



Comptroller General  
of the United States

Washington, D.C. 20548

92-1 CPD 46

## Decision

**Matter of:** Herndon Science and Software, Inc.

**File:** B-245505

**Date:** January 9, 1992

J. Marvin Herndon for the protester.

Darleen A. Druyun, National Aeronautics and Space Administration, for the agency.

M. Penny Ahearn, Esq., David Ashen, Esq., and John M. Melody, Esq., Office of the General Counsel, GAO, participated in the preparation of the decision.

### DIGEST

Where protester's proposal under broad agency announcement failed to include sufficient technical information to show viability of proposed research, agency reasonably determined that technical success was improbable and decision to reject proposal for funding was proper.

### DECISION

Herndon Science and Software, Inc. protests the rejection of its proposal under solicitation No. NRA-91-OSSA-1, issued by the National Aeronautics and Space Administration (NASA) for planetary geoscience research proposals. Herndon principally argues that its proposal was improperly evaluated.

We deny the protest.

The solicitation, a NASA research announcement (NRA), is a form of a broad agency announcement (BAA) that NASA uses annually to solicit basic research on a competitive basis in furtherance of NASA's Planetary Geology and Geophysics Program (PG&GP).<sup>1</sup> The NRA listed a number of research

<sup>1</sup>Under a BAA, offerors who submit proposals are not competing against each other, but rather are attempting to demonstrate that their proposed research meets the agency's requirements. The issuing agency is under no obligation to award any contract. The agency may decide to fund those efforts and award contracts to those offerors who submit ideas the agency finds suitable. See Federal Acquisition Regulation (FAR) §§ 6.102(d)(2) and 35.016; see also Avogadro Energy Sys., B-244106, Sept. 9, 1991, 91-2 CPD ¶ 229.

areas for which proposals could be submitted. Offerors were advised that their submission would be judged according to the following factors of approximately equal weight: intrinsic merit, relevance to NASA's objectives, and cost. Under intrinsic merit, the subfactors to be evaluated included "overall scientific or technical merit of the proposal or unique and innovative methods, approaches, or concepts demonstrated by the proposal." Cost was to be evaluated for realism and reasonableness.

NASA received 212 proposals in response to the NRA. Herndon's proposal, entitled, "Nuclear Fission Reactors as Energy Sources for the Giant Planets," was for research to examine the hypothesis that planetary nuclear fission "breeder" reactors account for the internal energy production in the giant outer planets. NASA conducted an external peer review technical evaluation, led by the Lunar and Planetary Geosciences Review (LPGR) Panel of the Lunar and Planetary Institute, with which NASA contracts for logistical support, and an additional NASA internal evaluation by PG&GP staff. At the conclusion of the evaluation, each proposal was placed in one of six evaluation categories: I--excellent scientific merit, essential to the NASA program; II--very good scientific merit, great importance to the program; III--good scientific merit, useful to the program; IV--fair scientific merit, useful to the program; V--poor, not recommended for funding; and VI--inappropriate for the program.

Herndon's proposal received a unanimous category V, i.e., poor rating, and was among the 18 lowest-rated proposals (of the 212 proposals submitted). Herndon's proposal was determined to contain two major technical deficiencies, both informational in nature, that led to its low rating. First, the technical evaluators, including the LPGR Panel's geophysics group, considered the information provided in the proposal insufficient to determine whether basic scientific concerns relating to "energetics," i.e., the transformation of energy, would be addressed by the proposed research. In this regard, the evaluators considered Herndon's proposed hypothesis on the origin of the internal planetary energy not likely to be scientifically viable under possible alternative physical conditions.<sup>2</sup> The evaluators found

---

<sup>2</sup>The evaluators considered the natural occurrence of uranium to be too low to produce the excess radiation observed. Alternatively, the evaluators believed that, even if uranium and hydrogen existed in some concentrated form, reaction times would be too short lived to still provide excess giant planet heating today, millions of years after the "reactor"

Herndon's discussion of nuclear reactions elementary and insufficient to address their concerns with respect to energetics. Second, the evaluators considered Herndon's "phase diagram" for the calculation of conditions within the interior of giant planets undergoing nuclear reaction not to be scientifically credible. The evaluators considered such a phase diagram currently almost impossible to compute and, in any event, determined that the calculations for the diagram were not clearly set forth in the proposal. At a minimum, they believed that an acceptable research proposal should include a detailed exposition of mathematical equations and the methods proposed for solutions, as well as appropriate references to the principles of physics; the evaluators determined that the elementary estimation procedures alluded to in Herndon's proposal did not meet this standard. At the conclusion of the technical review, on July 1, 1991, a summary of deficiencies was forwarded to Herndon stating that the agency had not made a final decision on which proposals to fund.

PG&GP staff within NASA then reviewed all of the written technical evaluations, as well as the ratings, and considered each proposal's overall relevance to NASA objectives and its cost in order to prioritize proposals for funding. On August 20, NASA notified Herndon of the resulting rejection of its proposal, stating that the proposal "was not assigned sufficiently high priority to permit inclusion" in NASA's program. This protest followed.

Herndon primarily contends that NASA improperly evaluated its proposal under the intrinsic merit factor by misrepresenting certain portions of the proposal, such as the previously-discussed section on energetics and Herndon's phase diagram. The protester also contends that the agency failed to evaluate its proposal for "unique and innovative methods" under the intrinsic merit subfactor or for relevance to NASA's objectives. Herndon further complains that NASA improperly rejected its proposal solely on the basis of the technical evaluation, without regard to its offered cost.

