Comptroller General
of the United States

Washington, D.C. 20548

# Decision

**Matter of:** Mogas Industries, Inc.

**File:** B-239182

**Date:** August 10, 1990

Edward L. Jensen, Esq., Edward L. Jensen and Associates, R.C. Kaufman and Grayum L. Davis, for the protester.
L. James Tillman, Carol Roberson, Esq., Randolph Cooper, and William Ayers, Department of Energy, for the agency.
John S. Torigian, Esq., Krell, Torigian and Power and Marvin E. Beasley, for ValvTron Industries, an interested party.
Jacqueline Maeder, Esq., Paul Lieberman, Esq., and John F. Mitchell, Esq., Office of the General Counsel, GAO, participated in the preparation of the decision.

## DIGEST

1. Allegation that awardee's valve did not meet solicitation specifications based on protester's incorrect assumption regarding which valve model was offered is denied where record establishes that agency reasonably determined that the valve model which was actually offered satisfied all specifications.

2. Protest that solicitation for indefinite quantity contract should have provided more information on the quantities of items the agency could reasonably expect to order under the contract is dismissed as untimely where filed after award since the allegation concerns alleged apparent solicitation impropriety which must be filed prior to the closing date for receipt of initial proposals.

## DECISION

Mogas Industries, Inc. protests the award of a contract to ValvTron Industries for ball valves for use in experimental projects at the Morgantown Energy Technology Center (METC), under request for proposals (RFP) No. DE-RP21-90MC27303, issued by the Department of Energy (DOE). Mogas contends that the valves offered by ValvTron do not meet the agency's technical specifications. Mogas also asserts that the solicitation price evaluation formula is misleading because it is based on an inadequate indication of the quantities of valves that would be required and that the solicitation does

not clearly define the environmental conditions in which the valves will be used.

We deny Mogas' protest in part and dismiss it in part.

The RFP, issued on December 1, 1989, provides for the award of an indefinite quantity, fixed-price supply contract for five sizes of ball valves (one inch, two inch, four inch, six inch, and eight inch). In general, these ball valves consist of a metal body of two pieces which when bolted together form a cavity with a hole at either end through which liquids or gases may pass. In the cavity is a ball through the center of which is a hole concentric with the openings in the body. Turning the ball by means of a stem which protrudes through the top of the body so that this hole is parallel with the body openings permits a flow through the valve in either direction; as the ball is turned further so that its solid surface is against the body openings, the valve seals and the flow is stopped. The ball rests on "seats" against which it is held by spring pressure, in this application a "Belleville spring," which is a flat, ring- or washer-shaped disc canted inward along its outer edge.

The solicitation states that these valves are for use in four environments, or service categories: "clean," "dirty," "hot," and "cold." Each combination of service categories (i.e., clean/hot, clean/cold, dirty/hot, dirty/cold) is incorporated into five American National Standards Institute (ANSI) ratings (ANSI Classes 300, 600, 900, 1500, and 2500) for each of the five valve sizes, resulting in 100 possible combinations. Because the award is for 1 base year and 2 option years, the solicitation requires submission of 300 separate valve prices.

The solicitation includes seven pages of technical specifications for the valves. Under the specifications, the scope of work section advises offerors that DOE was seeking to purchase "[b]all [v]alves or [e]quivalent" designed for liquid gas and gas/solid service which could perform satisfactorily over the specified ANSI class rating of temperature and pressure (i.e., ANSI Classes 300 to 2500). The gas service environment would vary from "clean" service such as air or nitrogen to "dirty" service, which is hot, abrasive particulate-laden gas. The dirty gas would consist of hydrogen sulfide, sulfur oxides, nitrous oxides, oxygen, carbon monoxide, carbon dioxide, methane, etc., with hot particulate loading of 15 milligrams per cubic standard feet of gas, ranging in size from 0 to 2,300 microns in diameter. The hot particulates would consist of, by weight, 15 to 75 percent ash and 25 to 80 percent carbon.

