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**Comptroller General
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**United States Government Accountability Office
Washington, DC 20548**

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Decision

Matter of: R&D Dynamics Corporation

File: B-298766

Date: December 11, 2006

William T. Welch, Esq., Barton, Baker, McMahon & Tolle, LLP, for the protester.
Vera Meza, Esq., U.S. Army Materiel Command, for the agency.
Sharon L. Larkin, Esq., and James A. Spangenberg, Esq., Office of the General Counsel, GAO, participated in the preparation of the decision.

DIGEST

Protester's challenge to agency's decision not to fund its proposal under Phase II of a solicitation issued under the Department of Defense Small Business Innovation Research program is denied, where the agency reasonably evaluated the protester's proposal and ranked it 21st out of 34 proposals received, and funding was available only for the 19 highest ranked proposals.

DECISION

R&D Dynamics Corp. (RDDC) protests the decision of the Department of the Army not to fund its Phase II proposal under the Department of Defense (DOD) Small Business Innovation Research (SBIR) program solicitation No. FY06.1.

We deny the protest.

The SBIR program is conducted pursuant to the Small Business Innovation Development Act, 15 U.S.C. § 638 (2004), which requires certain federal agencies to reserve a portion of their research and development funds for awards to small businesses. In addition to advancing the role of small businesses and the participation of minority and disadvantaged persons in research and development, the objectives of DOD's SBIR program include stimulating technological innovation in DOD's critical technology area and increasing the commercial application of DOD-supported research and development results. The program has the following three phases: Phase I is to determine the scientific, technical, and commercial merit of ideas; Phase II is the principal research and development effort resulting in a well-defined, deliverable prototype; and in Phase III, the small business seeks to obtain private and public funding to develop the prototype into a viable commercial product for sale to military and/or private sector markets. Only those firms that are

awarded Phase I contracts are eligible to participate in Phases II and III. Solicitation No. FY05.2, ¶¶ 1.1, 1.2.¹

The Phase I solicitation included Army “Topic” No. A05-035, “Revolutionary Non-Contacting Gas Path Seals for Improved Turbine Engine Performance.” The objective of this topic was to “[d]esign and develop innovative, non-contacting, compliant gas path seals that improve turbine engine performance for military and commercial jet engine applications.” Supplemental Agency Report (SAR) (Nov. 13, 2006), encl. 2. RDDC received a Phase I award under this topic for its Phase I proposal, “Foil Face Seal for Advanced Gas Turbine Engines.”

On March 7, 2006, RDDC and other Phase I contractors were invited by the U.S. Army Research Laboratory to submit a proposal for Phase II. Contracting Officer’s Statement at 3; Agency Report (AR), Tab E. These Phase II proposals were considered for award in the Army’s “Advanced Propulsion Technologies” technology area. Contracting Officer’s Statement at 4. The Phase II proposals were to be evaluated for “overall technical merit” based on the following three factors, listed in descending order of importance:

- a. The soundness, technical merit, and innovation of the proposed approach and its incremental progress toward topic or subtopic solution.
- b. The qualifications of the proposed principal/key investigators, supporting staff, and consultants. Qualifications include not only the ability to perform the research and development but also the ability to commercialize the results.
- c. The potential for commercial (Government or private sector) application and the benefits expected to accrue from this commercialization.

AR, Tab G, Solicitation No. FY06.1 Evaluation Criteria. Other factors that could be considered in the Phase II selection process include a commitment for Phase III follow-on funding, the possible duplication with other research or research and development, program balance, budget limitations, and the potential of a successful Phase II effort leading to a product of continuing interest to DOD. Id.

The evaluation was conducted in two “tiers.” First, a technical evaluation team (TET), consisting of personnel representing participating organizations, performed a technical assessment and forwarded the “best” proposals for a second level of

¹ Solicitation No. FY05.2 described the SBIR program phases and sought proposals for Phase I.

review. This second level of review was performed by a panel of senior level Army scientists and technologists, called “technical area chiefs” (TAC), who together were the source selection board (SSB). The SSB conducted its review “from an Army-wide perspective” and recommended to the source selection authority (SSA) which proposals should be funded. Contracting Officer’s Statement at 2-3.

With regard to RDDC’s proposal, the TET identified a number of strengths and weaknesses under each technical factor. For the first factor (technical merit), the TET identified several strengths, including the “innovative seal-bearing configuration” and the benefits of “reduced specific fuel consumption, increased power density, and increased seal life.” The TET also identified a number of weaknesses involving the failure to address or lack of detail provided in several key areas, including the material used for the “top foil coating,” the incorporation of a “fail safe sealing labyrinth” or similar seal into engine design, and the extent of the modifications and test program. AR, Tab I, TET Summary, at 1.

