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NATURAL GAS

Opportunities for Federal Cost Savings Through Competitive Purchases





United States
General Accounting Office
Washington, D.C. 20548

Resources, Community, and
Economic Development Division

B-240575

October 23, 1990

The Honorable Richard G. Austin
Administrator
General Services Administration

Dear Mr. Austin:

Changes in federal regulations affecting the sale, purchase, and transportation of natural gas in the late 1970s and early 1980s have provided the federal government with greater opportunities to purchase natural gas from sources other than a single public utility serving a local area. By purchasing natural gas from a variety of sources, such as at the well-head where natural gas is produced, users are afforded opportunities to shop for the most competitive prices and reduce their natural gas costs. Because of the large dollar amount that federal agencies spend for natural gas—over \$500 million annually—and the potential opportunity to reduce costs, we initiated this review of natural gas purchases by military and civilian facilities to determine (1) the extent to which competitive procurements are used by federal facilities, (2) actual and potential cost savings of selected facilities that have been or could be buying competitively, and (3) why competitive procurement may not be more widely practiced.

Results in Brief

The number of federal facilities purchasing natural gas competitively appears to be small. Within the Department of Defense (DOD), the Defense Fuel Supply Center (DFSC) has the responsibility for centrally coordinating natural gas purchases among the military services. Officials there told us that about 63 out of approximately 600 DOD facilities were competitively purchasing natural gas in 1989. Although we did not obtain data for all federal civilian agencies, information we obtained from the federal civilian agencies who are the largest users of natural gas indicates that federal civilian competitive purchases are limited.

We reviewed the savings reported by three federal facilities—one DOD and two Department of Veterans Affairs (VA) facilities—in three states and found that significant savings were realized through competitive procurement of natural gas. We verified that these facilities saved 10 percent to 30 percent on their natural gas purchases through competitive procurement practices. We also estimated that four other facilities in these three states could have reduced their natural gas costs by 11 percent to 22 percent if they had used competitive procurement. These

the traditional practice of purchasing natural gas from the local utility. Before changes in the regulation of the natural gas industry, users contracted with their local utilities for their natural gas needs. The utilities arranged for the purchase of natural gas from the wellhead supplier, which transported it by major pipelines to them. The utilities then distributed natural gas to their customers.

Extent of Competitive Purchasing Unknown but Appears Limited

Significant amounts of natural gas are being purchased by federal agencies each year. The extent to which federal agencies are procuring natural gas competitively is unknown. However, information we obtained from federal civilian and military agencies that are among the largest users of natural gas indicates that competitive procurement appears to be limited.

The military services spend over \$345 million annually on natural gas. While some of the larger DOD facilities have been purchasing gas competitively since 1987, the practice is not widespread. Of almost 600 military installations nationwide, 63 were buying natural gas competitively at the end of 1989, according to DOD officials.

Federal civilian agencies spend over \$160 million annually for natural gas, but agencies that we contacted have little information on how individual facilities purchase natural gas. According to Energy Information Administration data, GSA and the Departments of Justice, Energy, and Veterans Affairs are among the largest federal civilian users of natural gas, accounting for 60 percent of the natural gas expenditures in the civilian sector. We were unable to determine the extent of competitive purchasing by these federal agencies because the data either were not collected or were not current.

From the information that we were able to obtain, however, it appears that the number of federal facilities purchasing natural gas competitively is limited. For example, VA provided data showing that 8 of 172 VA medical centers were buying natural gas supplies competitively. GSA has assisted seven federal civilian agencies' facilities in obtaining competitive contracts for natural gas over a 21-month period through 1989. During this time frame 42 facilities requested assistance from GSA in purchasing natural gas competitively. To the best of GSA's knowledge, however, the remaining 35 facilities had not awarded a competitive procurement contract for natural gas.

