The Comptroller General
of the United States

Washington, D.C. 20548

Decision

Matter of: Plessy Electronics Systems, Inc.

File: B-232693

Date: February 2, 1989

DIGEST

Protest that agency improperly found awardee's proposal compliant with mandatory solicitation requirement is sustained where agency unreasonably determined that information furnished with proposal established awardee's compliance with this requirement.

DECISION

Plessy Electronics Systems, Inc., on behalf of the ISC Cardion Electronics/Plessy Radar Joint Venture, protests the Department of the Army's award of a contract to Wilcox Electric, Inc., under request for proposals (RFP) No. DAAB07-88-R-M011, for radar systems to augment visual observation of air traffic at Army airfields and air gunnery ranges. Plessy contends that Wilcox should not have been considered for award because its proposal failed to comply with mandatory solicitation requirements.

We sustain the protest.

The solicitation specified that award would be made to the responsible offeror submitting the lowest-priced offer compliant with the technical specifications, which included a provision requiring a proposed system, exclusive of antenna, to have a mean (i.e. average) time between failure (MTBF) of not less than 3,000 hours. The contracting officer found that each of the five offerors, including Wilcox, which proposed a magnetron radar system, and Plessy, which offered its own Watchman system, met the stated requirements. Wilcox, proposing the low price of $29,159,956, as compared to Plessy's second low price of $40,823,826, thus was selected for award.

The Army found that Wilcox's proposed radar system meets the functional specifications under the solicitation. With respect to the requirement in issue here, that the offered

system possess an MTBF of not less than 3,000 hours, the Army found that Wilcox's predicted system MTBF of 4,486 hours was supported by two types of information: actual and demonstrated data on the 128 systems Wilcox has installed worldwide, and partial calculations provided by Wilcox, derived from Military Handbook (MIL-HDBK) 217E (which prescribes a method for calculating the reliability of magnetron radar systems). The Army thus concluded that this predicted MTBF was attainable.

Plessy contends that the Army's conclusion was incorrect. Believing that Wilcox modified its currently available system to meet this solicitation's stricter detection requirement, Plessy argues that the supporting information furnished by Wilcox reflected only the capabilities of the current version of this system, and thus could not be relied upon to establish the offered modified system's compliance with the MTBF requirement.

We agree with Plessy. First, while field data on currently installed similar equipment may be a valid basis for determining conformance with a reliability requirement, Wilcox's installed systems appear to be materially different from the system offered here. Specifically, the system Wilcox proposed for this procurement, while based on the installed systems, represents an advancement in magnetron radar design. Although Wilcox indicated in a press release that it would supply to the Army its TA-10M system currently installed throughout the world, the system Wilcox actually proposed to furnish the Army differs significantly from this standard TA-10M model. Unlike this standard system (which utilizes a magnetron transmitter model ER 712S, powered by a frequency tunable magnetron, type TH-3113), the system Wilcox offered here has an upgraded, more powerful, and higher performance transmitter and magnetron (the model numbers of which Wilcox considers proprietary and thus will not be disclosed), necessary to satisfy the solicitation's rigorous detection requirements (the standard TA-10M radar system lacks the performance capabilities necessary to comply with this requirement).

Since the system offered here is different from the 128 installed systems in material respects--namely, it includes different major components that have a significant impact on the system's MTBF--we do not think the data from these installed systems validly reflected Wilcox's compliance with the 3,000-hour MTBF requirement. Thus, we do not think the Army reasonably relied on this actual observed data in determining Wilcox's compliance with the MTBF requirement.