Because the valves are to be used in research applications and are expected to be frequently pushed to design limits, ease of maintenance, parts availability, and manufacturer cooperation are required to minimize "down time" for valve repair. Valves are required to "seal in either direction without removing from the process line," although valves sealing in only one direction would "be considered with technical justification by the vendor." Twelve identical specifications are listed for each of the five sizes of valves, including the requirements that the valve seat be spring-loaded and that it be made of ASTM A182 F316 stainless steel with a hard coating, or equivalent, for erosive service.

Because the specific research projects within the program had not been finally approved, the agency determined that it could not estimate the quantities of valves needed over the life of the contract and therefore the agency did not include any estimated quantities in the solicitation. The solicitation only obligated the agency to purchase the following minimum quantities:

| Valve Size | Quantity |
|---|---|
| 8 inch | 0 |
| 6 inch | 2 |
| 4 inch | 2 |
| 2 inch | 4 |
| 1 inch | 4 |

Paragraph M.05 of the solicitation provides that technical criteria would first be applied to determine the technical acceptability of each proposal, then award would be made to the lowest priced, technically acceptable offeror. "Price" for evaluation purposes would be determined by totaling each offeror's prices for the 300 line items and dividing this total by the number of line items in order to arrive at an average price per valve.

Six proposals were received by the January 8, 1990, closing date, three of which, including ValvTron's and Mogas', were found technically acceptable. No clarifications were requested from ValvTron; Mogas was asked to clarify if actuators (pneumatically-powered devices which operate the valves) were included in its prices and to provide pricing for option years 1 and 2. All three technically acceptable offerors submitted best and final offers (BAFO). The evaluated prices (total of all line items) and average valve prices for Mogas and ValvTron were as follows:

| | ValvTron | Mogas |
|---|---|---|
| Evaluated price (total of 300 line items) | $4,873,110 | $6,393,794 |
| Average valve price | $ 13,536 | $ 21,313 |

Based on the price evaluation of ValvTron's technically acceptable BAFO, and an affirmative responsibility determination, award was made to ValvTron on March 14. Unsuccessful offerors were notified of the award the same day and Mogas protested to DOE and to our Office by letter dated March 23.

TECHNICAL ACCEPTABILITY OF AWARDEE'S PROPOSAL

Mogas argues that the valve offered by ValvTron does not meet the solicitation specifications. The RFP required that valves be bidirectional, have seats made of a certain material and be spring-loaded, and that the valves be easily serviced. Mogas asserts that ValvTron's valves meet none of these specifications.

The contracting agency is responsible for evaluating the information supplied by an offeror and ascertaining whether it is sufficient to establish the technical acceptability of its offer, since the contracting agency must bear the burden of any difficulties incurred by reason of a defective evaluation. Dictaphone Corp., B-238159, Apr. 23, 1990, 90-1 CPD ¶ 409. We will not disturb the agency's determination unless it is shown to be unreasonable. Here, the record does not support Mogas' allegation that ValvTron's product fails to meet the RFP specifications.

As noted previously, the RFP required valves that would "seal in either direction without removing from the process line" but also indicated that valves which seal in one direction would be considered with technical justification by the vendor. Initially, Mogas speculated that ValvTron must have offered its "Unitron" valve, a one-ball, one-seat unidirectional or "half" valve which seals in only one direction. Mogas asserted that "ValvTron makes only a unidirectional valve." Mogas argued that while two half valves can be put together to create a two-ball, hybrid valve to allow sealing in either direction, this hybrid valve is a "maintenance nightmare" which may not meet ANSI requirements. Mogas' initial speculation that ValvTron must have proposed a two-ball, hybrid design simply is incorrect.

After reviewing the agency report justifying its award selection, which included a redacted copy of ValvTron's proposal, Mogas continued to maintain that the characteristics of the ValvTron valve are inconsistent with the specifications. Mogas further explained its position at a bid protest conference and in its written conference comments.