We found that all four could have saved money by changing to competitive procurements. At VA medical centers in Atlanta and Augusta, Georgia, we estimated savings of \$48,000 (19 percent) and \$66,000 (11 percent), respectively. For a VA medical center in Chicago, we calculated savings of \$101,000, or 22 percent. Similarly, we estimated that the U.S. Penitentiary in Leavenworth, could have saved \$99,000, or 20 percent, if it purchased natural gas from the wellhead.

Other federal agency evaluations of facilities currently buying natural gas noncompetitively from utilities also indicate significant potential savings. These estimates could change because market rates for natural gas can vary from one region to another and over a period of time. For the 42 sites that requested assistance from GSA on competitive purchasing over a 21-month period through 1989, GSA's analysis showed combined savings could total over \$5 million annually (24 percent) for these facilities if they purchased natural gas competitively. Likewise, DFSC's evaluation of facility gas purchases in one of its regions projected total annual savings for the 13 sites reviewed at \$3.5 million (16 percent). Annual savings were calculated to be over \$2 million for one facility, \$100,000 to \$260,000 for five facilities, and \$7,000 to \$100,000 for the remaining seven facilities. Another DOD study estimated that savings for DOD nationwide could total between \$25 million and \$38 million annually, or from 7 percent to 11 percent of DOD's total natural gas expenditures.

Further potential savings are detailed in a April 1990 report issued by the Department of Energy's (DOE) Inspector General.¹ The Inspector General's office reviewed the contracting practices of its Albuquerque Operations Office for purchasing natural gas at four DOE facilities. The audit concluded that by awarding competitively priced natural gas contracts, the Albuquerque Operations Office could save about \$3.6 million annually (39 percent).

Reasons Vary for Lack of Competitive Procurement

Since agencies have historically bought natural gas from a local utility, they have been unaware of or slow to recognize the impact of deregulated prices and increased pipeline access on natural gas purchasing practices. Of the 30 facilities we contacted during our review, 19 were not purchasing natural gas competitively. Reasons cited by agency officials for not buying natural gas competitively included (1) a lack of

¹Purchase of Natural Gas By the Albuquerque Operations Office (U.S. Department of Energy Office of Inspector General, DOE/IG-0282, Apr. 1990).

of 42 federal civilian agencies' facilities that requested assistance in obtaining competitive natural gas contracts. GSA officials told us that when agencies request GSA's assistance in procuring natural gas competitively, GSA will review and assess annual gas expenditures, existing utilities gas contracts, potential wellhead purchases, and alternative fuel capability for federal civilian facilities. GSA will develop a competitive savings estimate based on its assessment, as well as market rates for natural gas and transportation costs. If projected savings are at least 10 percent, GSA recommends competitive procurement. GSA will then provide instructions on the procedures to follow, as well as a sample solicitation package for competitive bidding. After the facility awards a competitive contract, GSA will, if requested, negotiate a contract with the local utility to transport the natural gas from the utility to the facility.

DOD's Program for Purchasing Natural Gas Competitively

DOD established a program in January 1990 to increase natural gas competitive purchasing for all the services by centralizing and expanding wellhead purchases. DFSC was given responsibility for administering the program because of its expertise in competitive purchasing of other petroleum products. To assess the potential savings using competitive purchasing, DFSC divided the country into seven geographic areas to analyze large military users of natural gas. In March of 1990, it completed an evaluation of one of its seven geographical areas by comparing utility costs with competitive procurement costs. (Evaluation results were discussed previously.) DFSC officials told us that they are continuing this assessment in the remaining six areas, and they estimate that the evaluation of all large facilities will be completed by early 1991. In addition to this assessment, DFSC officials said that they will determine gas purchasing strategies for these facilities and solicit and award the contracts. Individual facilities will arrange transportation for the gas from their local utility to the facility.