For the second factor (qualifications), the TET found strengths in the “excellent qualifications” of RDDC’s principal investigator and the person who would lead RDDC’s effort, as well as the “unique credentials” and capability of the “[p]rincipal’s team.” However, the TET also found that the responsibilities of Rolls-Royce (one of RDDC’s team members) were not clearly defined, and the proposal was “unclear” and that “[m]ore detail is needed” regarding modification and testing. *Id.* at 2.

For the third factor (commercial potential), the TET found strengths in RDDC’s pursuit of partnerships with six gas turbine manufacturers to develop and produce the next generation of gas turbines, including a partnership with Rolls-Royce, which would provide support and testing for the foil face seal on an endurance engine. However, the TET also found weaknesses because the proposal did not make clear whether Rolls-Royce would be “interested” in the Phase III effort, the proposal “lack[ed] description” of cost benefits and how the foil face seal will enter production if tests results are successful in Phase II, and the commercialization portion of the proposal lacked sufficient information about gas turbomachinery and potential savings. *Id.*

The SSB concurred with the TET’s findings and provided the following “overall comment”:

[RDDC’s] proposal is judged to be of high quality, but not of the highest quality when all evaluation criteria are considered. Some items of particular note include the following[:] The commercialization portion of the proposal needs to address a broader class of gas turbomachinery and to quantify advantages of the seal-bearing concept as well as the potential savings in fuels, environmental impact, and system cost. From a technical standpoint, better justification [is] needed from representative standpoints such as: life projections (including

short-life bearing use), fail safe labyrinth or similar seal integration into engine design, top foil coating identification (described in proposal as “green,” but no mention of the coating material [is] given). Finally, specific details on the extent of the modifications and test program of the proposer’s test rig as it is integrated into major manufacturer’s hardware is lacking.

AR, Tab J, SSB Comments, at 1.

The SSB developed an “order of merit list,” which ranked all 34 proposals submitted for the technology area. RDDC’s proposal was ranked 21st out of 34. Based on the findings of the SSB, the SSA selected only the 19 highest ranked proposals for funding. While RDDC’s proposal was sufficiently highly ranked to be eligible for an award, the number of awards was based on the availability of funding and there was insufficient funding to make additional awards. Contracting Officer’s Statement at 4.

After receiving a detailed explanation of its proposal strengths and weaknesses, RDDC filed an agency-level protest challenging the assessment of weaknesses. That protest was denied by the Army, and RDDC timely protested to our Office. RDDC complains that the agency’s evaluation of its proposal was “inconsistent with the stated evaluation criteria” because the assessed weaknesses were inconsistent with its proposal and, in any event, were “far exceed[ed] (in quantity and quality)” by its proposal strengths.² Protest at 7; Protester’s Comments at 2.

Where an agency is conducting an SBIR procurement, it has substantial discretion to determine which proposals it will fund. RDAS Corp., B-294848, Dec. 23, 2004, 2004 CPD ¶ 253 at 2. In light of this discretion, our review of an SBIR procurement is limited to determining whether the agency violated any applicable regulations or solicitation provisions, or acted in bad faith. Id.; R&D Dynamics Corp., B-285979.2, Nov. 14, 2000, 2000 CPD ¶ 193 at 4. Here, we have no basis to object to the agency’s decision not to select RDDC’s proposal for funding.

RDDC disputes the weaknesses found under the first technical factor (technical merit). It asserts that weaknesses regarding the top foil coating material, failure to incorporate a fail safe sealing labyrinth or similar seal into engine design, and lack of information regarding the extent of modifications are “putting the cart before the

² RDDC also protested the relative ranking of proposals to our Office. That information was made available to RDDC during its debriefing, but was not protested in its agency-level protest. Because the protest to our Office was not filed within 10 days of when the information was first made known, or included with its agency-level protest, the protest ground is untimely now. See 4 C.F.R. § 21.2(a)(2), (a)(3) (2006).

horse,” since these will be determined during Phase II development. Protester’s Comments at 3. However, the agency provided reasonable explanations for these weaknesses, and showed how the weaknesses demonstrated concern over the soundness of RDDC’s approach, which was what the agency was required to evaluate under this factor. For example, the agency asserts that it was unable to fully evaluate the seal design and manufacture in the context of the stated goals because “little is known of the [top foil] coating (i.e., material, thickness, method of application, temperature range capability, wear characteristics, adherence to the base material, etc.) other than it is ‘green.’” SAR (Oct. 23, 2006), encl. 1, Statement of TET Team Chief, at 2. The agency was also concerned with the proposal’s failure to address fail safe seals, since these are necessary to “prevent engine performance loss,” which could “have [a] negative impact to a mission in progress.” *Id.* at 2-3. RDDC’s failure to adequately address modifications was determined to be a weakness because the information “aid[s] in mitigating risks to the successful test of the foil face seal, risks to cost, and risks to schedule.” *Id.* at 3. Although RDDC disagrees with these assessments, it has not shown them to be unreasonable.³