Mogas asserts that its allegations are substantiated by excerpts from ValvTron's proposal which it was provided and by a telephone conversation with agency officials. The two sections of the ValvTron proposal to which Mogas refers consist of pages from ValvTron's commercial sales catalogues. Mogas notes that these pages refer specifically to the "Unitron" valve, which has a "unidirectional sealing feature" and allows for flow in either direction but pressure in only one direction. In addition, at the conference and in an affidavit submitted after the conference, a Mogas representative stated that in an April 11 conference call with three agency employees, which was initiated to informally resolve the protest, the agency's technical evaluator said that the valve which ValvTron offered had a single ball and one seat.

Mogas argues that a single seat design cannot comply with the specifications. It states that while a single seat valve can seal satisfactorily in its intended primary downstream direction, an external force must hold the ball in sealing contact with the seat at the maximum rated pressure differential in the opposite direction in order for the valve to seal off flow with equal effectiveness in the upstream direction as required to meet ANSI requirements for a bidirectional valve. The protester asserts that DOE unreasonably concluded that sufficient external force in the ValvTron valve can be supplied by the use of a Belleville spring because the protester asserts it is not feasible to use a spring large enough to meet the full range of ANSI requirements. For example, the protester submitted a set of calculations to demonstrate that, for a four-inch bore ANSI 2500 Class valve, a 55 ton spring load must be exerted to meet the reverse flow sealing requirements.

Mogas' arguments necessarily have been made without knowledge of the contents of its competitor's complete proposal because that proposal contains design information proprietary to ValvTron. Mogas bases its argument that

ValvTron proposed its Unitron valve on sections of commercial literature contained in ValvTron's proposal. The agency correctly states that ValvTron did not offer the Unitron valve, as alleged by Mogas, but offered its Bitron valve. The two catalogue sections on the Unitron valve included in ValvTron's proposal appear to be part of a standard description of ValvTron's product line.

The agency points out that the Bitron valve proposed by ValvTron is a one-ball, two-seat, bidirectional valve. This valve is represented in ValvTron's proposal as having two seats, one movable and one integral to the valve body, and as sealing in both directions. At the protest conference, the agency technical evaluator disputed Mogas' recollection of the April 11 conference call, stating that he does not recall saying that the ValvTron valve had one seat. The evaluator stated that he had advised Mogas that the agency had determined that the ValvTron valve would seal to full required differential pressure. The technical evaluator stated that the evaluation did not include an independent test of the ValvTron valve, but was based on examination of the information in the ValvTron proposal, including the ValvTron drawings. The RFP did not contain any requirement for testing the valves. Also at the conference, a Mogas representative admitted that the calculations he submitted to support the claim that ValvTron's valve was not bidirectional were based on the assumption that the valve had only one seat. The representative said that these calculations would have to be revised for a two-seated valve.

Based on this record, including our own review of ValvTron's proposal, we believe that the agency had a reasonable basis to conclude that the Bitron valve would seal bidirectionally to full differential pressure. In arriving at this conclusion, we do not consider the April 11 telephone conference dispositive regarding the design of the valve proposed by ValvTron. The issue of whether ValvTron's product meets the specifications must be resolved on the basis of ValvTron's proposal. As indicated above, the record establishes that ValvTron's valve is compliant. Moreover, based on the conference, we find that the technical evaluator did not advise Mogas that ValvTron's product had only one seat. The technical evaluator stated that he did not recall making such a statement and it is clear that the Mogas representative's understanding was colored by his belief that ValvTron was offering its Unitron valve. In light of this belief, it appears that the Mogas representative understood any reference to the ValvTron product line as a reference to that product with which he was familiar.