GSA Plans to Assess Agencies' Potential to Purchase Natural Gas Competitively

GSA has recognized that the potential exists for additional savings associated with competitive natural gas purchases among federal civilian facilities and that, like DOD, GSA could provide greater guidance and assistance to these facilities within its existing authority. In commenting on a draft of this report, GSA officials told us that, as a result of our review, they plan to initiate a program to assess federal civilian agencies' potential to procure natural gas competitively. This effort includes identifying the 20 largest facilities within GSA in order to evaluate their gas purchasing practices. They also plan to contact other federal civilian agencies that use natural gas to determine potential savings through

Agency Comments

We provided a draft of this report to the Administrator, GSA, to obtain formal agency comments. GSA officials told us that they generally agreed with the facts presented and with our recommendations. GSA officials agreed that federal civilian facilities could achieve additional savings through competitive procurement, although savings may vary depending on natural gas prices and transportation costs. They also agreed that increased leadership could facilitate additional savings and said they are developing a number of initiatives to address our recommendations, including evaluating potential savings of federal civilian facilities that could purchase natural gas competitively.

We also discussed information contained in this report with DOD, DOE, VA, and Department of Justice officials who generally agreed with the factual information in this report, and we have incorporated their comments where appropriate.

The head of a federal agency is required by 31 U.S.C. 720 to submit a written statement on actions taken on our recommendations to the Senate Committee on Governmental Affairs and the House Committee on Government Operations not later than 60 days after the date of this letter and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of this letter.

We would appreciate being apprised of actions you intend to take regarding our recommendations. We wish to express our appreciation for the assistance and cooperation of GSA personnel during our review. The objectives, scope, and methodology of our review are discussed in appendix I.

We are sending copies of this report to the Departments of Defense, Veterans Affairs, Energy, and Justice; the Office of Management and Budget; other federal agencies; and selected Committees and Subcommittees.

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Objectives, Scope, and Methodology

Our work focused on both military and federal civilian facilities at judgmentally selected sites in diverse geographic regions across the country to determine how they were procuring natural gas. Our first objective was to determine the extent of natural gas competitive buying at federal facilities. We initially obtained information from agency officials on large users of natural gas and potential savings through competitive procurement within their agencies, including the Departments of Energy, Defense, Justice, and Veterans Affairs, as well as GSA. We did not verify the accuracy of the information provided us by the agencies.

Our second objective was to verify annual savings at federal facilities purchasing natural gas competitively and determine the potential for savings at facilities continuing to buy natural gas from local utilities. Using information supplied by agency officials, we judgmentally selected seven states where large consumers buying natural gas both competitively and noncompetitively were clustered. Within the seven areas, we contacted 30 facilities to identify those that had claimed savings through competitive procurement, as well as those that had the potential for savings.

In order to meet this objective, we selected three facilities buying natural gas competitively and four buying natural gas from the local utility in three of the seven areas—Georgia, Illinois, and Kansas. We verified savings at the three facilities by reviewing gas supplier and local utility contracts and comparing each facility's costs using competitive purchasing with what it would have paid to the local utility. We estimated potential savings at the four facilities not purchasing competitively by applying competitive gas prices and transportation rates from suppliers and local utilities in the area to the facility's gas consumption figures.

Our third objective was to identify reasons why competitive procurement may not be more widely practiced. We interviewed officials at the Office of Federal Procurement Policy, GSA, and DOD to better understand roles and responsibilities for procurement policy. We contacted officials at the 30 facilities to acquire information on their gas purchasing methods and reasons why they used a particular method. We conducted our work from January 1990 to June 1990 in accordance with generally accepted government auditing standards.

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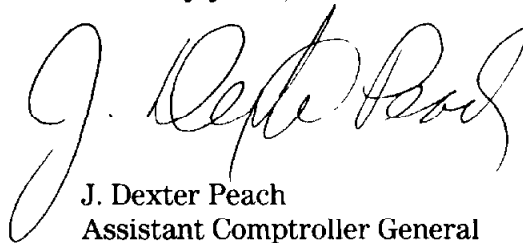
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Abbreviations

DFSC	Defense Fuel Supply Center
DOD	Department of Defense
DOE	Department of Energy
GAO	General Accounting Office
GSA	General Services Administration
VA	Veterans Affairs

The work was performed under the direction of Victor S. Rezendes, Director of Energy Issues, who may be reached at (202) 275-1441. Other major contributors to this report are listed in appendix II.

