The Outsourcing Option: Are There Some Gas Utility Functions That Others Can Do Better?

Ken Costello

February 15, 2009

About the Author

Ken Costello is the natural gas research and policy expert at the National Regulatory Research Institute (NRRI). He has conducted extensive research on topics such as energy industries and public utility regulation. His most recent work has focused on the natural gas sector, with particular emphasis on the issues facing public utility commissions. These issues include revenue decoupling, rate issues in retail gas markets, fuel diversity in electric generation, the effects of EPAct 2005 on the natural gas market, incentive mechanisms for gas procurement, long-term contracting for gas pipeline services, and assessing market trends in the natural gas sector. Costello is a member of the NARUC Subcommittee on Gas.

Previously, Costello worked for NRRI as an associate director and as a senior institute economist. He has also held positions within the Illinois Commerce Commission, the Argonne National Laboratory, and the Commonwealth Edison Company. Additionally, he has provided independent training and consulting services to the countries of Argentina, Bolivia, Canada, the Central and Eastern European countries, China, Costa Rica, Egypt, India, Japan, the Newly Independent States, and Russia.

Costello earned his B.S. and M.A. degrees from Marquette University. He also completed some doctoral work in the Department of Economics at the University of Chicago.

The Outsourcing Option:

Are There Some Gas Utility Functions That Others Can Do Better?

Ken Costello, Principal
National Regulatory Research Institute
Presentation before the NARUC Subcommittee on Gas
February 15, 2009

Gas utilities, in recent years, have increasingly relied on the outsourcing of gas procurement and asset management ("AM") (i.e., the management of excess pipeline and storage capacity by an outside party). From a public-interest perspective, outsourcing these functions should aim to extract efficiencies that would otherwise be unrealized. These efficiencies can: (1) lower purchased gas costs, (2) increase net margins credits to retail consumers, and (3) benefit a gas utility and the AM via the more economical utilization of the utility's non-distribution capital assets (e.g., pipeline capacity under contract, storage facilities). An outside firm has the potential to better exploit opportunities than a utility for both buying natural gas and reselling a utility's unused capacity. An outside firm also may have superior access to different markets and more flexibility with which to maximize the value of assets, in addition to realizing scale economies. It also can achieve more efficient results from bundling gas supplies with delivery services.

On the downside, outsourcing can harm, or produce minimal benefits to, customers when efficiency gains accrue mostly to utility shareholders and the outsourcing firm or when affiliate abuses jeopardize utility customers' interests. Because of this possibility, state commissions need to take an active role in reviewing proposed outsourcing agreements, as well as in overseeing outsourcing activities. One constraint for state commissions is their limited authority over unregulated outsourcing firms.

This presentation analyzes five major issues associated with outsourcing. These issues include: (1) the benefits and costs of outsourcing, (2) affiliate relationships, (3) fees paid to a utility for the right to resell its unused pipeline and storage capacity, (4) the sharing of benefits, and (5) the selection of the outsourcing firm. These issues are the most crucial ones for state commissions to engage when assessing outsourcing, especially those relating to asset management.

I. Why commissions should investigate whether others can perform utility functions better: The case of capacity management and gas procurement

II. Introduction to outsourcing

A. **Definition and basic features of outsourcing** (going outside the firm to perform a function that the firm could perform itself; term interchangeable with "outside contracting") (client oversight and monitoring of performance, profit or risk sharing)

B. **Examples of outsourced activities** (IT, call centers, maintenance, asset management)

C. **Rationales for outsourcing** (law of comparative advantage, cost saving, higher-quality product or service, constraints on acquisition of internal expertise and skilled employees)

D. **Downsides to outsourcing** (self-dealing abuses, profitable to the outsourcing firm but marginally beneficial or detrimental to a utility's customers, counterparty risk, lost of utility expertise that could adversely affect its long-term performance, inadequate oversight of the outsourcing firm's performance by the utility)

III. State experiences with a specific kind of outsourcing

A. Overview of capacity management and gas procurement arrangements

1. Generic features

a. The outside party typically commits to provide gas supply or manage assets, or both, under a contractual pricing scheme.

b. It also often takes control of the utility's firm transportation and storage assets.

c. 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.

d. In some instances, the pricing formula includes benchmarking and a sharing rule (e.g., for purchased gas), with a portion of the savings achieved by the outside firm flowing back to the utility and its customers.

e. The outside firm usually must comply with the utility's prescribed operational plan, or else face a penalty.

2. Examples and issues in selected states (Georgia, Kentucky, New Jersey)

a. Benefits to outside firm relative to the utility and its customers

b. The process for selecting an outside firm

c. Utility-affiliate relationship

d. The outside firm's control over the utility's assets

B. Case studies

1. *Indiana* (ProLiance dockets and settlement agreements)

2. *Minnesota* (addresses basic question of the benefits from outsourcing and alternative commission policies toward outsourcing)

3. *Tennessee* (major issues include profit sharing between the utility and the asset manager; sharing of the fixed fee paid by the asset manager between the utility's shareholders and customers; length of the outsourcing agreement; and the process for selecting an asset manager)

4. *Virginia* (report and docket on whether an existing AM arrangement remains in the public interest)

5. *Washington* (review and rejection of continuation of outsourcing)

C. FERC Order 712

1. Facilitating asset management arrangements

2. Articulation of benefits from asset management

3. Expected effect

IV. Major areas of consideration for state commissions

A. Fundamental regulatory question: Do the benefits of outsourcing exceed the costs?

1. Economic benefits

a. The outside firm maximizes the value of a utility's assets through the synergy of pipeline capacity and the natural gas commodity. It may bundle a utility's excess capacity with gas supplies and other components more proficiently to optimize the value of the capacity.

b. The outside firm has more scale, flexibility, and expertise in natural gas markets than the local gas utility.

c. The outside firm may better exploit market conditions to gain a higher price for the sale of unused capacity. It may more aggressively market the unused assets, leading to a higher utilization rate and more sales.