In reviewing an agency's technical evaluation, we will not reevaluate the proposals; we will only consider whether the agency's evaluation was reasonable and in accord with the evaluation criteria listed in the solicitation. Information Sys. & Network Corp., B-237687, Feb. 22, 1990, 90-1 CPD ¶ 203. A protester's disagreement with the agency's judgment is not sufficient to establish that the agency acted unreasonably. United HealthServ, Inc., B-232640 et al., Jan. 18, 1989, 89-1 CPD ¶ 43.

*69 CompDen 89*  
was assembled.

Based on our review of the record, we find the agency's evaluation and consequent rejection of Herndon's proposal reasonable. The evaluated technical deficiencies in Herndon's proposal relate to the agency's overriding concern that there was insufficient information provided on major issues to demonstrate the viability of the firm's proposed research. In our view, Herndon fails to demonstrate that the agency's overall assessment in this regard was unreasonable.

For example, the NRA specifically notified offerors that their project statement of work should discuss the relation of the project to the present state of knowledge in the field and that their proposal should be in sufficient detail to enable a reviewer to make a judgment with respect to the probability for accomplishment of the stated objectives. Herndon acknowledges that it did not address the issues raised by the agency with respect to energetics and the origin of the planetary energy, but argues that the agency has misrepresented the firm's proposal by unreasonably raising issues not included in the firm's proposal. To the contrary, however, we find that the agency reasonably focused on whether Herndon's hypothesis on the origin of planetary energy was consistent with possible physical conditions. In our view, NASA's consideration of these conditions was properly found relevant to Herndon's likely contribution to the present state of knowledge in the field and to the viability of its proposed research.

With respect to the evaluation of Herndon's phase diagram, the protester contends that the reviewers erroneously considered its diagram to be based on a certain computation, known as the Thomas-Fermi equation, but that its diagram is in fact state-of-the-art for which no scientific literature exists. It is, however, an offeror's responsibility to submit an adequately written proposal in order to establish that what it proposes will meet the government's needs; an offeror runs the risk of having its proposal rejected if the proposal submitted is inadequately written. See Research Analysis & Maintenance, Inc., B-242836.4, Oct. 29, 1991, ✓ 91-2 CPD ¶ 387; Defense Sys. Concepts, B-242755.2, July 1, 1991, 91-2 CPD ¶ 2; Completere, Inc., B-227832, Sept. 15, 1987, 87-2 CPD ¶ 254. This is particularly important here where research is to be undertaken into new concepts. We find that any uncertainty or confusion regarding its phase diagram resulted from Herndon's failure to include an adequate explanation, including appropriate scientific references, for its proposed approach.

Herndon questions whether it was properly evaluated under the evaluation factor for unique and innovative methods and for relevance to NASA's objectives. Contrary to Herndon's contention, there is no indication in the record that its

proposal was not considered innovative. Indeed, one evaluator stated that the basic premise of the proposal was "startling" and, if true, "would be a most important discovery." However, NASA maintains, reasonably in our view, that a successful proposal must show how any unique and innovative features would contribute to the improvement of scientific understanding, and should convince the reader that the proposed scientific methodology is technically sound, and has a reasonable probability for success. NASA, citing the evaluation of Herndon's approach to energetics and its phase diagram, determined that was not done by Herndon. We find this determination to be reasonable.

In view of the significant informational deficiencies concerning Herndon's proposed research, and its resulting very low ranking among the proposals received, we conclude that the agency reasonably eliminated the firm from consideration. See Madison Servs., Inc., B-236776, Nov. 17, 1989, 89-2 CPD ¶ 475. Where an offeror's technical proposal is determined technically unacceptable, as here, its cost proposal need not be evaluated. American Technical & Analytical Servs., Inc., B-240144, Oct. 26, 1990, 90-2 CPD ¶ 337; Electronic Warfare Assocs., B-224504 et al., Nov. 3, 1986, 86-2 CPD ¶ 514.

B-223938

Herndon also challenges the technical evaluation based on the composition of the technical evaluation panel. The protester argues that because the LPGR panel consists in major part of individuals from organizations who submit proposals to NASA's PG&GP, it is not in their interest to evaluate favorably proposals submitted by a competitor for funding.

The composition of technical evaluation panels is within the contracting agency's sound discretion and, as such, does not give rise to review by our Office absent a showing of possible abuse of that discretion, such as by ignoring a conflict of interest or actual bias on the part of evaluators. National Council of Teachers of English, B-230669, July 5, 1988, 88-2 CPD ¶ 6. We will not attribute unfair or prejudicial motives to procurement officials on the basis of mere inference or supposition. Id. In order to prove bias, a protester must provide hard facts showing undue influence on panel members so as to result in favoritism or antagonism towards a particular offeror. Id.

NASA reports that it has instituted measures to avoid conflicts of interest. Specifically, proposal evaluators were excluded from review or discussion of any proposal which they submitted as a principal or collaborator or which was submitted by their supporting institution. Further, with respect to the specific evaluation of Herndon's proposal, NASA reports that none of the external, non-LPGR

(9)

panel evaluators, who provided a majority, i.e., 3 out of 5, of the written evaluations, is currently funded through NASA's PG&GP. We find no evidence in the record, nor reason to believe, that any conflict of interest was responsible for Herndon's low rating and therefore we will not consider this issue further.

The protest is denied.

*Robert P. Murphy*  
for James F. Hinchman  
General Counsel