

November 23, 2005

Amy Napier, Esq.  
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Re.: Disagreement by Johnson Controls, Inc. (Solicitation No. 162640-05-A-0156)  
SDR Case No. OM05MF-03

Dear Ms. Napier:

This letter responds to the disagreement lodged on September 19 on behalf of Johnson Controls, Inc. (JCI), pursuant to 39 C.F.R. Part 601 and to the subsequent comments to the final draft decision provided to you for comment on October 25. Johnson contends that the contracting officer's decision was flawed on its face and the solicitation was unduly restrictive with respect to Standard Design Criteria Handbook AS-503, dated September 17, 2004.

#### Background

On August 10, the United States Postal Service (USPS) issued solicitation number 162640-05-A-0156 for replacement of the control system for the heating ventilation and air conditioning at a Milwaukee, Wisconsin, mail processing and distribution center (Milwaukee GMF). In its initial request for a proposal, the USPS required that the protocol used in the HVAC system be BACnet compatible and listed only Automated Logic Corp. as an acceptable manufacturer. A subsequent amendment no. 02, issued on August 26, further interpreted "BACnet compatible" for the HVAC system, and added other acceptable manufacturers. The amendment to the technical specifications of the solicitation reads as follows:

1. Section 15900, page 5, Article 1.7, Quality Assurance . . . "The manufacturer's control system, to be considered, shall have a successful, proven, in use history of at least 2 years, to be considered. The DDC control system programming must be 100% virgin BACnet protocol with no other programming language protocol, interface, or programming utilized, except otherwise required by the Project documents."
2. Section 15900, page 5, Article 2.1. To the existing paragraph A, add the following acceptable manufacturers:
  - B. Alerton
  - C. American Auto-Matrix
  - D. Andover
  - E. KMC Controls

On August 31, JCI lodged a disagreement with the contracting officer. JCI argued that the amended specifications in the solicitation were unduly restrictive and that JCI could meet USPS's minimum requirements. On September 13, the contracting officer denied the disagreement, stating that the amendment was in compliance with the requirements cited in the Standard Design Criteria Handbook AS-503 (Handbook) and the amendment reflected correctly the Handbook's intent to obtain a BACnet

compatible system. As such, with inclusion of amendment no. 02 to the solicitation, JCI was not an acceptable manufacturer. JCI then lodged a disagreement with the USPS Supplier Ombudsman on September 19.

In its disagreement with the Ombudsman, JCI challenged the contracting officer's decision that the solicitation for the replacement of the HVAC control system at the Milwaukee GMF was unduly restrictive. JCI asserted that the Milwaukee GMF specification was too narrow because it excluded numerous competitors, such as JCI, and the contracting officer misapplied the requirements of the Standard Design Criteria requirements. In support of its assertion, JCI raised the following issues in its disagreement: (1) JCI's system is not proprietary as that term is used in the USPS's criteria; (2) the USPS restricted competition by narrowing the Design Criteria requirements substantially by inventing new terms and extending the criteria into programming restrictions; (3) JCI's system does not require added interface devices; (4) the USPS standard criteria routinely had been interpreted in previous postal acquisitions to permit JCI systems; and (5) USPS failed to provide JCI with any engineering studies that support its decision.

JCI contends that the only basis for the contracting officer's decision to issue the specification in a manner that excludes JCI and other potential suppliers from the procurement is the Standard Design Criteria that USPS issued in September 2004. JCI asserts that its system complies with those standard criteria; that its system meets and exceeds USPS' needs; and it should not be excluded from further consideration for the procurement. JCI requests that the Ombudsman overturn the contracting officer's final decision and require the solicitation to be amended to permit the possible use of JCI's system.

In an effort to insure that all pertinent points were adequately addressed, on October 25, 2005, I forwarded to you and the contracting officer a copy of the final draft decision of the subject disagreement for comments. I received comments from both you and the contracting officer (see attachments).