2. Contracting and other costs relative to vertical integration

a. The utility would lose control over some functions that were managed internally.

b. The utility would lose its expertise in a crucial functional area.

c. The utility could incur high contracting costs and lose the economies from efficiently synchronizing gas purchases with utilization of its contracted pipeline capacity.

d. The contact between a utility and an outside firm for gas procurement and asset management services might entail several complexities that would make such a contract infeasible or highly costly to negotiate and enforce.

e. Any outsourcing arrangement poses a counterparty risk to the utility.

f. A commission may lack the authority, staff resources, or technical ability to detect whether the outside firm has acted imprudently, or to determine whether the utility made a poor judgment in signing an agreement with an outside firm.

g. Utility-affiliate abuses could adversely affect the utility's customers (e.g., the parent company may benefit from the local utility oversubscribing pipeline and storage capacity).

3. Stronger regulatory incentives as an alternative to outsourcing (e.g., performance-based pass-through of purchased gas costs and revenue sharing of resale of pipeline and storage capacity)

B. "Outsourcing" to an affiliate

1. Basic concern (unduly favoring an affiliate)

2. Suggested regulatory actions (standards of conduct and affiliate pricing rules, competitive bidding process)

C. Distribution of profits and efficiency gains

1. Trading off regulatory objectives

a. Strong incentives for high performance

b. "Fairness" to the utility and its customers)

2. Illustration of three sharing arrangements: The compensation or amount of net margins accruing to the utility (C), generically, equals $C = A + s \cdot NM^a$, where A is the guaranteed compensation to the utility (e.g., the upfront management fee paid by the outside firm to the utility for the right to resell excess pipeline and storage capacity), and s is the share of the actual net margins (NM^a) allocated to the utility.

D. The tasks of a proactive commission

1. Development of guidelines/principles for outsourcing (e.g., guidelines for issuing an RFP and reviewing the outside firm's performance)

2. Review and evaluation of outsourcing proposals (e.g., with regard to the likely benefits to the utility's customers)

3. Approval, acknowledgment, acceptance, or rejection of outsourcing proposals (e.g., the commitment of a commission to an approved outsourcing agreement)

4. Oversight and monitoring of in-place outsourcing arrangements (e.g., how well the outcomes of outsourcing coincided with expectations and the pre-outsourcing performance of the utility)

5. A decision on prospective outsourcing arrangements (e.g., should a commission require a utility to entertain outsourcing for a function that it has performed poorly?)

6. A decision on cost recovery (e.g., should the utility be allowed to recover the fee paid for outsourced services?)

E. Process for selecting an outside firm (e.g., RFP competitive bid process, evaluation criteria and their relative weights, bilateral negotiations)

F. Length of outsourcing arrangement and the process for renewal (e.g., 2-3 years, automatic renewal with current outsourcing firm in the absence of outside complaints, arguments for shorter-term and longer-term arrangements)

G. Recommendations

1. A commission should recognize that outsourcing has both potential benefits and potential costs It should evaluate these benefits and costs relative to the gas utility itself performing the activities under existing regulations or alternative regulations (e.g., performance standards, PBR).

2. A commission should scrutinize any proposed utility-affiliate relationship. It should condition any such relationship on the enactment of standards-of-conduct rules and other actions protecting the utility's customers against self-dealing abuses.

3. A commission should assure that a utility's customers receive adequate benefits from the efficiency gains or profits derived from an outsourcing arrangement.

4. Selection of an outside firm should include a competitive bidding process where a utility affiliate is involved.

Questions Commissions Should Ask about Outsourcing

Desirability of outsourcing

1. What are the legitimate objectives of outsourcing?

2. What factors would make outsourcing beneficial or detrimental to a utility's customers?

3. What alternatives to outsourcing could improve a utility's performance? What are the benefits and costs of these alternatives relative to outsourcing?

Conditions affecting commission decisions on outsourcing

1. Is there any evidence to support a utility's subpar performance in functions considered for outsourcing?

2. If such evidence exists, what factors account for the subpar performance?

3. What skills and expertise does an outside firm have that a utility does not?

4. Under what conditions, if any, should a commission require a utility to outsource some of its functions?

5. If a commission lacks the legal authority to mandate outsourcing, what alternatives does it have to induce a utility to outsource when deemed appropriate?

Issues faced by commissions and their decisions

1. What metric(s) should a commission use in measuring and assessing a utility's performance in functions considered for outsourcing? What have been the experiences of outsourcing arrangements across states? What problems have arisen? What issues were raised? How did commissions respond to those problems and issues?

2. To what extent should a commission review, evaluate, and approve provisions in outsourcing contracts?

3. How have commissions decided on major issues, including (a) utility "outsourcing" to an affiliate; (b) sharing of efficiency gains and profits between the outside firm, the utility, and its customers; (c) their role in approving, overseeing, and evaluating an outsourcing arrangement; (d) the process for selecting an outsourcing firm; and (e) the length of an outsourcing agreement and the process for renewal?