

National Regulatory Research Institute

**Outsourcing of Gas Procurement and
Related Functions**

A Report to the Colorado Public Utilities Commission

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Outsourcing of Gas Procurement and Related Functions

This document discusses outsourcing of gas procurement as an option for Colorado gas utilities. It provides background information on outsourcing as a business strategy, a rationale for outsourcing, and an overview of outsourcing arrangements in different states. It also identifies issues that the Colorado Public Utilities Commission (“Commission”) will need to address in considering the outsourcing option. Finally, the paper enumerates questions on outsourcing of gas procurement that the Commission may want to ask stakeholders in future forums.

This document assumes that the reader has a basic knowledge of the natural gas industry. To acquire or review that basic knowledge, see the author’s paper “The Natural Gas Industry at a Glance,” at http://nrri.org/matrix/gas/natural_gas_industry_at_a_glance.pdf

I. Outsourcing in general: definition, examples, rationales and features

A. Definition

Outsourcing occurs when a firm buys a product or service from an outside supplier. The firm previously performed the activities internally but for business reasons decided to contract them out to another entity. U.S. firms, large and small, have outsourced a growing amount of their business since the 1980s, frequently to foreign entities.

B. Examples of outsourced activities

Almost all public utilities in the U.S. outsource some of their activities, notably information technology, maintenance, service support, and metering activities. Many utilities, for example, contract out a portion of their construction and maintenance functions, including tree trimming and pipeline, distribution line and substation construction. Other examples include firms contracting out their call centers and information technology services to outside parties.

In the context of gas supply and physical assets, one energy-marketing company defined outsourcing as an agreement between a wholesale natural gas marketer and a gas utility under which the marketer (1) takes an assignment of the utility’s gas supply contracts and upstream interstate pipeline capacity; (2) agrees to deliver to the city gate a firm gas supply sufficient to meet the full requirements of the utility’s customers at a fixed, indexed, or negotiated price; and (3) maximizes the utilization of upstream assets such as pipeline capacity and storage facilities. The marketer contended that taking on these functions enables the utility to focus its resources on distribution operations and customer service.

C. Rationales for outsourcing

Outsourcing stems partly from the argument that a firm should focus on “core competencies,” outsourcing or shedding other activities. This thinking led to many firms shedding activities not considered “value adding” and not directly contributing to profits. In an

increasingly global market, many firms felt compelled to concentrate on those internal functions that have the greatest effect on their competitiveness.

Experts view outsourcing as a management tool to achieve some specified goal. Early outsourcing arrangements emphasized cost savings to the client firm, while the trend in recent years has shifted toward the goal of service performance. A firm may not have the internal expertise and resources to use best-practice techniques, which an outside firm may enjoy. Firms of all sources increasingly have adopted outsourcing as a core operational strategy because of the difficulties in acquiring skills in operational and administrative areas.

Outsourcing is tied to the “law of comparative advantage,” which says that a firm should concentrate on what it does best and contract out those functions (e.g., customer service, accounting, web management) that others do best. According to this concept, the client firm can have the same or even greater capabilities as an outside firm to perform those functions. It could still outsource them, however, because of the higher opportunity costs to the client firm in undertaking those activities itself. A gas utility, for example, can have the same expertise as a non-regulated energy marketer to procure natural gas in the wholesale market; but it would have to use internal resources that might contribute more to the utility’s profits and the public interest when allocated to other company activities.

A firm may decide to outsource some of its internal functions to shift risks and management responsibility to an outside entity that can manage the risks and perform the function more efficiently. These risks may be financial and operational in nature. This outsourcing arrangement can result in a long-term, mutually-beneficial relationship between the two firms. Evidence shows that successful outsourcing requires both parties to profit from the arrangement. An outcome that benefits both parties requires them to negotiate on the specific contractual provisions of an agreement, which often proves to be tricky and contentious.

D. Features of outsourcing

While outsourcing reduces a firm’s direct control over the outsourced operations, there still must be effective management oversight of the outsourced activities. Leaving the outside firm with total discretion can lead to performance that falls short of the client firm’s goals for the outsourcing arrangement. The contract between the two entities should dictate the line of responsibility between them. The two entities also should have a trusting relationship conducive to a long-term, mutually-beneficial arrangement. Outsourcing arrangements typically occur over a multi-year period so that a close relationship develops between the client firm and the outside entity.

While outsourcing can be attractive to a firm, whether and to what extent it benefits comes down to the details of an agreement. The contractual agreement is often in the form of a

performance contract that determines risk-sharing and rewards. Such a contract, for example, can penalize the outsourcing firm for subpar performance and allows it to share in the efficiency gains or from surpassing “benchmark” performance.¹ Many outsourcing arrangements include “fee-for-service” compensation, which should correspond to the external firm’s cost but also can depend on the relative bargaining power of the two entities.