#### **Decision**

I have carefully examined the disagreement lodged with me as well as the information you provided to me on September 19 and the additional information you provided me on November 9 in response to the final draft decision. I have also examined the contracting officer's administrative/contract file and comments provided in response to the final draft decision. I have considered responses from interested parties, and obtained expert opinions from Postal Service officials regarding best value considerations vis-à-vis the specifications. Based on the correspondence I have examined, JCI's disagreement is denied. The contracting officer's decision issued to JCI on September 13 correctly applied the best value standard for the Postal Service and therefore the contracting officer's decision will stand. The rationale for this conclusion follows.

#### **Findings**

##### **1. USPS's Standard Design Criteria**

There are a number of protocols that are used in the building automation controls systems, including Heating, Ventilation, Air Conditioning (HVAC) controls systems. One such protocol is a Building Automation Control Network referred to as BACnet. BACnet is a protocol by which devices in a building automation control system communicate with each other.

At issue is whether the contracting officer unduly restricted the solicitation by stating that a supplier must provide a "fully" BACnet compatible direct digital control system as opposed to a partially-compliant BACnet system, which is the type of system JCI seeks to offer.

The following two design requirements are pertinent to this disagreement:

1. "The system shall not be proprietary,"
2. "The system shall be BACnet compatible meeting the ANSI/ASHRAE 135-1995 standard."

JCI contends its system is not proprietary as that term is used by the USPS's criteria. JCI suggests that USPS cannot mean it seeks only systems that have nothing proprietary to them and that JCI's systems are the most open of all on the market. If a DDC controller needs to be replaced and USPS has a JCI system, then USPS could install any number of DDC controllers, including DDC controllers manufactured by a variety of manufacturers utilizing various protocols. According to JCI, by assuming that a system has to exclusively communicate with BACnet devices (and not others) in order to be "not proprietary" pursuant to the design criteria, the contracting officer misapplied the requirement in the solicitation.

JCI further contends that the USPS narrowed the design criteria requirements substantially by inventing new terms and extending the criteria into programming restrictions. JCI asserts that the addition of the word "fully" is not consistent with standard design criteria, which are met by JCI's system. According to JCI, the postal requirement that the DDC control system programming must be 100 percent virgin BACnet "fully" compatible" is beyond minimum standard design criteria of BACnet compatible. JCI also asserts that JCI's systems are compliant with BACnet and that its systems communicate with BACnet devices. JCI stated that JCI's systems have not required translators or intermediate hardware since 2003.

After consulting with experts in the field, I have determined that amendment no. 02 was in conformance with best-value design criteria. The solicitation for the Milwaukee GMF, HVAC Controls, specified in Section 15900, Part 2.3 A.8., that "all control devices shall comply with the requirements of ANSI/ASHRAE 135-2001 BACnet standard for communications between controllers and intelligent sensors at all levels of control." Furthermore, module 2A, 4-2.9.2 states that "the system shall not be proprietary. The system shall be BACnet compatible meeting the ANSI/ASHRAE 135-1995 standard." This requirement was further clarified in amendment no. 02 which provided that the "DDC control system programming must be 100% virgin BACnet protocol with no other programming language protocol, interface, or programming utilized." The solicitation for the Milwaukee project clearly requires that the HVAC control system must be fully compatible with the BACnet standard and that partial compatibility is not acceptable.

The contracting officer's rationale in the decision stated that requiring a fully BACnet compatible system for this type of project is appropriate for the needs of the Postal Service because a partially-compliant BACnet system would require the use of added interface devices to enable communication with each other. Requiring the use of additional hardware or software to enable non-BACnet compatible devices to communicate with the computer adds another layer of complexity to the project, which is not in the best interest of the Postal Service, as it would increase repair complications and costs in the future as technology advances.

As stated above, I find that amendment no. 02 did not alter the intent of the requirement to have the DDC control system programming be virgin BACnet protocol, but clarified a requirement that existed in the initial solicitation.