Mogas' next argument concerns the specification requirement: "Seats: Shall be spring-loaded." The protester contends that because ValvTron's design includes an integral seat--that is, one built into the body--it cannot be "spring-loaded" as required by this specification. Drawings submitted in ValvTron's proposal, however, show that it uses both an integral seat and a movable seat and the proposal explains that both seats are spring-loaded against the ball by one spring. The spring applies a load to the movable seat which in turn applies a load to the ball and to the integral seat. The protester argues that this explanation only confirms that the ball, rather than the seat, is spring-loaded and argues that this design does not provide the conventional two-seated, floating ball, bidirectional valve that DOE was seeking to purchase. However, the RFP did not indicate that DOE was seeking a specific design nor did it specify that the "conventional" design was required. Thus, we find that the agency reasonably determined that ValvTron's method of spring-loading was technically acceptable and in compliance with the requirement.

Mogas also argues that ValvTron's integral seat, because it is part of the valve body, cannot meet the following specification requirement:

> "Valve Seat: ASTM A182 F316 stainless steel with hard coating or equivalent for erosive service. Hard chrome is not acceptable."

The protester contends that this specification requires the seat to be made from one specific material--A182 F316 stainless steel--while under other specification provisions the valve body can be made from one of three different materials (only one of which is A182 F316 stainless steel), depending on the class of valve and service category. The protester argues that because there are three different possible valve body materials, in at least two instances the material used in the valve body will be different from the type of stainless steel which must be used for the seat. Therefore, it maintains that because in ValvTron's design one seat is integral to the body, the seat must be the same material as the body and therefore cannot always satisfy the seat material requirement.

Mogas has misinterpreted the valve seat material requirement. Mogas assumes that only one material can be used for the seat. However, the specification provides that the valve seat can be made of A182 F316 stainless steel or any other material which provides equivalent service in an erosive environment. At the bid protest conference, the

agency technical evaluator stated that the agency had determined that the material proposed by ValvTron for all its valves was equivalent to A182 F316 stainless steel.

Mogas also contends that ValvTron's product is not easily serviced as specified in the scope of work statement. According to Mogas, the integral seat is not removable or replaceable, and the efficiency and economy of replaceable seats as in its design is widely accepted in the industry. The agency determined that since the ValvTron design permits removal and easy replacement of the valve end piece (which includes the integral seat) the RFP ease-of-maintenance requirement has been met. Once the end piece is removed, the ball and movable seat are also replaceable. Although Mogas questions the cost of replacing "half of the [valve] body" (the end piece), this does not show that the agency's determination that ValvTron's product is easily serviced is unreasonable.

In sum, the record shows that ValvTron proposed a valve, the exact design of which is proprietary, which is different in kind from that proposed by Mogas, but which the agency has reasonably determined to be compliant with the solicitation requirements. Our review of Mogas' allegations and ValvTron's proposal provides no basis to disturb METC's determination.

SOLICITATION PROVISIONS

Mogas also alleges that the solicitation was deficient because it provided incomplete or inaccurate information. First, Mogas contends that the RFP's pricing schedule did not provide guidance on how to submit prices. The schedule, consisting of 18 pages of standard form (SF) 36, required the entry of 300 unit prices: one for each size valve, for each of the five ANSI classes, for each of the four application environments, and for the base year and each of

2 option years.1/ Mogas argues that although the specifications require the use of three different valve body materials, the schedule did not specify which body material was to be used with each application environment. The protester noted in its offer that it had "enclosed Price Sheets broken down by body materials" since it believed that the SFs 36 provided could not be used. Mogas also argues that the solicitation does not adequately define the four environments or address operating temperatures.

The agency responds, and we concur, that it was the offeror's responsibility to determine which body material was appropriate for each of the four environments and that an offeror's response to that issue would be assessed for technical acceptability. The agency also notes that not only were descriptions of the environments provided in the RFP's scope of work, but that it also issued an amendment in which it clarified the operating temperatures and stated that the valves were to operate over the entire ANSI Class range, up to 1500 degrees fahrenheit.

