RESOLUTION NO. 6537

WHEREAS, the General Electric EX2000 exciters installed at Jones Street Station Unit 1 (JS1) and Unit 2 (JS2), Sarpy County Station Unit 1 (SC1) and Unit 2 (SC2) and North Omaha Station Unit 4 (NO4) and the General Electric EX2100 exciter installed on North Omaha Station Unit 5 (NO5) are all obsolete and new components for the exciter control system will no longer be available to purchase from the manufacture; and

WHEREAS, due to the EX2000 Exciters and the EX2100 Exciter being obsolete, the District must replace these critical electrical components to ensure the continued reliable operation of these generation units; and

WHEREAS, Nexus Controls, formerly a division of General Electric Company, is the original equipment manufacturer for the exciter equipment and offers an upgrade package to retrofit the obsolete controls section while retaining existing components with more available spare parts, thus eliminating the need for a complete exciter replacement and associated redesign of the existing distributed control system integration and resulting in an overall financial savings; and

WHEREAS, the District’s Engineer has certified that Nexus Controls, as the original equipment manufacturer, is the only available source of supply for the exciter equipment needed for the referenced generation; and

WHEREAS, pursuant to Nebraska Revised Statute Section 70-637 (as amended), District Management requests approval by the Board of Directors of the Engineer’s Certification for the procurement of equipment and services to replace the exciter equipment as described in the Engineer’s Certification.

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

1. The Engineer’s Certification for the sole source procurement of exciter equipment and services from Nexus Controls, the original equipment manufacturer, for the generation units described therein is hereby approved.

2. Management is hereby authorized and directed to negotiate and enter into the necessary contract or contracts to procure materials and services for the exciter equipment and services, 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.
Board Action

BOARD OF DIRECTORS

November 15, 2022

ITEM

General Electric Exciter Upgrades

PURPOSE

Upgrade exciter control components for Jones Street Station Units 1 and 2 (JS1&2), Sarpy County Station Units 1 and 2 (SC1&2), and North Omaha Station Units 4 and 5 (NO4&5).

FACTS

a. The exciter controls hardware and software for JS1&2, SC1&2 and NO4&5 are no longer supported and available from the manufacturer. This will make obtaining spare parts difficult, challenging continued reliable operation of these generation units.

b. Nexus Controls (formerly a division of General Electric), the original equipment manufacturer (OEM), is the sole source of an upgrade package to replace the controls equipment without the need for a complete and more costly exciter replacement.

c. The District's engineer has certified that it is impractical and not in the public interest to utilize the statutory sealed bid process for this contract.

ACTION

Approval of the Engineer's Certification and authorization for Management to negotiate and enter into a contract with Nexus Controls for the procurement of EX2100e digital front end retrofits for the existing exciter control components on JS1&2, SC1&2 and NO4&5.

RECOMMENDED: Troy R. Via
Chief Operating Officer and Vice President – Utility Operations

APPROVED FOR BOARD CONSIDERATION: L. Javier Fernandez
President and Chief Executive Officer

TRV:sae

Attachments:  Letter of Recommendation
              Engineer’s Certification
              Legal Opinion
              Resolution
MEMORANDUM

DATE: October 28, 2022

FROM: S. A. Eidem

TO: T. R. Via

SUBJECT: General Electric Exciter Upgrades

1.00 GENERAL

The General Electric EX2000 exciters installed at Jones Street Station Unit 1 (JS1) and Unit 2 (JS2), Sarpy County Station Unit 1 (SC1) and Unit 2 (SC2), North Omaha Station Unit 4 (NO4) and the EX2100 exciter installed on North Omaha Station Unit 5 (NO5) are obsolete. New components for the exciter control system will no longer be available to purchase from the manufacturer. Due to this obsolescence, the district must replace these critical electrical components to ensure continued reliable operation of those generation units. The Original Equipment Manufacturer (OEM) offers an upgrade package to retrofit the obsolete controls section while retaining existing components with more available spare parts, thus eliminating the need for a complete exciter replacement and associated redesign of the existing distributed control system integration resulting in an overall financial savings. Nexus Controls (formerly a division of General Electric) is the OEM and has specific knowledge of the existing exciter controls and equipment. The engineering and integration of the exciter control equipment is technically complex and the OEM is the sole source for this upgrade package. The districts evaluation has determined it is best to replace the controls section for JS1&2, SC1&2 and NO4&5 with the current EX2100e digital front end exciter retrofit as offered by the OEM.

2.00 RECOMMENDATION

An Engineer’s Certification of the above has been prepared. Approval of the Certification is recommended. We request the Board of Directors to approve the Engineer’s Certification and authorize management to negotiate and enter into contract to upgrade the exciters for JS1&2, SC1&2 and NO4&5 with the EX1200e digital front end retrofit.