According to the contracting officer, to ensure salient features and requirements were fully understood by all suppliers, a decision was made to clarify the level of BACnet compliancy. The design criteria with respect to BACnet meet postal best value standards.

After speaking with experts in this field, I find that the design criteria applied by the contracting officer properly required that control system programming to be virgin BACnet protocol for a building having the characteristics of the Milwaukee GMF. The requirement that "the system shall be non-proprietary and BACnet compatible meeting the ANSI/ASHRAE 135-1995 standard" is an appropriate best value consideration. The ANSI/ASHRAE 135 standard is the official BACnet standard. The term "virgin" in the specification was intended to reinforce that aspect of the solicitation, and to emphasize that partial compliance would not be acceptable.

In JCI's disagreement to the contracting officer, JCI argued that "the USPS requirement for a 'fully BACnet compatible' system dictates that every device in the system must operate using a BACnet protocol when there is no performance or economic benefit to such a requirement. In fact, such a requirement would eliminate the current and future use of devices or equipment that do not use the BACnet protocol." JCI's reasoning conflicts with an important best value consideration—to allow components made by different manufacturers to be used seamlessly to form a complete central energy monitoring and control system. With that approach, a number of competing companies can provide equipment to supplement and expand an existing BACnet based system. That increases competition, reduces acquisition costs, lessens maintenance, and lowers the cost of future upgrades. The experts further explained that the BACnet compatible requirement is valuable because "BACnet provides open system architecture used in such a way that control panels and devices that are made by different manufacturers can be used seamlessly to form a complete EMCS." <sup>1</sup> The implementation of a proprietary system communicating with BACnet protocol would require a deviation from USPS Standard Design Criteria in order to use the required translator panel or interface device. An EMCS system design must not usurp the benefits of BACnet by allowing a proprietary EMCS disguised as a BACnet system because it is sitting behind a translator panel."

It is my finding that the experts who assisted in formulating the above best value criteria are in a unique and credible position to advise the Postal Service of the value of the BACnet requirement and to advise the Postal Service on the type of system that would best serve the Milwaukee GMF. Accordingly, I find that the Postal Service's specifications stating "[t]he system shall be BACnet compatible meeting the ANSI/ASHRAE 135-1995 standard" is appropriate. I further find that the wording in amendment no. 02 of the solicitation which required that the DDC control system programming be 100 percent virgin BACnet protocol with no other programming language protocol, interface did not restrict the solicitation requirement, but only clarified the Handbook's intent of being BACnet compatible. As such, the amendment no. 02 of the solicitation was in accordance with best value considerations.

## 2. Competitive Market for 100 Percent Virgin BACnet

As discussed above, JCI asserts that the Milwaukee GMF facility specification was written too narrowly in order to exclude numerous competitors.

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<sup>1</sup> JCI apparently recognizes the importance of having a product that meets the referenced requirement as it states that it will have a fully compliant BACnet system in January, 2006. JCI further asserts that it has developed a product upgrade, which has been tested and will be available before work under the solicitation is performed, that provides for the use of BACnet protocol of JCI devices and equipment at the controller level.

In amendment no. 02 of the solicitation, the contracting officer listed five acceptable manufacturers who could offer the Postal Service 100 percent virgin BACnet in the Milwaukee GMF. Clearly, there is a competitive market with several manufacturers able to offer 100 percent virgin BACnet protocols in the HVAC industry.

### 3. Best Value Determination

In its disagreement, JCI argues that the amended specifications are unduly restrictive and JCI could meet USPS's "minimum" requirements. As discussed above, the Postal Service seeks to acquire goods and services that represent the best value to the Postal Service. Best value is defined as the outcome that provides the optimal combination of elements such as lowest total lifecycle cost, technology, innovation and efficiency, assurance of supply, and quality relative to the Postal Service's needs.