Successful outsourcing requires that the client firm quantify the value of outsourcing to itself. Quantification may involve benchmarking where, for example, the client compares its actual costs with what costs would have been in the absence of outsourcing.

II. Outsourcing of gas procurement and related functions

A. Role of gas utilities in gas procurement and transportation

A major activity of local distribution companies is to acquire gas and deliver it, or have it delivered, to the city gate. The combined costs associated with gas commodity and pipeline transportation presently represent, on average for the country as a whole, about 75-80 percent of the retail rate for residential gas service.² The vast majority of gas utilities profit only from local gas delivery; they do not profit from the buying and selling of the gas commodity and pipeline transportation.

Prior to FERC Order 636 (1992), retail gas utilities procured much of their city-gate supplies from the interstate pipelines under long-term contracts for gas commodity, transportation and off-system storage services. Order 636 led retail gas utilities to procure more of their gas supplies separately from transportation service, i.e., to purchase the gas from sources other than the transportation pipeline. Consequently, since 1992, gas utilities have played a greater role in managing their gas procurement practices. FERC actions, in other words, have forced gas utilities to be active participants in wholesale gas markets restructured in part to give market participants more opportunities.

¹ Earlier forms of outsourcing arrangements priced an outside product or service based on a mark-up of the supplier’s cost or on a fixed cost for providing the product or service. More recently, pricing has shifted to a “gains-sharing” arrangement where both parties benefit from performance improvements.

² The remaining 20-25 percent covers the local gas utility’s distribution costs.

B. Potential benefits from outsourcing of gas procurement and related functions

Outsourcing of gas procurement and related functions is supposed to extract efficiencies that otherwise would be unrealized.³ These efficiencies can: (1) lower purchased gas costs and (2) increase revenue credits accruing to retail customers and profits to a gas utility from more efficient utilization of a utility's non-distribution capital assets (e.g., pipeline capacity under contract, storage facilities). An outsourcing firm, for example, can optimize the storage function by selling physical gas already in storage or by injecting gas into storage.⁴

An outside firm can have superior resources, relative to a gas utility, in using market knowledge to exploit opportunities for both buying natural gas and utilizing a utility's unused capacity. An outside firm also can have superior access to different markets and more flexibility to maximize the value of assets, in addition to realizing scale economies. It also can achieve more economical results from procuring gas for several entities with a diverse and a more "even" demand profile.⁵ By generating additional revenues from capacity release, off-system sales and market sales of stored gas, an outside firm can increase the amount of revenues credited to retail customers from carrying out these functions.

Both the Federal Energy Regulatory Commission and natural gas utilities recognize the benefits from outsourcing, especially in the form of what is called asset management. Late in 2007, FERC proposed rules (Docket No. RM08-1-000) that would facilitate asset management arrangements,⁶ recognizing their benefits in improving the efficiency of capacity markets and transactions tailored to customer needs.⁷ The American Gas Association (AGA), in comments

³ The gas procurement function, in addition to making physical transactions, can include hedging with financial derivatives.

⁴ Incidentally, the firm can hedge either transaction with a financial derivative such as a swap.

⁵ The outsourcing firm, for example, can purchase gas for a group of entities that collectively have a higher load factor and a more attractive load shape than an individual utility's "peaky" load shape.

⁶ Asset management is a contractual arrangement where one party agrees to manage the gas supply and delivery arrangements, including transportation and storage assets, for a gas utility. It might involve, for example, a gas utility releasing its surplus pipeline or storage capacity to an outside entity which will perform the functions that the releasing utility could do for itself.

⁷ The proposed rules, for example, would exempt capacity releases made as part of an asset management arrangement from bidding requirements contained in present FERC

before FERC, expressed the view that asset management arrangements provide benefits by increasing the load-responsive use of gas supply, increasing liquidity in the capacity markets, and more efficiently utilizing capacity.⁸

The asset manager, often an affiliate of the gas utility and a natural gas marketing company, can help to increase utilization of the utility's facilities and lower gas costs. An asset manager, for example, can increase the value of a utility's transportation and storage assets by bundling capacity, gas supply and other services tailored to the specific conditions of the market. The asset manager may have more expertise and resources than the gas utility (especially a small utility) for increasing the value of a utility's capacity and gas supply holdings. The asset manager generally shares with the gas utility the value obtained from the utility's unused capacity and supply contracts.