It is our general view that an agency need not disclose what it considers to be the optimal approach to meeting the solicitation requirements. See Pitney Bowes, Inc.--Recon., B-233100.2, June 22, 1989, 89-1 CPD ¶ 587. We believe the information provided by the agency was sufficient to put any prudent offeror on notice of what was required. Mogas never submitted a written request for clarification, as required by the solicitation, and it was able to calculate and submit an offer. In any event, this ground of protest

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1/ The pricing format for 8-inch, ANSI Class 300 valves is typical:

| Supplies/Services | Unit Price |
|---|---|
| 1. 8-inch ball valve or equivalent | |
| 1. ANSI Class 300 Application Environment: | |
| a. hot/dirty | _____ |
| b. cold/dirty | _____ |
| c. hot/clean | _____ |
| d. cold/clean | _____ |

This format was used for each valve size and each ANSI Class for 1 base year and 2 option years.

is based upon an alleged solicitation impropriety which was apparent prior to the closing date for receipt of initial proposals and under our Bid Protest Regulations should have been filed prior to that date. 4 C.F.R. § 21.2(a)(1) (1990). Because Mogas' protest was filed after award, this basis of protest is untimely.

Mogas' last ground for protest arises from METC's letter of March 14 notifying Mogas of the award to ValvTron, in which METC stated that "[t]otalling the prices for all valve applications for the basic year and 2 option years set forth in the solicitation resulted in the evaluated price of $4,873,110." The protester interpreted this sentence to mean that the contract awarded to ValvTron was for $4.8 million. Based on this interpretation, Mogas argues that the minimum quantities given in the solicitation were misleading since these quantities suggested that vendors were competing for a contract worth only approximately $50,000 to $100,000 per year. Mogas argues that had it known that the dollar value of the award would be larger, it could have offered a more competitive price based on production economies and asserts that at the very least METC should have specified minimum and maximum quantities. Mogas says that in a telephone conversation with the agency, Mogas had complained that because no estimated quantities were supplied in the solicitation it was having difficulty in preparing its offer.

In his response to Mogas' protest, the contracting officer stated that Mogas' belief that the contract value was $4.8 million was based on a misunderstanding. In fact, he reported, based on the agency's expectation that certain projects would be approved, the contract value "was expected not to exceed $2.4 million." The agency further explains that the $4.8 million figure in the letter refers only to the evaluated price of ValvTron's offer, not to the award value. The evaluated price, as expressly provided in the solicitation, is simply the total price ValvTron offered for one each of all 300 line items specified in the solicitation. This total price was divided by 300 to determine the lowest average valve price and award was made accordingly. The agency emphasizes that the contract awarded is not for $4.8 million but for only the minimum quantities of valves specified in the solicitation.

The agency states that while the solicitation did specify the minimum quantity of valves it would require, as it advised Mogas in the above-referenced telephone conversation, no accurate estimates were available because of the uncertainties of the research projects and the highly speculative nature of valve life.

As a general rule, agencies must use evaluation schemes that are designed to give reasonable assurance that award to the lowest evaluated offeror will result in the lowest cost to the government during contract performance. Exclusive Temporaries of Georgia, Inc., B-220331.2 et al., Mar. 10, 1986, 86-1 CPD ¶ 232. Accordingly, in our view, even where the exact quantities which will be ordered are not known precisely, a solicitation should contain the agency's best estimate of what will be required to permit the agency to reasonably determine the low offeror. See R.P. Densen Contractors, Inc., 66 Comp. Gen. 31 (1986), 86-1 CPD ¶ 401.

Here, the solicitation fell short of this standard because it did not contain any estimates and included an evaluation formula which is not related to anticipated order quantities. However, this evaluation formula was clearly spelled out in the solicitation, and the problem was immediately apparent from the face of the solicitation. As the agency correctly asserts, a protest allegation which is based on an alleged apparent solicitation impropriety is required to be filed prior to the closing date for receipt of initial proposals. 4 C.F.R. § 21.2(a)(1). Accordingly, Mogas' protest in this regard is not for consideration on the merits since it was untimely filed.

The protest is denied in part and dismissed in part.

for James F. Hinchman
General Counsel