Comptroller General
of the United States

Washington, D.C. 20548

Decision

Matter of: Engelhard Corporation

File: B-237824

Date: March 23, 1990

R. G. McDowell, for the protester.
Col. Herman A. Peguese, Department of the Air Force, for the agency.
C. Douglas McArthur, Esq., Andrew T. Pogany, Esq., and Michael R. Golden, Esq., Office of the General Counsel, GAO, participated in the preparation of the decision.

DIGEST

1. Protest that awardee's technical proposal did not meet specifications is denied where awardee committed itself to meeting technical requirements for radiation detection equipment and where agency reasonably evaluated information submitted by awardee to determine that its proposal was technically acceptable.

2. Protest concerning pre-closing solicitation amendment provisions relaxing specifications is untimely where protester waited 2 months after receipt of initial proposals before filing protest.

DECISION

Engelhard Corporation protests the award of a contract to Panasonic Industrial Company under request for proposals (RFP) No. F41622-88-R-7114, issued by the Department of the Air Force for a turnkey thermoluminescent dosimetry system1/ for the agency's Occupational and Environmental Health

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1/ The dosimetry system is used to detect, measure, process, and store radiation exposure data of Air Force personnel in various organizations and locations throughout the world to gamma, x-ray, beta, and neutron ionizing radiation. Thermoluminescence refers to material used in such a system which emits light when gently heated.

Laboratory. The protester contends that the agency relaxed the RFP specifications by awarding the contract to Panasonic.

We deny the protest in part and dismiss it in part.

The RFP, as amended, provided for award to the low, responsible offeror whose product conformed to the requirements of the solicitation. The RFP contained detailed technical specifications for the system. Essentially, the system was required to be a thermoluminescent dosimeter (TLD) based system with sufficient capacity and flexibility to support the entire Air Force workload of 8,000 monthly "badge issues."2/ The system was required to be of modular design, with separate and individually supported components. All hardware and software was to have been fully developed and readily available. The successful contractor was required to provide all necessary dosimeter exposures, algorithm development and documentation, dosimetry proficiency testing, software modifications and system documentation.

Three offerors responded to the amended solicitation on July 31, 1989. The agency held discussions with these offerors and, on September 14, requested the offerors to submit best and final offers (BAFOs) by September 22. The agency found that of the two technically acceptable proposals submitted in response to the request for BAFOs, Panasonic was lower in price than the protester.

The agency awarded a contract to Panasonic on September 30. On October 9, Engelhard filed a protest with the contracting agency, in which the protester alleged that the awardee's proposal did not conform to the RFP specifications in ten technical areas. The agency responded on November 8, denying the protest. Engelhard filed this protest with our Office on November 17.3/

2/ The dosimeter consists of a plastic badge or card holder which is worn by the employee being monitored. This badge holds a card containing thermoluminescent material and is used to record radiation exposure that can subsequently be read by a "reader" which is part of the system.

3/ Engelhard has requested that an independent panel of experts evaluate the ability of Panasonic and Engelhard to comply with the specifications. However, it is properly the function of the procuring agency to evaluate proposals, and our Office does not conduct a de novo review of proposals in the context of a bid protest. See The Jonathan Corp., B-199407.2, Sept. 23, 1982, 82-2 CPD ¶ 260.

Initially, we note that the protest, questioning the technical acceptability of Panasonic's proposal, involves highly technically complex issues concerning a scientifically state-of-the-art system. We will not substitute our judgment for the agency's unless its conclusions are shown to be arbitrary or otherwise unreasonable. See Harris Corp., B-235126, Aug. 8, 1989, 89-2 CPD ¶ 113; Morey Mach., Inc., B-234124, May 10, 1989, 89-1 CPD ¶ 440.

The protester alleges that the awardee's proposal (offering a dosimeter using in part lithium borate material) did not meet the RFP requirements for fading.4/ The protester relies upon "general experience in the [TLD] marketplace, Panasonic marketing publications and articles published in various technical journals," which the protester believes cast serious doubt on whether the awardee's dosimeter can meet the requirements of the statement of work, which limits fading to no more than 5 percent in 6 months, especially where the badge is read within 15-20 hours of exposure. However, the protester does not in fact know what modifications to its current product Panasonic offered the Air Force.