RDDC also complains that the agency unfairly assessed a weakness under the second technical factor (qualifications) because the “exact responsibilities of the in-kind participation of Rolls-Royce are not clearly defined” in the proposal. RDDC asserts that this information was addressed in its proposal through a statement that “the full size seal will be tested . . . at Rolls-Royce[’s] facility” and a discussion of the testing and engine modifications that will be performed. Protester’s Comments at 3. The agency acknowledges that the RDDC’s proposal included this information, but notes that the proposal did not address who at Rolls-Royce will be responsible for the overall test program and the engine modifications. As the agency explains, the qualifications factor was to evaluate the qualifications of principal or key investigators and consultants, and since Rolls-Royce was the “technical point of contact with overall responsibility for the test program as well as [for the engine

³ RDDC objects to our consideration of statements submitted by the Team Chief and Chief Scientist during the course of this protest, and comments of the SSB contained in the record, on the grounds that they were not created contemporaneously with the evaluation. Protester’s Comments at 4; Protester’s Supplemental Comments at 1. However, our Office will consider post-protest explanations that provide a detailed rationale for contemporaneous conclusions of the agency, so long as the explanations are credible and consistent with the contemporaneous record. Manassas Travel, Inc., B-294867.3, May 3, 2005, 2005 CPD ¶ 113 at 3. The post-protest statements and comments complained of here simply provide additional detail regarding the weaknesses identified in RDDC’s proposal during the evaluation and are consistent with the contemporaneous record. Accordingly, we have considered these statements in determining that the decision not to fund RDDC’s proposal was reasonable.

modifications] that will test the foil face seal,” in our view, the lack of detail about Rolls-Royce’s responsibilities was reasonably evaluated under this factor and determined to be a weakness. SAR (Oct. 23, 2006), encl. 1, Statement of TET Team Chief, at 3-4.

RDDC asserts that the weakness assessed under the third technical factor (commercial potential) that the proposal was “unclear if Rolls-Royce is interested in a Phase III effort” see AR, Tab I, TET Summary, at 2, was, in fact, addressed in its proposal in that a “commitment letter” from Rolls-Royce was included with RDDC’s proposal. However, this letter is described in RDDC’s proposal only as a “letter of support” and states only that Rolls-Royce will provide “continuing support” for Phases II and III, without any further explanation of the level of support that will be provided. See AR, Tab H, RDDC’s Proposal, at 36-37. Thus, we find that the agency reasonably remained concerned about the extent of Rolls-Royce’s interest in Phase III. See SAR (Oct. 23, 2006), encl. 1, Statement of TET Team Chief, at 5.

RDDC complains that another weakness assessed under the third technical factor (commercial potential) is inconsistent with a recognized proposal strength. The weakness was that RDDC did not sufficiently describe the cost benefit to an engine company or the potential savings in fuel and environmental impact. AR, Tab I, TET Summary, at 2. RDDC asserts that the assessed weakness is inconsistent with a recognized proposal strength that the agency found under the first technical factor: that the foil face seals could result in “savings of over 0.5 billion gallons of fuel.” Protester’s Comments at 4; AR, Tab I, TET Summary, at 1. The agency explains that its comment about fuel savings was based on an evaluator’s attempt to “extrapolate” savings that could occur 15 to 20 years in the future after the technology was fully developed, and was not based on any analysis by RDDC in its proposal; it was the lack of detail supporting cost savings that led the agency to assess a weakness.⁴ See SAR (Oct. 23, 2006), encl. 1, Statement of Team Chief at 4; AR, Tab I, TET Summary, at 2. We find the agency’s evaluation in this regard reasonable.

Finally, RDDC complains that the “quantity and quality” of strengths recognized by the agency far outweigh the identified proposal weaknesses. Protester’s Comments at 2. However, our review of the record shows that the agency reasonably considered the strengths and weaknesses in accordance with the evaluation criteria and determined that RDDC’s proposal was not among the highest ranked proposals.

⁴ Although the record also shows that RDDC projected \$750 million of market “potential” for the foil face seals in its proposal, the firm provided no explanation to support this. See AR, Tab H, RDDC Proposal, at 38.

While RDDC disagrees with the agency's conclusions, it has not shown them to be unreasonable. See Noble Solutions, B-294393, Sept. 10, 2004, 2004 CPD ¶ 197 at 4.

The protest is denied.

Gary L. Kepplinger
General Counsel