Sincerely yours,



J. Dexter Peach
Assistant Comptroller General

competitive procurement and to work with DFSC officials on centralizing solicitation and contract awards. In May 1990, GSA had contacted DFSC officials and provided natural gas pipeline and gas usage information to DFSC on two civilian facilities so that these facilities could be included in DFSC's solicitation for procuring natural gas competitively in one of its regions.

Conclusions

Although regulatory changes in the natural gas industry have afforded federal agencies the opportunity to procure natural gas competitively directly from a variety of sources, such as at the wellhead, our review and other analyses indicate that agencies have not taken full advantage of this option, which could reduce their natural gas expenditures.

We believe that DOD is moving in the right direction by instituting an agencywide program to determine at which facilities competitive procurements are practicable. We also believe that GSA's recent initiatives to assess the potential for competitive natural gas procurement in the federal civilian agency sector are good first steps. GSA's initiatives, however, are in the formative stage and have yet to be implemented throughout the federal civilian agency sector. We believe that the GSA Administrator should monitor these efforts to ensure that opportunities to reduce federal natural gas expenditures are fully realized.

Recommendations

We recommend that the Administrator, GSA, as a principal negotiator for federal utility and supply contracts, institute a program to work with federal civilian agencies in conducting procurement cost comparisons for all large federal civilian agency users of natural gas. We also recommend that on the basis of the comparative analysis, GSA should recommend a gas-purchasing strategy to agency users, actively assist in its achievement, and maintain data showing results of the analysis. We also suggest that GSA may wish to consult and work with DOD officials to take advantage of their regional analysis, as well as their centralized solicitation and contract award procedures.

In addition, we recommend that the Administrator monitor GSA initiatives to assess the potential for competitive natural gas procurement in the federal civilian agency sector to ensure that opportunities to reduce federal natural gas expenditures are fully realized.

awareness of this purchasing option and (2) a lack of time, staff resources, and technical expertise for evaluating the various options available and for managing the competitive bid process itself. In one case, the reason cited for not procuring competitively was that the local utility would not transport the natural gas bought by the consumer at the wellhead to the consumer's facility. In other instances we were told that utilities had offered some facilities lower natural gas rates in order to avoid losing them as customers.

We also identified other factors that should be considered if a federal facility is going to pursue competitive procurement of natural gas. Primarily, a facility needs to consume a large volume of gas to make competitive procurement economically worthwhile and may need to have the capability to use an alternative fuel as a backup in case of gas transportation interruptions by the pipeline. Some factors may result in additional costs, such as the costs associated with staff training and/or additional resources that may be needed to pursue competitive procurement. Also, suppliers may assess a facility a penalty for under- or over-ordering amounts of gas needed. In addition, VA and DOD officials told us that because savings obtained from competitive procurement are not available to the facilities for other activities—the savings result in cuts from their budgets—there is no incentive to devote the time and resources to pursue cost-saving initiatives.

GSA's Natural Gas Purchasing Practices

The Federal Property Administrative Services Act of 1949, as amended, provides GSA with statutory authority to negotiate and review federal agencies' contracts for utility services, including natural gas. GSA has delegated some of this contracting authority to the Departments of Defense and Energy. Historically, GSA negotiated long-term contracts with area utilities to provide gas services for individual facilities. Where a utility could provide service to more than one facility in the same geographic area, GSA could arrange areawide contracts to include all appropriate facilities. At the same time, however, federal facilities are allowed to enter into contracts with utilities for natural gas on their own. If a federal facility purchases natural gas through a public utility, Federal Acquisition Regulations require the facility to submit a utility contract above \$150,000 to GSA for review prior to award.

