and efficient, how can regulators introduce policy that does not unduly restrict the flexibility needed in negotiations to craft product offerings?

The corresponding policy choices center around filing requirements and, especially, the appropriate degrees of confidentiality and disclosure of negotiated agreements. The applicable

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The principle of full disclosure has only superficial appeal as a general guide to policy, though it is appropriate in some specific contexts. Take the case of uniform commodity-like goods, where public disclosure of the full content of transactions may be economically conducive to market performance. Such markets often require full disclosure even without regulatory compulsion, in order to reduce transaction costs for market participants. Trade tends to be conducted in standardized units, often on public exchanges. This exchange-market model may not, however, be the right one for some regulated industries.

Natural gas pipelines provide a good example for discussing contract confidentiality. When it comes to pipeline service offerings that may be tailored by mutual agreement to customers' needs, the model of full disclosure is just plain wrong. It is true that gas pipelines transport a commodity, but the range of services they actually provide shippers can be extremely heterogeneous.

Some background about regulatory reform in this industry helps set the stage for understanding the issues involved. The initiative by the Federal Energy Regulatory Commission (FERC), under RM95-3 and RM95-4, to update filing and reporting requirements, streamline rate-case processing, and remove outdated instructions related to gas pipeline regulation is an important step toward fulfilling the objectives of the ongoing reform of the nation's natural gas policies. These policies have been motivated by the public's interest in an efficient and productive natural gas industry (see sidebar). In particular, the public has an abiding interest in generating as much value as possible from the resources it commits to the production, transportation, storage, and distribution of natural gas, and an interest in minimizing the cost—the commitment of scarce resources—incurred to produce any given level of quality of these services. These criteria of economic efficiency are appropriate goals for public policy.

One of the remaining challenges in the reform of the nation's natural gas policies is the better matching of pipeline service offerings to customers' needs. In general, this requires contracts that are negotiated between pipelines and their customers. The traditional approach, in which the regulator tries to specify one or two sizes that "fit all," simply cannot hope to maximize the value of pipeline services to customers.

A related challenge is posed by the simple fact that contract negotiations commonly involve commercially sensitive information. This raises policy questions for the regulator appropriately concerned with matters of nondiscrimination and equity.

By reforming its reporting requirements and procedures, the FERC is acknowledging the link between these and economic efficiency. But what are the economically proper boundaries between confidentiality and disclosure when commercial information is embodied in contracts between a utility and its customers? Are there applicable public policy principles by which the FERC can

The Evolution of Natural Gas Policy

Over the past 15 years, natural gas policy has undergone a gradual but systematic transformation, moving toward a market structure that reflects increased competition. Regulatory reform of the natural gas industry began with the Natural Gas Policy Act (NGPA) of 1978, which was passed in response to the dramatic interstate market of the 1970s. The NGPA's principal feature was the gradual decontrol of wellhead prices, which introduced the forces of competition into the wellhead gas market.

Since the enactment of the NGPA, the Federal Energy Regulatory Commission has acted to unbundle competitive activities such as gas sales and storage from the regulated transmission function. With Order 436 and Order 500, the FERC moved pipelines into adopting open-access transportation policies for both local distribution companies and end users. Under such policies, customers are granted the right to convert bundled pipeline sales contracts to transportation contracts. These regulatory changes culminated in Order 636, which required interstate pipeline companies to separate their merchant and transportation functions; to structure their transportation services in such a way as to offer comparable service to all shippers; and to create a secondary market for pipeline capacity through the capacity release mechanism.

collect the information needed to fulfill its mandate with as little distortion as possible to the efficient performance of natural gas transportation and storage markets?