The agency concedes that the Panasonic dosimeter may have a problem with short-term (15-20 hours) fade, but claims to have little interest in short-term fade, since it does not generally process the badges within 15-20 hours of exposure. Nevertheless, the agency believes that it has sufficient data to allow it to correct for short-term fade should it wish to process the badges that quickly.

The record shows that in general fading is affected by several factors, many of which can be controlled by the user, who applies an algorithm or correction factor to control fade; the RFP specifically recognized and tacitly approved use of such correction factors. Furthermore, both the Panasonic system and the protester's system require the manipulation of data to reduce the fade rate to 5 percent. The Air Force found, and the record shows, that Panasonic offered a combination of special heating processes, readout techniques and an algorithm to meet fade rate requirements. Our review of Panasonic's proposal shows that the firm committed itself to meeting the 5 percent fading requirement and took no exception in its proposal. The agency found that with the proper adjustments and algorithm

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4/ Depending on when a badge is read after exposure, fading of radiation exposure information may occur.

corrections, Panasonic could comply. We have no basis to disagree with this technical determination since Panasonic offered to comply and provided information to the Air Force substantiating its product's compliance.

The protester next argues that the existing literature contains no basis for believing that Panasonic's system can meet the RFP requirement that time-temperature profiles generated by the reader must be linear.5/

Regarding the time-temperature profile, the agency suggests that the data relied upon by the protester to support its arguments is generally out of date, and, in any event, relates to a product different than the one offered by Panasonic to the Air Force. The record shows that the literature published in the early 1980's, and cited by the protester, indicated that the Panasonic system had a near linear profile through the application of eight heat parameters. With system improvements, Panasonic has now increased the number of parameters applied, to allow heat to be applied in a linear fashion, by applying additional heat at a different stage. The agency advises our Office that this system is similar to the protester's, in which heated gas is supplied to the thermoluminescent material. Since the record shows that the earlier Panasonic product relied upon by the protester for its arguments of technical noncompliance by Panasonic is not the same product offered the Air Force here, we have no basis to question the Air Force's determination that Panasonic met the requirement.

The protester also asserts that, based on Panasonic sales literature, the awardee's promise to limit the dosimeter's energy dependence to less than ±20 percent for photon energies greater than 10 keV, as required by the specifications, is unrealistic.

The agency points out that the energy dependence requirements of the system apply to the system as a whole rather than individual elements. As with its arguments regarding fading and the time-temperature profile, the agency notes that the protester's arguments concerning energy dependence again rely upon old and often outdated information and journals. As the agency notes, Engelhard relies upon a 1984 Panasonic sales brochure as showing energy response outside the limits. Our review of Panasonic's proposal shows that

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5/ In reading the badge, the reader produces time-temperature profiles of the radiation exposure data. The purpose is to obtain accurate and consistent readings from the badge over a period of time.

the firm specifically promised to meet the requirement and submitted information considered sufficient by the agency to establish the awardee's ability to meet the energy dependence requirement. In our view, the agency reasonably considered Panasonic's statement of compliance as a commitment to meet the specifications.

The protester also points out that the awardee's system does not meet the requirement of the statement of work that the proposed dosimeter meet National Voluntary Laboratory Accreditation Program (NVLAP), and Department of Energy Laboratory Accreditation Program tolerance levels at various angles of radiation exposure. As noted by the protester, the agency essentially admits that the awardee's system does not meet this specification, but found that the protester did not meet these tolerance levels either. The protester does not dispute its own nonconformance but asserts generally that of eight NVLAP tolerance levels, the awardee does not meet four, while the protester only fails in two.

The record before us shows that neither offeror met the statement of work requirements in this regard and that the agency therefore waived the requirement. The RFP provided for award on the basis of technical acceptability, not on the basis of a comparative evaluation, and did not provide for the agency to award a contract to a nonconforming offeror simply because it came closer to conforming than did another offeror. Generally, if the acceptance of an offer will meet the agency's needs, and no offeror will thereby be prejudiced, award should be made notwithstanding an alleged defect in the specifications. See Hamilton Prods. Group, Inc., B-233067, Oct. 24, 1988, 88-2 CPD ¶ 387. We find no basis to object to the agency's decision to make award to Panasonic notwithstanding its failure to meet the tolerance levels since the requirement was waived for both offerors, and equal competition was not compromised.