According to GSA, any agency requiring technical or consulting assistance in acquiring utility services, including assistance in negotiating with a potential wellhead supplier, may contact GSA and GSA will, upon this request, furnish assistance. As discussed earlier, GSA has assisted 7

Actual and Potential Savings Through the Competitive Procurement Process Can Be Significant

Considering that over \$500 million is spent annually on gas purchases by federal agencies, increasing competitive procurement could result in significant further savings. We verified actual savings of \$393,000, ranging from 10 percent to 30 percent, at three facilities that competitively purchased gas. In addition, we estimated that a total of \$314,000, or 11 percent to 22 percent, could have been saved over a 12-month period if four other facilities in areas nearby the above three facilities had purchased natural gas competitively. Table 1 shows the actual and potential savings for the facilities in three geographic locations.

Table 1: Actual and Potential Natural Gas Savings Through Competitive Procurement

Locations with savings		Locations with potential savings	
Facility	Actual savings	Facility	Potential savings
Warner-Robins		VA Medical Centers	
Air Force Base,		Atlanta, GA	\$48,000 (19)
Warner-Robins, GA	\$104,000 (11)	Augusta, GA	66,000 (11)
		Chicago, IL	101,000 (22)
VA Medical Centers		U S Penitentiary	
Hines, IL	144,000 (10)	Leavenworth, KS	99,000 (20)
Topeka, KS	145,000 (30)		
Total	\$393,000	Total	\$314,000

Note: Numbers in parentheses represent percentage of actual or potential natural gas savings

As shown in table 1, Warner-Robins Air Force Base buys natural gas competitively. We verified savings of \$104,000, or 11 percent, in 1989. We also visited VA medical centers that purchase gas competitively in Hines, Illinois, and Topeka, Kansas, and verified savings over a 12-month period of \$144,000 (10 percent) and \$145,000 (30 percent), respectively.

We identified four federal facilities buying natural gas from their local utilities also located in Georgia, Illinois, and Kansas. We calculated the costs of competitive procurements for these four facilities and compared them to current utility purchases to see if they could realize any savings by changing their procurement practices. Our calculations were based on (1) current annual natural gas consumption at the facilities, (2) the rates that the utilities charged for natural gas used, and (3) wellhead rates negotiated from competitive sources used by the above three facilities, plus costs for transporting the gas to the facilities.

savings estimates apply to the facilities we reviewed and cannot be applied to the universe of all federal facilities. However, other analyses of natural gas purchases done by federal agencies indicate that significant savings are possible through competitive procurement.

Various factors have inhibited agencies from pursuing competitive purchasing. Reasons why this has not been pursued include lack of knowledge by agency personnel about natural gas purchasing options and the time, staff resources, and incentives necessary to explore this option. Other factors might also affect facilities' use of competitive procurement for purchasing natural gas. For example, facilities should consume a large enough volume of natural gas to make it economically worthwhile to pursue competitive procurement.

DOD, which is the largest federal user of natural gas and therefore could potentially benefit the most from competitive purchases, accounts for about 70 percent of total federal expenditures for natural gas. DFSC officials told us that because of the limited number of military installations taking advantage of potential competitive savings, DOD authorized DFSC to evaluate and consolidate competitive procurement among all the services, which it began in January 1990. In contrast, similar central coordination does not exist for federal civilian agencies wishing to buy gas competitively. On the basis of our work, the General Services Administration (GSA) has recently begun to evaluate federal civilian agencies' potential to procure natural gas competitively.

Background

During the late 1960s relatively low regulated natural gas prices led to an increased demand for natural gas. At the same time, the low price ceilings, together with a number of other factors, led to a reduction in gas exploration and development and decreased gas discoveries. As a result, supplies were not being replaced at the same rate they were being consumed. Decreased gas discoveries, service curtailments, and the inability of pipelines to acquire gas supplies led to the Natural Gas Policy Act of 1978, which provided for the eventual phase-out of controls of natural gas prices for certain categories of gas. The Natural Gas Wellhead Decontrol Act of 1989 established 1993 as the deadline for complete price decontrol.

As a result of regulatory changes that increased access to pipelines and the decontrol of natural gas prices, a user can now buy gas directly from a variety of suppliers at competitive prices, arrange its transportation through major pipelines to its facility, and realize potential savings over