Contracts and Competition

Business contracts are a common method of organizing economic activity. They bind parties together for a period of time and permit the development of efficient economic relationships that would not otherwise be available. In particular, when a buyer and/or seller needs to commit relation-specific assets—those that cannot be redeployed, except at substantial cost or loss in revenue, to serve other markets or uses—con-

tracts permit such economically desirable investments to be made. Absent binding contractual obligations, one party to a relationship may think: "Now that you have invested your capital in serving me, I am going to change our relationship by changing what I pay you, when I pay you, and/or how much I buy from you—and good luck finding another trading partner." Contracts counteract such opportunistic incentives and risks by specifying in advance the parameters of a business relationship.

Contracts are also important in reducing transaction costs-managerial, legal, and other costs among parties in situations where the nature of the good or service sold could require renegotiation of price, availability, and other

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conditions of sale if transacted over and over again on a spot basis. Contracts can also serve to allocate risk among parties by specifying and committing parties to contingent pricing formulae, payment terms, volumetric obligations, expense sharing, buyout provisions, emergency adjustments, and myriad other terms and conditions. Because risks can take many forms, and buyers and sellers can have diverse needs and desires when it comes to bearing risks, the bulk of a contract is often devoted to establishing how the risks of future contingencies will fall among the parties.

Competitive markets achieve economic efficiency by allowing the forces of supply and demand to determine the price and nonprice contractual terms by which buyers and sellers commit themselves to each other. With appropriate price and nonprice signals, buyers and sellers can make efficient decisions about the production and use of goods and services. Competition tends to push sellers' prices toward equality with the costs of the services to which sellers commit themselves, thereby eliminating excess profits and disciplining sellers to be efficient in what they offer to the marketplace.

Contracts are essential to the operation of competitive markets. Both sides to transactions in competitive markets routinely agree to confidentiality provisions in contracts they sign. While the economics behind such provisions is complicated, their persistence in competitive markets indicates clearly that they are a key contributor to the market's efficient operation. Were that not so, their use probably would not be so widespread.

For regulated markets, the economics of contracting provides a framework for policy design. Proper public policies regarding disclosure generally lie along a continuum describing the types of goods and services and the characteristics of contracting parties. At one end, goods and services are standardized readily and efficiently, and buyers and sellers have what are essentially the same contractual needs. Public disclosure of the terms and conditions of parties' agreements under such conditions can improve market performance. At the other end, transactions are tailored efficiently to meet the varied marketplace demands of buyers and sellers. At that end of the continuum, public disclosure of the terms and conditions of parties' agreements can have an adverse effect on market performance by discouraging tailoring.

The bullion, stock, and futures exchanges provide good examples of standardized transactions. These markets trade in standardized, interchangeable units, often on a continuous realtime basis. Even where parties have otherwise diverse needs, demands registered on an exchange tend to be relatively homogeneous, since a party's overall needs may be met with transactions in a portfolio of markets. For example, diverse oil companies often use crude-oil futures markets for the common goal of hedging, while engaging in other diverse arrangements for actually acquiring and selling oil.

Few goods and services fit the extreme of the exchange-market model. Rather, some markets operate most efficiently through direct buyerseller negotiations, where both parties can customize individual transactions to varying degrees to fit individual contexts. Examples here range from home buying to capital financing. Such cases of contractual tailoring commonly involve long-term commitments and large stakes, often with immovable capital being devoted to the operations of one or both sides of a transaction.

The existence of the continuum from exchange markets to customized contracting means that there is no single public policy regarding disclosure and information production that is right for all markets. This reality is recognized in the consumer protection policies of, for example, the Federal Trade Commission. That agency's policy recognizes that when goods and services are tailored by negotiation, full public disclosure has the tendency to create at least two results that upset market performance.

First, forcing full public disclosure can lead to the standardization of offerings, which in turn may eliminate the very variety a system of negotiation flexibility is designed to induce. The introduction of all sorts of extraneous information into parties' negotiations can cause confusion, mistrust, and misconception—and thus can raise transaction costs. Higher transaction costs discourage sellers and buyers from engaging in mutually beneficial transactions and encourage inefficient standardization. In a regulatory context, this tendency can be exacerbated because parties may seek bargaining power by inappropriately using publicly disclosed deviations in negotiated results to leverage threats of claims of illegal discrimination. The result can quell sellers' incentives to offer nonstandard negotiated services, pushing the market to inefficient outcomes despite the diverse needs of all parties.

