

DECISION

**THE COMPTROLLER GENERAL
OF THE UNITED STATES**
WASHINGTON, D. C. 20548

FILE: B-216449

DATE: March 13, 1985

MATTER OF: The Trane Company

DIGEST:

Agency's specification for a building chiller does not unduly restrict competition where agency presents explanation why the restriction is necessary to meet its minimum needs and protester, while disagreeing with agency's technical analysis, does not show that the agency's position is clearly unreasonable.

The Trane Company protests that the specifications in invitation for bids (IFB) No. F41800-84-B-9490, issued by the San Antonio Contracting Center, San Antonio, Texas, unduly restrict competition. The IFB called for two 750-ton open drive centrifugal chillers with solid state starters, to replace two hermetic drive centrifugal chillers located in building 2841 at Fort Sam Houston, Texas. The protester, which manufactures hermetic drive chillers with electro-mechanical starters, contends that the restrictions limiting competition to open drive chillers with solid state starters were not justified by the agency's minimum needs. We deny the protest.

The contracting agency cites several technical advantages which it attributes to the open drive chiller design, including its superior energy efficiency. The agency's principal reason for limiting the procurement to open drive chillers, however, is the greater reliability, in the agency's opinion, of the open drive design when compared to the hermetic drive design. Use of an open configuration for the chiller's operating parts in the open drive design--instead of enclosing the parts, as in the hermetic drive design--appears to be the critical feature which, in the agency's view, makes the open drive chiller more reliable. In addition, according to the agency, maintenance and repair to open drive

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chillers can be performed in-house; in contrast, repairs to hermetic drive chillers are more difficult and require greater technical expertise, effectively requiring the agency to use outside contractors, at greater cost. Reliance on outside repair services also increases the time during which a malfunctioning chiller is out of service. As a result, the agency views the open drive chillers as more reliable and less costly to maintain than the hermetic drive chillers.

The reliability of the chiller is particularly important to the agency because the building where the chiller is to be located has few windows and little natural ventilation. The building houses scientific research laboratories and classrooms. According to the agency, if a constant temperature is not maintained, the research experiments are jeopardized, and, particularly in the summer months, there is insufficient ventilation for the building to be used as classroom space. Therefore, the agency concludes, it is necessary to have both a reliable chiller and one which, if it malfunctions, can be repaired quickly and economically in order to minimize the adverse impact on use of the building.

The agency based its conclusion regarding the superior reliability of the open drive chiller on industry literature, the professional judgment of the agency's engineers, and discussions with mechanical contractors and consultants. In addition, the agency points to the poor performance of the hermetic drive chillers currently in use in the building where the new chillers will be installed; specifically, the hermetic drive chillers have had a high and costly rate of repair due primarily to motor burnout, a problem which the agency reports is associated with the closed configuration used in the hermetic drive design.

The protester disagrees with the agency's conclusions regarding the comparative merits of the open drive and hermetic drive chillers. Trane contends that industry experience does not support the agency's conclusion that open drives are easier to repair, and states that hermetic drives are currently used for many critical heavy-use facilities, like nuclear power plants. Trane also questions the significance of the past performance of the two hermetic drive chillers now in operation at Fort Sam Houston, on the basis that their poor performance can be due to factors other than the design of the chiller.

A protester contending that a solicitation requirement is unduly restrictive has a heavy burden of proof. The contracting agency has broad discretion in determining its minimum needs and the best methods of accommodating those needs. Potomac Industrial Trucks, Inc., B-204648, Jan. 27, 1982, 82-1 CPD ¶ 61. Where, as here, a protester challenges a specification as unduly restrictive of competition, the initial burden is on the procuring agency to establish prima facie support for its position that the restriction imposed was necessary to meet its minimum needs. Gerber Scientific Instrument Co., B-197265, Apr. 8, 1980, 80-1 CPD ¶ 263. In our review of the issues, we examine the reasonableness of the agency's determination of its minimum needs and the technical judgment forming the basis for that determination. Philadelphia Biologics Center, B-209660, June 1, 1983, 83-1 CPD ¶ 589. Once the agency establishes prima facie support for its restriction, the burden shifts to the protester to show that the restriction is clearly unreasonable. Walter Kidde, Division of Kidde, Inc., B-204734, June 7, 1982, 82-1 CPD ¶ 539.

We find that the agency has established a prima facie case for restricting this procurement to open drive chillers. The agency determined that a reliable chiller was critical to its needs at Fort Sam Houston, and concluded that an open drive chiller would offer superior reliability because of the technical features of the open drive design. The agency's conclusion regarding the greater reliability of the open drive chiller as compared with a hermetic drive chiller is supported by industry literature, the agency engineers' professional judgment, and the agency's experience with hermetic drives. For example, the agency cites an article entitled "Industrial Refrigeration: Compressors" in the July 1984 issue of Heating/Piping/Air Conditioning, which recommends using open drive chillers in heavy-use cooling systems due to their greater reliability and energy efficiency. The record also contains detailed analyses by the agency's engineers of the technical features of the hermetic drive chiller which contribute to malfunctions due to motor burnout.

The agency and the protester disagree regarding the significance of the poor performance of the hermetic drive chillers currently in operation at Fort Sam

Houston. Trane contends that the chillers' poor performance should not be attributed to the hermetic drive design without examining other factors, like the equipment's age, and comparing the performance record of hermetic drive chillers in use at other locations in the same area which, Trane maintains, have been operating satisfactorily. We disagree. According to the industry literature and the agency's engineers, the primary problem with the hermetic drive chillers now in use, motor burnout, is related to the closed motor design of the hermetic drive chillers. Thus, it was reasonable for the agency to associate the current chillers' poor performance with their design. Moreover, while we do not believe the agency was obligated to compare the performance of hermetic drive chillers used at other locations, the record shows that the agency was aware of similar performance problems with hermetic drive chillers in use at Lackland Air Force Base, located in the San Antonio area.

The agency and the protester also disagree over the number of manufacturers which produce chillers conforming to the specifications; Trane maintains there is only one manufacturer, the agency, at least two. The number of sources of an item does not determine whether a specification for the item is unduly restrictive, however; to the contrary, as long as the specification is reasonably related to the agency's minimum needs, the fact that there is only one source does not make the specification unduly restrictive. See Gerber Scientific Instrument Company, supra.

Finally, Trane contends that many of the agency's technical conclusions regarding the features and performance of open and hermetic drive chillers are erroneous. While Trane discusses in some detail the technical errors it perceives in a number of the agency's conclusions, Trane offers no independent support for its own, contrary conclusions, even though, as a chiller manufacturer, Trane presumably would have access to performance statistics and industry literature favorable to its position. Thus, we find that Trane has failed to meet its burden of showing that the agency's decision to restrict the procurement to open drive chillers was clearly unreasonable.

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In view of our conclusion that the requirement for open drive chillers was not unduly restrictive, we need not address the protester's other contention that the requirement for a solid state starter also was unduly restrictive, since the requirement for an open drive design precludes the protester from offering a conforming chiller. See Tooling Technology, Inc., B-215079, Aug. 6, 1984, 84-2 CPD ¶ 155.

The protest is denied.

for Seymour Eason
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General Counsel