Outsourcing of gas procurement and related functions can help to focus a utility's attention on its core competencies such as managing and operating its distribution system. If a gas utility were to increase its profits at the margin, it would have an incentive to devote more internal resources to those activities that have a direct bearing on profits. Most gas utilities make little or no profits from the buying and reselling of gas. They also receive no or little profits from reselling their surplus pipeline capacity and from off-system sales, as retail customers receive most or all of the benefits (e.g., from revenue crediting).

The last paragraph suggests a reason for outsourcing arrangements: the utility presently earns little or profits from the functions to be performed by an outside firm; outsourcing would reallocate some of the gains from trade to the utility's affiliate. A gas utility, in other words, might see outsourcing as evading regulation to earn higher profits for its non-regulated affiliate or the umbrella company.

regulations. These requirements, for example, include the posting of capacity-release transactions for competitive bidding, unless the transactions are at the maximum rate or are for thirty-one days or less. See Federal Energy Regulatory Commission, *Promotion of a More Efficient Capacity Release Market*, Notice of Proposed Rulemaking, Docket No. RM08-1-000, November 15, 2007.

⁸ See American Gas Association, *Comments of the American Gas Association*, FERC Docket No. RM08-1-000, January 25, 2008.

III. Examples of outsourcing of gas procurement and related functions

A. Basic features

Several gas utilities outsource their gas procurement and related functions. Under an asset management arrangement, the outside party typically commits to provide gas supply or asset management, or both, under a pricing scheme defined in a contract. The outside party also often takes control over the utility's firm transportation and storage assets. The two parties may agree that the price for purchased gas be based on published indices, and the outside party may pay a fixed fee for the right to market excess transportation and storage capacity. In some instances, the pricing formula includes benchmarking and a sharing rule, with a portion of the savings achieved by the outsourcing firm flowing back to the utility and its customers.

Experiences with these arrangements have shown that sharing rules require much care to implement and to ensure benefits to utility customers. They also can provide a strong incentive for an asset manager. In principle, a sharing rule should not only provide an asset manager with sufficient incentives to achieve the goal set out by the utility (e.g., efficient utilization of the utility's unused assets), it also should provide a fair return for the utility and its customers.

The outside party is expected to achieve lower gas cost by optimizing procurement through its larger portfolio, combining the utility's assets with other assets. The utility captures a portion of the expected benefits of such arrangements for customers through the outsourcing agreement, whether it results from a bilateral negotiation or competitive procurement. Because the regulated utility remains ultimately responsible for reliable gas supply and reasonable prices, it typically remains closely involved in procurement decision-making and frequently communicate with the outside party.

In many instances, the utility chooses the asset manager through a request for proposal (RFP) process that mitigates the possibility of self-dealing abuses.⁹ Since the gas utility is ultimately responsible for reliable and reasonably priced gas supply, most times it remains closely involved in procurement and asset management decisions (even on a daily basis).

⁹ In choosing an outsourcing firm, a utility considers a number of factors, including experience in managing pipeline and storage assets and gas sales, knowledge of the regional gas market and the fee offered to the utility for selling its unused assets.

B. Special characteristics of individual outsourcing arrangements and issues¹⁰

Distinction between gas procurement and asset management: Gas procurement is the purchase of gas. Asset management is the effort to optimize the utility's unused assets by generating maximum revenues from on-system and off-system utilization of idle assets. The Virginia commission Staff preferred separate asset management and gas purchase agreements, contending that since these activities are separate and distinct, they should be unbundled.

Gas utilities have argued that asset management can: (1) provide reliable, least-cost supply and transportation service to their customers, (2) optimize the competitive value of their supply, transportation, and underground-storage assets, and (3) optimize their combined resource portfolios to reduce the unit cost for sales customers. Some of the utilities contended that the basic premise for such agreements is the asset manager's right to use the portfolio for its best interests provided it first satisfies the gas utility's city gate needs. One asset manager serving an in-state gas utility has full operational control of the assigned assets and gas resources; it does not, however, have authority either to change the utility's long-term commitments for those assets and resources or to change the primary receipt and delivery points for the assigned capacity. The utilities argued that the major benefit to customers from asset management arrangement comes from the capacity management fee paid to the utility. They contend that the fee exceeds the total revenues they otherwise would receive from marketing their upstream capacity and commodity rights for interruptible transportation, interruptible sales, capacity release and off-system sales.

Examples of asset management: Some gas utilities in Massachusetts have asset-management agreements with outside parties.¹¹ Sequent Energy also provides natural gas procurement and asset management services to Virginia Natural Gas. Sequent Energy acts as an agent in managing supply, transportation and storage contracts presently held by the utility. This arrangement, as argued by the Virginia Corporation Commission, allows the utility to benefit from the economies of scale and other business efficiencies realized by Sequent Energy. These

¹⁰ The author did not conduct a comprehensive survey to identify all the gas utilities that outsource their gas procurement and related functions. The following discussion focuses on only a sample of outsourcing arrangements around the country. The sample, however, include those states where outsourcing has received the most attention.