Second, full disclosure can hamper competition and promote tacitly or explicitly coordinated or collusive behavior. It is basic to antitrust economics that market power becomes less likely when there are diverse attributes to the transactions over which buyers and sellers negotiate. In other words, the more attributes there are to compete over, the harder it is to stop competing. Such competition is particularly likely if aggressive competitors can conceal transactions. The converse is obvious: making contract terms public can facilitate collusion by allowing each competitor to know exactly what others are doing.

The railroad industry offers a useful illustration of the counterproductive impact of full disclosure policies in regulated markets. There, an experiment with the full disclosure of commercially sensitive contractual relationships in the post-Staggers Act regime resulted in a narrowing of customer options and a rise in rail rates in the form of smaller discounts.

The Example of Natural Gas Pipelines

In the natural gas pipeline industry, full public

disclosure of commercially sensitive pipeline information is not likely to promote the public interest. Requiring pipelines to disclose information believed to be market-sensitive or proprietary will likely harm customers. This will reduce contractual flexibility and narrow customers' options.

Some examples illustrate the potentially damaging effects of mandated disclosure. First, if discounts are made public, their competitive use to attract customers would be discouraged, since all customers (including customers already signed up) would presumably have incentives to renege (or otherwise put pressure) on existing rates. As if this insecurity in contracts were not enough of a problem, transaction costs would rise as dealings with one customer touched off more negoti-

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ations with other (or all) customers. Of course, full public disclosure of discounts or other commercially sensitive information also makes such information available to a pipeline's competitors.

Mandatory public disclosure of contractual terms and conditions can generally impede efficiency by strengthening the relative bargaining power of sellers, as mentioned above. In the case of pipelines, such a policy would appear to favor buyers by compelling a pipeline to accept demands for automatic contractual readjustment among existing customers whenever a new contract with more favorable rates, terms, and/or conditions is minted for a single customer. Thus, a policy of having contract terms and conditions known to all market participants would result in de facto "most-favored-customer" contracting practices (which may actually lead to higher prices paid by customers). The economics of bargaining, however, implies that this prospect can enable a pipeline to refuse to respond to customers' requests for contractual flexibility. Pipelines could plead, "If I do it for you, I'll have to do it for everyone"—and then credibly refuse to offer the flexibility customers seek. While customers may appear to enjoy equal status under such circumstances, it is the seller's hand that is likely to be strengthened in contract negotiations.

The problems wrought by full public disclosure of commercially sensitive information in pipeline customer contracts go beyond limiting customer options and dampening competition. Such a policy would also create significant regulatory burdens. In RM95-3 and RM95-4, the FERC took a positive step toward coming to grips with the realities of pipeline industry contracting pressures and practices. In particular, RM95-3 and RM95-4 provide the opportunity to make progress on policies with respect to contract reporting, confidentiality, and disclosure. However, the proposed requirements would entail substantial additions of person-hours and other resources devoted to administrative and

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legal compliance. In light of the likely adverse effects noted above, and absent empirical evidence that benefits might be expected from the added regulations, these proposals would likely worsen the industry's performance.

Indeed, even if the proposed regulations required only that contractual information be reported to the FERC, without public disclosure, there is no evidence that the public would benefit. Pipelines would still face a significant regulatory burden, particularly if information is presumed to be for public consumption unless proven otherwise commercially sensitive. Such a regime would force pipelines (and, ultimately, customers) to bear the costs of distinguishing between information that should be kept confidential and information that can be made public; and the costs of notifying and justifying to the FERC the conclusions of this inquiry; as well as the cost of responding to the commission's decisions or other parties' challenges.

