WHEREAS, Nebraska City Station Unit 2 (“NC2”) utilizes a distributed control system manufactured by Emerson Process Management Power & Water Solutions, Inc. (“Emerson”); and

WHEREAS, the District’s Engineer has certified that OPPD must procure replacement hardware and software for the control system and that the components for the system are technically complex and unique, and that Emerson, the original manufacturer of the control system, is the only available source of supply to maintain a properly functioning control system for NC2; and

WHEREAS, pursuant to Nebraska Revised Statute Section 70-637 (as amended), and upon approval of the Engineer’s Certification by the Board of Directors, the District may negotiate and enter into a contract or contracts related to such project without sealed bidding.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Omaha Public Power District that:

1. The Engineer’s Certification requesting that the Board waive the sealed bid requirements, in accordance with Nebraska Revised Statutes Sections 70-637 through 70-639, is hereby approved.

2. Management is hereby authorized and directed to negotiate and enter into a contract or contracts with Emerson Process Management Power & Water Solutions, Inc. for the upgrade of the Nebraska City Unit 2 Ovation Distributed Control System, subject to review and approval of the final contract(s) by the District’s General Counsel.

3. The notice required by Nebraska Revised Statutes Section 70-637 shall be published in the Omaha World Herald, or other similar newspaper of general circulation.
ITEM

Nebraska City Unit 2 Ovation DCS Evergreen Upgrade

PURPOSE

Authorize management to negotiate and enter into a contract with Emerson Process Management Power & Water Solutions, Inc. (Emerson) to upgrade the existing Nebraska City Unit 2 Ovation Distributed Control System (DCS).

FACTS

a. The DCS Human Machine Interfaces (HMI) are obsolete running the Windows 7 and Server 2008 R2 operating systems. The DCS HMI networking switches and media converters will be replaced in addition to several DCS software packages.

b. Upgrading the DCS equipment and software to the most current vendor platforms is required to maintain reliability and availability.

c. The Ovation DCS is complex and highly technical. Emerson is the original equipment manufacturer and is most capable of providing replacement equipment best integrated with their DCS.

d. Compliance with sealed bidding provisions of the Nebraska Revised Statutes Section 70-637 is impractical and not in the public’s best interest.

ACTION

Approval of the Engineer’s Certification and authorization for management to negotiate and enter into a contract with Emerson to upgrade the Nebraska City Station Unit 2 DCS.

RECOMMENDED:  

APPROVED FOR BOARD CONSIDERATION:

Mary J. Fisher  
Timothy J. Burke

Attachments:  
Letter of Recommendation  
Engineer’s Certification  
Legal Opinion  
Resolution
DATE: December 19, 2019

FROM: S. A. Eidem

TO: M. J. Fisher

SUBJECT: Request for Proposal No. 5682
Nebraska City Unit 2 Ovation DCS Evergreen Upgrade
EC 70285

1.00 GENERAL

It is requested that the District negotiate and enter into a contract with Emerson Process Management Power & Water Solutions, Inc. (Emerson) for the Nebraska City Unit 2 (NC2) Ovation Distributed Control System (DCS) Evergreen Upgrade.

The current Ovation DCS Human Machine Interfaces (HMI) were installed in 2015. The HMI portion of the control system requires updating due to obsolescence of the operation system software for continued reliability and availability and for reduced cyber security vulnerabilities. Windows 7 and Server 2008 R2 will become unsupported by Microsoft in January 2020. The Ovation DCS software 3.5.1 entered retired status in June 2019. Retired status indicates software and products are no longer available for purchase and product support is limited and subject to availability. The HMI hardware and software must be replaced.

The Ovation DCS network switches and media converters are in need of replacement for their continued reliability and availability. The network switches were last replaced during the 2011 DCS Evergreen Upgrade. The media converters are original from the initial DCS assembly in 2006.

The work involved is complex and of a highly technical nature and it is critical that the hardware replacements be properly integrated with the overall proprietary control system. A negotiated contract with the OEM to upgrade the DCS to their most current platform ensures proper system engineering, equipment and software integration with the overall control system and is in the best interest of the District. This approach is expected to minimize project cost and risk.

2.00 RECOMMENDATION

An Engineer's Certification to support this position has been prepared. Approval of that Certification is recommended. We request the Board of Directors to approve the Engineer's Certification and to authorize management to negotiate and enter into a contract with Emerson Process Management Power & Water Solutions, Inc. to upgrade the Nebraska City Unit 2 DCS.

S.A. Eidem, P.E.
Director – Engineering Services
Energy Production and Nuclear Decommissioning
The District’s Nebraska City Station Unit 2 (NC2) utilizes an Ovation Distributed Control System (DCS) manufactured by Emerson Process Management Power & Water Solutions, Inc. (Emerson). The Human Machine Interface software and interface support hardware of the system consist of computers running either Windows 7 or Server 2008 R2. Other DCS equipment includes the network switches and media converters. Due to obsolescence, the District must replace these components of the control system and upgrade software for ease of operation, maintenance, support and spare parts availability.

The undersigned professional engineer employed by the District certifies that, due to the technically complex and unique nature of the DCS and the need to upgrade the existing system to maintain optimal DCS function, Emerson, the original supplier of the DCS hardware and software, is the only available source of supply for this project, and the proposed purchase is consistent with standards of the Board of Directors for such procurements.

Pursuant to Section 70-637 of the Nebraska Revised Statutes, as amended, the Board of Directors is requested to approve this Engineer’s Certification and authorize Management to negotiate and award a contract to Emerson to engineer and supply the replacement hardware and software for the Ovation Distributed Control System at NC2, without compliance with the statutory sealed bidding requirements.

I, Michael A. Neu (registered Professional Engineer in the State of Nebraska), certify the above to be true and correct to the best of my knowledge and belief.
December 6, 2019

Omaha Public Power District
444 South 16th Street Mall
Omaha, NE 68102

RE: Engineer's Certification Relating to Procurement of material and software for control system at Nebraska City Station Unit 2 (“NC2”)

Ladies and Gentlemen:

NC2 utilizes a distributed control system manufactured by Emerson Process Management Power & Water Solutions, Inc. (“Emerson”). Michael A. Neu, P.E., a Professional Engineer employed by the District, has issued an Engineer's Certification that addresses the District's need to procure replacement hardware and software for the control system.

Mr. Neu certifies that the components for the control system are technically complex and unique and that Emerson, the original manufacturer of the control system, is the only available source of supply to maintain a properly functioning control system for NC2.

Neb. Rev. Stat. § 70-637(6) authorizes the District to purchase replacement parts or services from original equipment manufacturers, without advertising for sealed bids, upon appropriate certification by an engineer for the District. In our opinion, Mr. Neu's Engineer's Certification meets the requirements of § 70-637(6).

Section 70-637(6) requires that a written statement containing the Engineer's Certification and a description of the resulting purchase from the original equipment manufacturer must be submitted to the District's Board of Directors for approval. Also, the District must publish notice of such purchase once a week for at least three (3) consecutive weeks in one or more newspapers of general circulation in the District and in any other periodicals that may have been selected by the Board.

In our opinion, the District may proceed to complete this procurement, subject to compliance with § 70-637(6) as outlined above. We recommend that the final contract with the vendor be reviewed and approved by the District's General Counsel.

Very truly yours,

Stephen M. Bruckner
FOR THE FIRM

SMB/sac
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