¹¹ See, for example, Massachusetts Department of Telecommunication and Energy, *Petition of the Berkshire Gas Company for Approval by the Department of Telecommunications and Energy of a Gas Portfolio Optimization Agreement and a Gas Sales and Purchase Agreement Executed Between the Berkshire Gas Company and BP Energy Company*, Order, D.T.E. 04-47, November 5, 2004.

efficiencies can lead to lower purchased gas costs for the utility and increased value of its assets, with retail customers benefitting from revenue crediting.

Issues in asset management: In Tennessee, the three largest gas utilities have agreements for asset-management services.¹² At the time of this writing, the state's regulatory agency is involved with litigation where a major issue is whether a profit-sharing arrangement of 50/50 between a local gas utility and its asset manager is appropriate and fair to utility customers. Another issue is sharing of the fixed fee paid by the asset manager between the utility's shareholders and customers. The asset manager uses a utility's excess storage capacity and pipeline capacity to make sales to third parties. In addition to profit sharing, other concerns raised by customer groups were the length of the multi-year agreement and the process for selecting an asset manager. All the gas utilities presently use an RFP process to select an asset manager, which was not always true.¹³

Affiliate relations: A characteristic of several outsourcing arrangements is that they involve a utility-affiliate relationship. In Washington, the commission rejected continuation of an outsourcing arrangement between Avista Utilities and its marketing arm, Avista Energy.¹⁴ The commission raised particular concerns about affiliated arrangements:

The danger in an affiliated interest arrangement is that the pressure for profit creates a risk to ratepayers that management may shift the costs and burdens of company operations so that beneficial aspects flow to the affiliate (while benefiting the same stockholders) and burdensome aspects flow to the regulated

¹² See Tennessee Regulatory Authority, *Review of Nashville Gas Company's Incentive Plan Account Relating to Asset Management Fees*, Order Approving Settlement, Docket No. 05-00165, December 14, 2007; Atmos Energy Corporation, *Request of Atmos Corporation for Approval of Contract(s) Regarding Gas Commodity Requirements and Management of Transportation Storage Contracts*, Preliminary Filing of Requests for Proposal, Docket No. 08-00024, February 7, 2008; Tennessee Regulatory Authority, *Request of Chattanooga Gas Company for Approval of Asset Management Agreement*, Order Setting Issues for Resolution, Discovery and Procedural Schedule, Docket No. 08-00012, February 12, 2008; and Tennessee Office of Attorney General, *Request of Chattanooga Gas Company for Approval of Asset Management Agreement*, Customer Advocate's Brief, Docket No. 08-00012, February 20, 2008.

¹³ The Tennessee Regulatory Authority requires an RFP process and its review and approval of an asset management contract.

¹⁴ See Washington Utilities and Transportation Commission, *Complaint v. Avista Corporation d/b/a Avista Utilities*, Sixth Supplemental Order Rejecting Benchmark Mechanism Tariff, Docket No. UG-021584, February 13, 2004.

company (and ultimately to ratepayers). In other words, any affiliated transaction poses a risk to ratepayers. Risks of manipulation, intentional or not, are inherent in any arrangement of this sort and are difficult to discover.

The commission emphasized the importance of scrutinizing any utility-affiliate relationships to guard against cross-subsidies or preferential treatment favoring the non-regulated affiliate.

The commission concluded that the affiliate, Avista Energy, benefited from the outsourcing relationship; it could not, however, find benefits for the utility and its customers.¹⁵ The commission concluded that the utility is able to achieve the same results in gas procurement as its affiliate; no need, therefore, exists to continue the arrangement with its affiliate. Commission staff argued that the arrangement creates perverse incentives by inducing Avista Energy to favor capacity release and off-system sales over basin optimization because it must guarantee Avista Utilities \$3 million in revenues from capacity release and off-system sales. The outcome could cause higher rates to customers. The commission also found that the utility failed to demonstrate adequate safeguards against the possibility of self-dealing abuses.

The utility argued that its dealings with Avista Energy have benefited customers because of the affiliate's greater presence in the market for commodity, transportation and storage services. The utility also argued that Avista Energy assumes some of the risks and costs associated with gas procurement that would otherwise be borne by it (e.g., nomination errors, counter party risk, some operation flow order risk, entitlement risk). The utility added that its outsourcing agreement is able to optimize unused pipeline capacity through capacity releases and off-system sales to third-parties. Finally, it argued that Avista Energy can do a better job than the utility because it has a different risk profile than the utility and it is an active participant in the market.¹⁶

A dissent concurred with the utility's view:

By an order of magnitude or more, Avista Energy has more trades, more trading partners, more opportunities for offsetting trades, more flexibility and choices

¹⁵ The commission concluded that the agreement appeared to create rewards to Avista Energy for merely tracking market trends, exposing it to little risk and calling for a limited need for Avista Utilities to draw on the affiliate's market experience. The commission also opposed continuation of the agreement because it could not audit its performance: parties did not provide the commission with information on either the market value of services provided by Avista Energy or Avista Energy's cost of providing service to Avista Utilities.