The protester also alleges that the awardee's system does not meet the equivalence requirements of the specifications in two other areas: thermoluminescent element material and encapsulation. The protester does not agree with the agency determination that the awardee's system meets the following equivalency requirements of the statement of work:

> "The complete dosimeter shall consist of two components, the thermoluminescent dosimeter (TLD) card and the card holder. The beta, gamma and x-ray TLD cards must contain at least four lithium based or equal TLD elements encased in a Teflon or equivalent seal and mounted on a card readable by the [thermoluminescent reader] . . . The cards must be capable of at least

> 500 reuses in the reader without significant mechanical deterioration, and have a sensitivity loss less than 5 percent after such reuses." (Emphasis added.)

Panasonic uses calcium sulfate rather than lithium-based material in two of the four elements of its dosimeter; the protester argues that the calcium sulfate elements are not "equal" to lithium-based elements, which are tissue equivalent, i.e., they absorb photons similarly to human tissue. The protester also states that Panasonic only uses Teflon on one side of the elements, using on the other side a polymid substrate material coated by carbon, and users of the Panasonic system have encountered a problem with the phosphor powder separating from the substrate, affecting the dosimeter's sensitivity to radiation.

The solicitation contains no express requirement for tissue equivalency, and the agency advises our Office that it has no need for the dosimeter elements to be tissue equivalent and that calcium sulfate materials meet the RFP performance requirements. The record shows that while lithium-based elements are roughly equivalent to tissue, both lithium-based elements and calcium sulfate elements require a correction factor to account for the difference; the awardee's processing algorithm takes the response of calcium sulfate into account in measuring radiation doses. We find that the protester has not shown that the agency was unreasonable in determining that Panasonic's calcium sulfate elements are functionally equal to lithium-based elements in pertinent characteristics and allow the Panasonic system to meet the minimum detectability requirement.

Further, the protester's argument, which is essentially that there is no equivalent to lithium but lithium, would make the phrase "or equal" meaningless. Where a dispute exists as to the actual meaning of a solicitation requirement, we will resolve the dispute by reading the solicitation in a manner that gives effect to all its provisions. TUMI Int'l., Inc., B-235348, Aug. 24, 1989, 89-2 CPD ¶ 174. We therefore believe that the solicitation clearly provided for the acceptance of elements that were not lithium-based, and that there is no basis for the protester's assertion that the agency was using tissue equivalency as a touchstone for determining whether a particular material was acceptable. Thus, we find that calcium sulfate elements, with the use of the correction algorithm, were reasonably found by the agency to be equal to lithium-based elements.

Concerning Panasonic's use of Teflon on one side of the elements, the agency advises our Office that the Panasonic

dosimeters have a Teflon cover on the side that is read to reveal radiation exposure levels; the agency states that it does not matter what coating is used on the side not visible to the reader. The agency therefore determined that a seal with Teflon on the critical side of the dosimeter was "equivalent" to a Teflon seal. The agency recognizes the awardee's past problems with the element separating from the substrate, but advises our Office that Panasonic has corrected the problem and has committed itself to meet the requirement of 500 reuses.

The protester's remaining arguments, which relate to x-ray discrimination, neutron holder design and hygroscopic properties,6/ all constitute untimely challenges to the specifications. Paragraph 2.1d of the amended solicitation prohibited the use of lead for dosimeter filtration. On July 18, prior to submission of initial offers, the agency amended the solicitation to allow the use of lead. The same amendment also relaxed requirements for the neutron holder design, and the specifications never contained a hygroscopy requirement.

The protester expresses concern about the use of lead in the dosimeter system and the quality of the system absent stringent controls that were relaxed by the amendment on the neutron holder design, as well as hygroscopy. However, although these matters were apparent on the face of the solicitation prior to initial closing, Engelhard waited until October 10, more than 2 months after the submission of initial offers before expressing these concerns, and its protest on these issues is clearly untimely under our Bid Protest Regulations, which require that protests based upon alleged improprieties which are apparent prior to the closing date for receipt of initial proposals be filed prior to the closing date for receipt of initial proposals. 4 C.F.R. § 21.2(a)(1) (1989). Accordingly, these protest grounds are dismissed.

The protest is denied in part and dismissed in part.

Robert P. Murphy

for James F. Hinchman
General Counsel

6/ Hygroscopy refers to a material's tendency to absorb and retain moisture.