According to engineering experts within the Postal Service, "USPS facilities are designed and constructed using design standards developed to respond to our customer requirements, life cycle cost considerations and the flexibility required to maintain and expand our assets in the dynamic environment needed to maintain our competitiveness . . ." Consideration of "other systems not meeting the BACnet compatibility requirement" is not in the best interest of the Postal Service due to the need for an interface device and other potential problems discussed above. Avoiding an interface device and requiring BACnet compatibility assures that the Postal Service receives competitive prices and benefits for future expansion from its open architecture protocol. "[The] current BACnet protocol requirement avoids the need for an interface device so that [the Postal Service] can provide a non proprietary system that can be managed, modified and enhanced in the future by USPS personnel or contractors obtained through fair competition." To that end, it would not serve best value considerations to require the solicitation to be amended as JCI urges.

### **The Draft Final Decision**

On November 9, JCI provided comments pursuant to my request to submit additional information on the draft final decision provided to all parties on November 3. JCI's response reiterated many of its arguments provided in the subject disagreement lodged on September 19. Additional comments included JCI's response to an assessment provided by the contracting officer's engineers and JCI's recitation of general governmental procurement case law regarding restriction on competition. Based on the information set forth in your response, I see no reason to change the substance of the draft decision. I also note the following points:

(a) JCI mentions it has requested documents and other information from the Ombudsman and others, but it has received only part of its request. It should be pointed out that JCI has no right at this time to any documents from the ombudsman. In a related point, JCI also criticizes the Postal Service for "not explaining its reasoning..." "point[ing] to no special circumstances..." and "USPS [has] not explained how the requirement . . .," but the Ombudsman resolves disagreements, it does not have a duty to explain views to JCI, as JCI alleges;

(b) JCI says the Postal Service is a quasi-public agency that has adopted general governmental procurement policy -- that is wrong on both counts: the Postal Service is an independent establishment of the Executive Branch and it is not subject to general governmental procurement policy, under the Postal Reorganization Act, 39 U.S.C. §§ 201, 410(a), and applicable regulations, 39 C.F.R. Part 601;

(c) JCI contends that the Postal Service must seek to acquire only products that meet minimum requirements. On the contrary, the Postal Service seeks best value, which may be a product meeting optimal needs;

(d) JCI claims that its data is not proprietary; however, on all of the documentation submitted to the Ombudsman, it included the following language: "[t]his protest and the documents ... contain proprietary ... information" (letter of 9/19, p. 1 and letter of 11/9); and

(e) JCI's spokespersons told the contracting officer and the contracting officer's engineers that JCI products were not fully BACnet compliant, but it expected to market such a product by December, 2005 or January, 2006. Now, it appears that JCI is saying something significantly different (e.g., letter of 11/9, p. 8, stating: KJWW "left unexplained its conclusion that a new (fielded) JCI product could not meet the USPS' needs."). JCI previously said it's products were not fully BACnet compliant and would not be until next month or early next year, so its current position lacks credibility.

#### Final Decision

Accordingly, I agree with the contracting officer's assessment in that it would not make good business sense for the Postal Service to purchase a critical infrastructure that has not been in use for sufficient time for problems to be identified and solutions to be found and implemented. An untried system that will be available in the future does not provide adequate assurance for meeting existing needs. The contracting officer rightfully states that the Postal Service cannot have a system which might fail in a facility which provides critical mail handling operations necessary to fulfill the public trust in the timely processing and delivery of mail. I find that the Postal Service's requirement for a fully BACnet control system provides the best value for the Postal Service.

This is the final decision by the Postal Service about JCI's disagreement in connection with solicitation no. 162640-05-A-0156 for Milwaukee GMF HVAC Controls under 39 C.F.R. Part 601.

Sincerely,

A handwritten signature in black ink that reads "Juanda J. Barclay". The signature is written in a cursive, flowing style.

Juanda J. Barclay, C.P.M., A.P.P.  
USPS Supplier Ombudsman

cc: John Vlcek  
Mike Schech  
Maria R. Infanger