¹⁶ See Avista Corporation, Direct Testimony of Michael D'Arienzo, before the Washington Utilities and Transportation Commission, Docket No. UG-021584, April 18, 2003.

among capacity release, off-system sales and basin optimization, more ability to maintain a broad and deep trading staff, etc. The majority discount these features, observing that because Avista Utilities management already makes the final trading decisions, it can be successful in taking over the whole gas-procurement function. This observation misses the point: now, Avista Utilities is permitted to take advantage of Avista Energy's operations; if Avista Utilities takes back the gas-procurement function, it will not be able to make the same decisions, because it will not be able to benefit from (or even be privy to) the range of choices provide through Avista Energy's scale, flexibility, and expertise.¹⁷

Sequent Energy and Atmos Energy Marketing act as asset managers for several affiliated gas utilities. Gas utilities located in Georgia, Kentucky, New Jersey, Tennessee and Virginia relied on at least one of these companies. Many of the utility-affiliate arrangements involve Sequent Energy paying the utility a fixed fee and both parties sharing in the margins obtained from selling unused capacity to the market. In New Jersey, Sequent Energy pays Elizabethtown Gas Company an annual fee for the right to act as its gas supplier and capacity-management agent. The fee consists of a minimum fixed annual payment plus a share of the capacity-release credits, off-system sales margins and storage arbitrage margins that Sequent Energy creates.¹⁸

In Kentucky, two gas utilities, Atmos Energy and Duke Energy, have asset-management agreements with an affiliate.¹⁹ Each utility receives a payment from the asset manager, which is then passed back to customers through the purchased gas adjustment (PGA) mechanism. For Atmos Energy, the utility arranges to receive full-requirements gas supply from Atmos Energy Marketing, which also manages the utility's non-distribution assets on a daily basis. The utility and its customers, consequently, are able to reap benefits. The utility retains full operational control through mandatory compliance with a predetermined seasonal storage and operational plan. The agreement includes non-performance penalties and remedies.

¹⁷ See Washington Utilities and Transportation Commission, *Complaint v. Avista Corporation d/b/a Avista Utilities*, Sixth Supplemental Order Rejecting Benchmark Mechanism Tariff, Docket No. UG-021584, February 13, 2004.

¹⁸ See New Jersey Board of Public Utilities, *In the Matter of the Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas Concerning Its Proposed Capacity Management Plan*, Docket No. GM07100752, Order, March 19, 2008.

¹⁹ See, for example, Kentucky Public Service Commission, *In the Matter of The Application of Atmos Energy Corporation for Approval of Third Party Gas Supply Agreement and for a Deviation from the Pricing Requirements of KRS 278.2207*, Order, Case No. 2006-00194, August 18, 2006.

The Kentucky Public Service Commission has addressed four issues that have arisen from the asset management arrangements: (1) the RFP process where a decreasing number of bidders has occurred over time, (2) adherence of an asset manager to the commission's affiliate transaction rules, (3) the creditworthiness and other requirements of an asset manager (the original asset managers for the two utilities filed bankruptcy),²⁰ and (4) the effect of an asset-management relationship on hedging and performance-based regulation.

One of the Georgia's gas utilities, Atlanta Gas Light, has a contract with an affiliate, Sequent Energy, to perform asset management. Since 2003, Sequent Energy has managed the utility's gas supply, transportation and storage assets. The utility and the affiliate share in the margins from off-system sales and capacity release. In a past docket the commission denied extension of the relationship, requiring the utility to issue an RFP for asset-management services.²¹ The commission staff reviews the RFP prior to issuance. The commission also requires the utility to conduct an annual benchmark study that evaluates Sequent's performance relative to specified benchmarks or metrics. The commission staff reviews the results of the study and reports its findings to the commissioners.

Finally, in 2001 and 2002, the gas utilities affiliated with Energy East retained BP Energy (BP) as the gas portfolio manager for their gas businesses. The agreement calls for BP to assist the affiliates in gas purchasing activities and optimizing savings from their gas portfolios and upstream assets. BP charged a fee to Energy East based on the level of gas savings obtained from the optimization of the Energy East portfolio.