S.A. Eidem, P.E.
Director, Engineering Services
Utility Operations
ENGINEER’S CERTIFICATION

The General Electric EX2000 generator exciters installed at the District’s Jones Street Unit 1 (JS1), Jones Street Unit 2 (JS2), Sarpy County Unit 1 (SC1), Sarpy County Unit 2 (SC2), North Omaha Unit 4 (NO4) and the EX2100 exciter installed on North Omaha Unit 5 (NO5) are obsolete and new components for the front end control system will no longer be available to purchase new from the manufacturer. Due to this obsolescence, the District must replace these electrical components. A detailed technical and economic evaluation has determined that the optimal solution is to replace the controls section with the current manufacturer’s EX2100e digital front end retrofit.

Pursuant to Nebraska Revised Statute Section 70-637(6), the undersigned professional engineer employed by the District certifies that Nexus Controls (formerly a division of General Electric) is the original equipment manufacturer (OEM) for the exciter equipment described above and is the sole available source of supply for the equipment and such sole source purchase would be in compliance with standards established by the Board of Directors. In support of this Certification, the undersigned further states as follows:

- The engineering and equipment integration for this project are technically complex and OEM upgrade is designed specifically to retrofit our existing exciters on the units specified above.
- By migrating to the EX2100e digital front end retrofit, only the control section would need to be replaced. The entire exciter would not need to be replaced, and this presents a cost savings for the District.
- The EX2100e digital front end retrofit would be able to reuse our existing Distributed Control System integration with the exciter and not need to be redesigned.
- Having the same control components on multiple exciters would reduce the amount of spare parts the District would be required to keep on hand. The District currently has multiple versions of the EX2000 exciter and not all components are compatible between the different versions.
- Nexus Controls, the OEM of the existing exciters, has specific knowledge related to the hardware and controls.

Pursuant to Section 70-637(6) of the Revised Statutes of Nebraska, the Board of Directors is requested to approve this Engineer’s Certificate and authorize Management to negotiate and enter into a contract to Nexus Controls (formerly a division of General Electric) for the supply of EX2100e Digital Front Ends to retrofit the existing EX2000 and EX2100 exciters currently installed on NO4, NO5, SC1, SC2, JS1, and JS2 without compliance with the sealed bidding requirements of Sections 70-637 through 70-639 of the Nebraska Revised Statutes.

I, Jason A. Bergman (registered Professional Engineer in the State of Nebraska), certify the above to be true and correct to the best of my knowledge and belief.

[Signature]
Jason A. Bergman, P.E.

[Stamp]
STATE OF NEBRASKA

[Stamp]
JASON A. BERGMAN
E-11593

[Date]
10/28/2022
Omaha Public Power District
444 South 16th Street
Omaha, NE  68102

RE:  Engineer's Certification for replacement of exciter equipment on multiple generation units

Ladies and Gentlemen:

We have reviewed the Engineer's Certification of Jason A. Bergman, P.E., a professional engineer employed by the District. Mr. Bergman’s Engineer's Certification explains that General Electric EX2000 generator exciters installed at the District’s Jones Street Unit 1 (JS1), Jones Street Unit 2 (JS2), Sarpy County Unit 1 (SC1), Sarpy County Unit 2 (SC2), North Omaha Unit 4 (NO4) and the EX2100 exciter installed on North Omaha Unit 5 (NO5) are obsolete and new components for the front end control system will no longer be available to purchase new from the manufacturer. Due to this obsolescence, the District must replace these electrical components.

Mr. Bergmann certifies that Nexus Controls, formerly a division of General Electric Company, is the original equipment manufacturer for the exciter equipment described in the Certification and is the only available source of supply for the exciter equipment needed for the referenced generation units, and that sole source procurement would comply with standards established by the District’s Board of Directors. He further certifies that the Nexus Control upgrade is designed specifically for retrofit of the existing exciters, and that utilizing the sole source approach will result in savings due to having to replace only a part of the existing exciters.

Section 70-637(6) of the Nebraska Revised Statutes authorizes the District to purchase replacement parts or services for generating units from original equipment manufacturers without advertising for sealed bids, upon appropriate certification by an engineer for the District. In our opinion, Mr. Bergman’s Engineer's Certification meets the requirements of Section 70-637(6) and may be approved by the Board of Directors.

Section 70-637(6) requires that a written statement containing the Engineer's Certification and a description of the purchase from the original equipment manufacturer must be submitted to the District's Board of Directors for approval at the next scheduled meeting of the Board. After receipt of the Certification, but not necessarily before the Board review, 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.

The District may proceed to complete this sole source purchase subject to compliance with Section 70-637(6) as outlined above. We recommend review and approval of the contract with the manufacturer by the District's General Counsel.

Very truly yours,

Stephen M. Bruckner
FOR THE FIRM

SMB/sac
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