Neither do we think that the calculations furnished by Wilcox (which were based on MIL-HDBK 217E) demonstrated its system's compliance with the MTBF requirement. As noted by the Army, Wilcox's calculations to support its predicted MTBF rate of 4,486 hours for the entire system did not include a projected MTBF rate for the magnetron, the most critical component of the entire system. The technical evaluation panel for this procurement determined that Wilcox's magnetron would need to have the very high MTBF rate of 8,972 hours to attain such a high overall level of reliability (under reliability analysis theory, as pointed out by the Army, a system MTBF is always lower than the MTBF of an individual subassembly). Recognizing that such an MTBF (8,972 hours) is higher than the expected magnetron MTBF of approximately 5,000 hours, the Army assumed that Wilcox's calculations must have been based on replacing the magnetrons after 5,000 hours (the Army believed Wilcox had offered sufficient spare magnetrons to meet this replacement schedule), thereby raising the magnetron MTBF (to 8,972 hours), and hence raising the overall system MTBF.

The record shows that this assumption by the Army in considering Wilcox's proposed MTBF rate of 4,486 hours was incorrect. While the Army based its determination on replacement of each magnetron after 5,000 hours of use, Wilcox's proposal sets forth no such replacement schedule. Further, our review of Wilcox's proposal indicates that, contrary to the Army's belief, the firm offered only enough spare magnetrons for replacement once a year, that is, after 8,760 hours. Our reading of the proposal was confirmed by Wilcox's statement at the bid protest conference that it in fact planned to replace this part only once every 8,760 hours, well beyond the 5,000 hours assumed by the Army.

Since the intended replacement schedule for the magnetrons must be considered when performing MIL-HDBK calculations to determine the overall MTBF for magnetron radar systems, and since assuming an earlier replacement of the magnetrons will result in a calculation showing a better system MTBF, this erroneous assumption by the Army casts doubt on the Army's conclusion that Wilcox's system complies with the MTBF requirement. We do not think the Army could reasonably determine that Wilcox's system complied with the MTBF requirement, based on the calculations submitted by Wilcox.

The Army argued initially (but did not pursue the argument in its post-conference comments) that whether Wilcox met the MTBF requirement was a matter of the firm's responsibility rather than the technical acceptability of the firm's proposed system, which generally is not subject to our

review. See Bid Protest Regulations, 4 C.F.R. § 21.3(m)(5) (1988). We disagree. The MTBF provision was included in the specification section of the RFP along with all other mandatory technical requirements, and the offerors' compliance with the requirement was specifically considered by the evaluation panel in determining technical acceptability (the panel concluded that all offerors had submitted adequate data to establish compliance). Thus, the requirement concerned a system characteristic, not the offeror's ability to perform.

We therefore sustain the protest on the basis that neither of the two types of information submitted by Wilcox to establish compliance with the MTBF requirement actually established compliance; the Army thus did not reasonably determine that Wilcox's proposed system met the requirement.1/ See Essex Electro Engineers, Inc., B-229491, Feb. 28, 1988, 88-1 CPD ¶ 215 (in negotiated procurements, a proposal that fails to conform to mandatory terms and conditions of a solicitation is unacceptable and may not form the basis for award).

Accordingly, by letter to the Secretary of the Army, we are recommending that, after verifying Wilcox's intended replacement schedule, the Army recalculate its system MTBF. Should the Army ultimately determine that Wilcox's proposal does not satisfy the MTBF requirement, Wilcox's contract should be terminated for convenience, and award made to Plessy, if otherwise appropriate. Alternatively, if the Army determines that its specifications overstated its needs because Wilcox's proposed system would satisfy the government's requirements, the solicitation should be canceled and the procurement recompeted on the basis of

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1/ Plessy, based on its mistaken belief that Wilcox offered to furnish its standard model TA-10M system (using the ER 712S transmitter and TH-3113 magnetron) for this procurement, also argues that Wilcox's proposed system did not satisfy the solicitation requirements pertaining to commercial availability and probability of detection. We have no basis to conclude that the actual system offered by Wilcox did not satisfy these requirements.

revised specifications. We also find that Plessy is entitled to be reimbursed its protest costs, including reasonable attorneys' fees. 4 C.F.R. § 21.6(d)(1) (1988).

The protest is sustained.

for Comptroller General
of the United States