Outsourcing storage: In Oregon, one gas utility, Northwest Natural, outsources the management of its storage. Every two years the utility issues an RFP and hires an outside party to optimize operation of its storage facility. The outside party has responsibility for (1) optimizing operations to ensure a high level of reliability for retail customers and (2) maximizing revenues from stored gas not needed by retail customers. Retail customers receive a share of the margins from the sale of stored gas.

²⁰ Any outsourcing arrangement carries a counterparty risk in that the asset manager, for example, might have financial difficulties that prevent it from making required payments to the utility or from buying or selling gas when needed by the utility.

²¹ See, for example, Energy Service Providers Association, *Comments of ESPA in Response to Atlanta Gas Light Company's Motion to Extend Asset Management Agreement*, Georgia Public Service Commission Docket No. 18437-U, July 5, 2007.

IV. Commission investigations of outsourcing

A. Virginia

In Virginia, the commission staff issued a report on asset management. The report was the product of a commission-initiated investigation and audit of the existing asset-management agreement between Virginia Natural Gas and its affiliate, Sequent Energy.²² The agreement covered both asset management and gas purchasing activities assumed by Sequent on Virginia Natural Gas' behalf. The report addressed several components of an asset-management arrangement. The most important ones include:

1. *Legal rights to a utility's assets:* Commission staff recommended an agency relationship;²³ assignment could limit the utility's legal rights to its supply, transportation and storage contracts during the term of the agreement.
2. *Gas supply pricing:* Staff favored a "virtual dispatch" approach for weighting gas quantities actually taken at each receipt point; otherwise, the benchmark may be set too high, with the utility paying too much for gas.
3. *Use of a utility's capacity or assets:* Commission staff emphasized the need to place top priority on meeting the needs of retail customers. An outsourcing firm's use of utility assets, in other words, should be limited to that portion not needed by the utility. Staff warned that optimization by the asset manager may cause more frequent interruptions of non-firm load.
4. *Agreement duration:* The typical duration of asset management agreements is two-years. Shorter durations give the utility more flexibility; staff recommended that

²² See Virginia Corporation Commission, *Investigation of Gas Supply Asset Assignment and Agency Agreement Between Virginia Natural Gas, Inc., and Sequent Energy management, L.P., f/k/a AGL Energy Services, Inc.*, Staff Report and Joint Motion to Approve Affiliate Agreements and Close Investigation, Case No. PUE-2004-00111, October 14, 2005; and Virginia Corporation Commission, *Investigation of Gas Supply Asset Assignment and Agency Agreement Between Virginia Natural Gas, Inc., and Sequent Energy Management, L.P., f/k/a AGL Energy Services, Inc.*, Order Approving Affiliate Agreements and Closing Investigation, Case No. PUE-2004-00111, October 31, 2005.

²³ In an agency relationship, according to the staff study, the assets would remain in the gas utility's name.

contracts should include standard “out” clauses such as bankruptcy or failure to perform.

5. *Asset-manager compensation:* A fixed fee provides revenue certainty to the utility but it may provide the asset manager with a weak incentive to maximize value. Staff warned that while margin or profit sharing rules provide strong incentives, they require much care in design to ensure that the utility receives its fair share.
6. *Affiliated relationship:* Affiliated relationships require special scrutiny because of the possibility for deal-dealing abuses.
7. *Utility oversight of the agreement:* The commission staff recommended that the utility take an active role in overseeing the asset manager’s performance and operating practices affecting the utility.²⁴
8. *Reporting requirements to the commission:* Information reported to the commission should include the price of gas supplies to the utility, the calculation of the margins from the sale of unused assets, the utility’s share of the margin, and the utility’s internal controls.

B. Minnesota

Minnesota was one of the early states to investigate the outsourcing of gas utilities’ gas and transportation procurement functions.²⁵ The commission initiated a proceeding by asking parties four fundamental questions on outsourcing:

1. What are the potential benefits and costs of outsourcing the entire natural gas procurement function through competitive bidding?
2. Is outsourcing an efficient way to capture the benefits of competition for natural gas customers?

²⁴ The report recommended that the utility establish a management/operational group responsible for oversight of the asset manager’s performance and operating practices,

²⁵ See Minnesota Public Utilities Commission. *In the Matter of an Investigation into Outsourcing of Gas and Transportation Procurement Functions*, Staff Briefing Paper, Docket No. G-999/CI-99-688, January 11, 2000.

3. How would the benefits and costs of outsourcing compared to: (a) the current practice of using competitive bidding for individual supply, storage and transportation contracts and (b) retail choice for small customers?
4. Is the implementation of outsourcing feasible, given possible impediments in the following areas: (a) legal and regulatory, (b) corporate strategic business planning and culture, and (c) gas utility operations and reliability of service?