There Are Better Policy Alternatives

The FERC will remain concerned about the need to gain access to the terms and conditions of contracts in regulated industries, including those between customers and natural gas pipelines. Until pipeline regulatory reform can be shown to have fostered the level of competition that Order

even feel compelled to scrutinize quite carefully the details of the interaction between pipeline customers and the regulated entities. In that case, there is precedent for alternative regulatory policies that are potentially less costly and that allow official access to terms and conditions of negotiated contracts without public disclosure. The preferred alternative speaks to situations where competition is probably extensive, but where regulators may feel uncertain that market forces themselves will discipline the market. Under this alternative, which we will call "Alternative 1," contracts are negotiated in the presence of backstop regulatory protection.

Alternative 1 is used extensively in the U.S. rail transportation industry. Railroads are highly competitive with other railroads, and compete with trucks as well. But railroads cannot function freely because trains require rail lines, much as electricity is restricted to the presence of power lines. Because of this restriction, those who control the rails can exercise a certain degree of power, especially in places where alternative rails do not exist.

Given such circumstances, regulators are justified in monitoring contracts between buyers and sellers for consistent evidence of heavy-handed dealings. Railroads are required to file their conwith the Interstate Commerce Commission. Depending on the goods being transported, some information is made public, although pricing information is not disclosed. For most goods, the public contract summary includes nothing more sensitive than the shipper's name, the duration of the contract, and if applicable, railroad car information. Thus, railroads and their customers have the advantages of confidential contracts, while the regulators have complete access to relevant documents.

Alternative 1 works particularly well for industries that require considerable up-front investment in assets that are not mobile. In the presence of high-cost "sunk" assets at excess capacity, the pressure to use them—at any price above short-run marginal cost—is very high. Both railroads and natural gas pipelines are markets made workably competitive by the presence of excess capacity and large capital costs. It costs a lot to get into the railroad business, that is, to get to the point where track exists. However, the cost to move a car on that track is relatively low. Similar characteristics are found in the natural

gas pipeline market.

The next approach, which we call "Alternative 2," makes sense only if regulators are convinced that market efficiency could be enhanced by some public disclosure of contract information and that enhanced efficiency increases the public good more than it costs firms to reveal information.

Under Alternative 2, the FERC could choose to make public limited information on contract terms and conditions. For example, if the amount of gas transported or stored and the regulated maximum rate applicable to the services provided were revealed or posted, but other terms and conditions of service (including discounts) were kept confidential, then pipelines and their customers could tailor agreements to fit their needs without seriously jeopardizing the benefits to be derived from negotiations.

This alternative is akin to shopping for an automobile. All prospective buyers can find out the list price of an auto and the basic terms and conditions of the sale and service. However, other aspects of the contract are held in confidence, including the value given in trade for a customer's existing automobile, the final selling price, the number of options added at no charge, and so on. While some buyers may voluntarily choose to reveal all this information to other prospective customers, the choice is left up to the buyer.

Under "Alternative 3," the FERC could require that all contracts be filed with the agency or its representative, but allow public revelation of the terms and conditions upon mutual agreement by pipelines and customers. Indeed, in many unregulated markets, parties to contracts often choose to treat them as confidential documents.

Each of these policy alternatives mitigates the problems associated with complete disclosure of contract terms and conditions. The spirit of Order 636 suggests that the commission should be loath to establish policy that would inhibit the transition to a more market-oriented form of regulation for natural gas pipelines. Revealing the terms and conditions of private contracts appears to be a step backward. Our Alternative 1 leaves regulators in possession of 100 percent of contract information, and positions the FERC to function as the representative of both the public and competitors in the market. Regulatory oversight can be accomplished without inhibiting the very interaction between buyer and seller that can help ensure efficient and competitive market outcomes—a goal not only for natural gas pipelines but for all markets undergoing regulatory reform.

Selected Readings

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