The Minnesota commission concluded that it cannot order a gas utility to outsource.²⁶ The commission, instead, favored reviewing a utility's proposal to outsource on a case-by-case basis. Commission staff presented the argument that for the commission to require a public utility to outsource its gas supply function, a showing of malfeasance or gross mismanagement by the public utility might be necessary. Parties to the proceeding commented that voluntary outsourcing is a viable, if not essential, alternative for small or troubled gas utilities that are unable to successfully perform these functions with their internal resources.²⁷

Some parties in Minnesota pointed out that outsourced gas would be more expensive than the cost of gas under the current regulatory structure because the outside supplier would assume risks, for which it must be compensated, and would include a profit in the bid price. In contrast, a gas utility receives no profit, nor is it compensated for the risks it takes in supplying natural gas.

Overall, the Minnesota commission agreed with parties that outsourcing could be a useful alternative for small gas utilities or utilities facing gross management problems. For other utilities, parties were unclear as to whether outsourcing offered cost advantages over traditional prudence review or over other regulatory approaches such as performance-based gas incentive plans. In conclusion, the commission considers outsourcing as a business strategy deserving careful consideration. It can provide a benchmark for reasonable gas costs and a preferred long-term strategy as well.

²⁶ See Minnesota Public Utilities Commission. *In the Matter of an Investigation into Outsourcing of Gas and Transportation Procurement Functions*, Order, Docket No. G-999/CI-99-688, February 14, 2000.

²⁷ Small utilities might lack adequate internal staff expertise and resources to perform its own gas procurement and asset management function; they also might have difficulties in satisfying the credit requirements of gas suppliers and pipelines.

V. Major issues for state commissions

A review of outsourcing activities by gas utilities, particularly asset-management arrangements, points to several issues. The concept of outsourcing is attractive for achieving certain regulatory objectives: it can produce efficiency gains and cost savings that otherwise would be left unexploited. Most gas utilities throughout the country lack strong incentives to purchase gas at the lowest cost and to optimize their asset utilization by reselling pipeline capacity and making off-system sales. If an agreement with an outside firm is able to provide the firm with strong incentives, the potential exist for better performance that ultimately could benefit customers. The key word is “if” because of the challenges in designing incentives that align the outsourcing firm’s interests with the utility’s interests. State commissions themselves know the difficulties in structuring regulatory incentives that are beneficial to both customers and the utility.

One issue with outsourcing arrangements occurs when the utility and the external firm have an affiliated relationship. Unless a state commission has properly structured standards-of-conduct, competitive bidding, and affiliate pricing rules that are strictly enforced, the danger always exists that outcomes may lie contrary to the interests of the utility’s customers. Self-dealing abuses can result in the non-regulated affiliate benefitting at the expense of the utility’s customers. An affiliated relationship, for example, can provide an asset manager with an incentive to give better deals and procure lower-cost gas to entities other than the regulated utility.²⁸

Another issue involves the sharing of the profits and efficiency gains that result from outsourcing. The agreement between the utility and the outside firm should specify the distribution of the gains between the two entities. Regulators, in turn, would determine the share of the utility gains allocated to shareholders and customers. These two sharing issues have come up in a few states. No easy answer exists, for example, on how to strike a proper balance between (1) providing adequate incentives to utility management and (2) allocating a fair share of the gains to customers. A higher share of the gains from capacity release or sale of other unused assets going to customers appears compatible with customer interests; but an excessive share to customers could reduce the incentive of the utility to negotiate hard with an outsourcing firm. Would the economic gains to customers improve, for example, with a 100-percent share of the gains with feeble negotiations by the utility with the outsourcing firm or an 80-percent share of the gains with more robust negotiations? A regulator might ask what sharing arrangement

²⁸ One possible advantage of an affiliated relationship for a commission is that it might be easier to audit an affiliate than a non-affiliate.

would maximize benefits to customers. Giving all the gains to customers would achieve this objective under the dubious assumption that the utility's behavior would not change with its share of the gains.

A major question is the role of a commission in reviewing, approving, overseeing and evaluating outsourcing arrangements. At one pole is a commission not getting involved until the utility requests recovery of costs related to an outsourcing arrangement. The commission, in this instance, would have no say in the RFP process, in the terms and conditions of an outsourcing agreement, and no guidance on whether the utility should outsource and if so, how. The utility, in other words, would make all outsourcing decisions without any regulatory oversight. The commission would leave all questions on the prudence of a utility's outsourcing arrangement until a later time when the utility requests cost recovery.

At the other pole, a commission could get involved with outsourcing from the first phase of examining the merits of outsourcing, to developing a process for selecting an outside firm, to determining how the utility should conduct outsourcing, and to enacting rules that set the parameters. Under this policy, the commission would make commitments early on to a utility's outsourcing activities, which could include giving its approval to the arrangement and guaranteeing recovery of all costs.

An intermediate policy would involve a commission overseeing the whole outsourcing process without intervening in the utility's actions and committing to the arrangement. Under this policy, a commission would examine (1) whether outsourcing is the best alternative from the perspective of customers, (2) the process for selecting an outside firm, (3) whether an agreement between a utility and an outside firm is in the utility's interest (especially for an agreement with an affiliate), and (4) how the outside firm has performed relative to the goals of the utility and to the pre-outsourcing performance of the utility. An agreement in the form of a performance contract needs to specify the services to be provided, the parameters for providing them, and the measurement of service performance. The regulator might want to review and understand the contract to make sure that the performance measures are compatible with customers' interests.

VI. Questions for the Commission to determine the merits of outsourcing

The previous discussion leads to several questions on outsourcing that the Commission can ask stakeholders. A major intent of these questions is to determine whether the incentives underlying outsourcing can produce better results than the results obtained under special regulatory incentives for gas procurement and asset management. Another intent is to identify questions that the Commission can ask if it decides to investigate outsourcing in general as a business strategy for utilities.

Outsourcing is a business strategy that has promising features. Its benefits to customers and the general public, however, depend on how it is carried out and what restrictions regulators place on its implementation. Customers would benefit when purchased gas costs decline and the revenues from utilization of unused assets credited to customers increase.

The Commission can ask gas utilities and other stakeholders the following questions to enhance its understanding of outsourcing and arrive at a more informed decision on its potential benefits to customers and the general public:²⁹

- (1) Desirability of outsourcing
 - (a) What should be the objectives of outsourcing? Is it to lower purchased gas costs and increase revenues from asset management? What other objectives are relevant?
 - (b) How should utilities and the Commission evaluate the merits of outsourcing? For example: What evidence is necessary? What criteria should apply?
 - (c) How could outsourcing benefit customers? How could it harm customers? Could gas purchased costs, for example, increase because of the outside firm assuming risk and earning a profit in procuring gas?
 - (d) What efficiencies are gained from outsourcing that the utility cannot achieve on its own? Even if the utility could achieve the efficiencies on its own, are there still benefits to outsourcing?
 - (e) Would stronger regulatory incentives (both rewards and penalties) for more efficient utility gas procurement and asset management achieve most of the potential benefits from outsourcing? If so, how could the Commission structure such incentives?
- (2) Present practices
 - (a) By what standards should one judge the performance of Colorado's gas utilities today in their gas procurement activities and in their management of nondistribution assets (e.g., pipeline capacity, storage)?
 - (b) Is there any evidence that gas utilities in Colorado have not procured their gas or managed their nondistribution assets prudently and efficiently?
 - (c) What factors account for the gas utilities' performance in these activities? Consider existing regulatory incentives, management decision-making,

²⁹ In the questions below, references to outsourcing pertain to gas procurement, asset management and related activities.

and utility staff resources, among other factors.

- (d) Have Colorado gas utilities studied outsourcing as a possible business strategy? If so, what conclusion did they come to and why?

(3) Outsourcing options

- (a) What are examples of how to structure an outsourcing arrangement for (i) gas procurement and (ii) asset management? Who should have which responsibilities, who should make what guarantees, who should bear what risks, and who should receive what compensation?
- (b) Should an outsourcing arrangement separate, contractually, gas procurement from asset management? Or are there economies or synergies in bundling these functions?
- (c) What are the pros and cons of different durations for an outsourcing agreement? For example, should a utility reserve a contract right to review and reconsider its agreements every three years, or more or less frequently?
- (d) Should a utility be allowed to extend an outsourcing agreement without the Commission's approval?
- (e) How should a utility select an entity for outsourcing? Should it issue a request for proposal (RFP)? What role should the Commission play in designing or overseeing an RFP?
- (f) What are the advantages and disadvantages of utility outsourcing activities to an affiliated company? Should the Commission establish standards of conduct and affiliate pricing rules prior to approving such a utility-affiliate relationship?

(4) Commission role

- (a) What role should the Commission play in overseeing an outsourcing arrangement, once in place? What guidance should the Commission provide?
- (b) How should the Commission allocate the economic benefits of an outsourcing arrangement between the utility and its customers? For example, are the customers entitled to a full pass-through of all cost savings? What about revenues received from off-system sales of asset capacity created through asset management activities? What are the important factors for determining this allocation?

- (c) Are there circumstances under which the Commission should mandate outsourcing, for example, where there is evidence of mismanagement? Does the Commission have the legal authority to order outsourcing?