



Williams/Fisher

**RESOLUTION NO. 6453**

**WHEREAS**, the Nebraska City Station Unit 1 combustion air preheaters were inspected and the cold end heating elements (baskets) require replacement in order to maintain reliability; and

**WHEREAS**, the District's Engineer has certified that Arvos-Ljungstrom, the original equipment manufacturer, is the only available source of supply for replacement air preheater heating elements (baskets); 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 that Arvos-Ljungstrom, the original equipment manufacturer, is the only available source of supply for the replacement heating elements (baskets) for the Nebraska City Station Unit 1 air preheaters is hereby approved.
2. Management is hereby authorized and directed to negotiate and enter into the necessary contract or contracts with Arvos-Ljungstrom to purchase replacement cold end heating elements (baskets) for the Nebraska City Station Unit 1 combustion air preheaters, 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

August 17, 2021

### ITEM

Nebraska City Station Unit 1 Combustion Air Preheater Replacement Basket and Seal Materials

### PURPOSE

Supply combustion air preheater cold end basket materials for Nebraska City Station Unit 1.

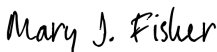
### FACTS

- a. The Nebraska City Station Unit 1 air preheaters were inspected during the scheduled spring 2021 unit outage and the cold end baskets of the combustion air preheaters require replacement.
- b. The Original Equipment Manufacturer (OEM) of the air preheaters, Arvos-Ljungstrom, maintains dimensional data of the air preheater baskets as proprietary information.
- c. Lead times have increased from 20 weeks to 32 weeks for supply of air preheater baskets from the OEM.
- d. A contract for installation of the air preheater baskets will be awarded separately. The installation will occur in the spring of 2022 during a scheduled unit outage.


### ACTION

Authorization by the Board of Directors to negotiate a sole source contract with Arvos-Ljungstrom for the purchase of replacement cold end baskets for the Nebraska City Station Unit 1 air preheaters.

#### RECOMMENDED:

DocuSigned by:  
  
C185DDBB12A4BA...  
 Mary J. Fisher  
 Vice President – Energy Production and Nuclear Decommissioning

#### APPROVED FOR BOARD CONSIDERATION:

DocuSigned by:  
  
AC399FDCE56247E...  
 L. Javier Fernandez  
 President and Chief Executive Officer

SAE:

Attachments: Letter of Recommendation  
 Engineer's Certificate  
 Legal Opinion  
 Resolution



## MEMORANDUM

**DATE:** August 6, 2021

EPND-2021-05

**FROM:** S.A. Eidem

**TO:** M.J. Fisher

**SUBJECT:** Nebraska City Station Unit 1 Combustion Air Preheater Replacement Heating Elements (Baskets)

### 1.0 GENERAL

The air preheaters transfer waste heat from the flue gas stream to the incoming combustion air stream and are an essential component of Nebraska City Unit 1. An inspection of the Nebraska City Unit 1 air preheaters was performed during the spring 2021 outage. The cold end air preheater baskets were observed to have extensive corrosion/erosion damage within the cold end heat transfer elements (baskets) of the two combustion air preheaters. The damage identified is judged to challenge safe and reliable operation of Unit 1 if the air preheater baskets are not replaced in the next scheduled outage in spring of 2022.

Compliance with the sealed bidding requirements of the Nebraska Statutes is impractical and not in the public's best interest. Arvos-Ljungstrom, the original equipment manufacturer, has proprietary information regarding the dimensional design of the air preheater baskets. They are the sole vendor with the dimensional design information required for the correct fabrication of replacement baskets.

### 2.0 RECOMMENDATION

An Engineer's Certificate of the above statements 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 a sole source contract with Arvos-Ljungstrom for the purchase of replacement cold end heating elements (baskets) for the Nebraska City Unit 1 combustion air preheaters.

*Scott A. Eidem*

S.A. Eidem, P.E.  
Director, Engineering Services  
Energy Production and Nuclear Decommissioning

### ENGINEER'S CERTIFICATION

The Omaha Public Power District (OPPD) Nebraska City Station Unit 1 combustion air preheaters were inspected during the 2021 spring outage. OPPD engineering has determined that the cold end heating elements (baskets) in the two combustion air preheaters are nearing the end of their service life. Replacement is scheduled to occur during the planned 2022 Nebraska City Unit 1 spring outage.

Arvos-Ljungstrom (Arvos) is the original equipment manufacturer (OEM) for the Nebraska City Unit 1 air preheaters. Fabrication of replacement components for the air preheaters involves proprietary dimensional information held by Arvos.

There are two companies, other than Arvos, that have previously responded to an OPPD request for proposal for supply of air preheater baskets. The non-OEM firms have stated that OPPD would be required to provide dimensional information for replacement baskets to ensure proper fit within the air preheater rotor. OPPD does not have access to the required Arvos proprietary dimensional information. Engineering work to obtain dimensional measurements without the OEM drawings would require an unscheduled Unit outage and could result in measurement errors that cause fit issues during basket installation.

The undersigned professional engineer employed by the Omaha Public Power district certifies that Arvos, the original equipment manufacturer, is the only available source of supply for replacement air preheater heating elements (baskets) because fabrication of new baskets requires proprietary dimensional information held by Arvos-Ljungstrom, and the procurement would comply with prior standards of the Board.

Pursuant to Section 70-637 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 purchase replacement air preheater baskets from Arvos, the original equipment manufacturer, for the Nebraska City Station Unit 1 without compliance with the sealed bidding requirements of Sections 70-637 of the Revised Statutes of Nebraska.

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

Kevin E. Keller  
K. E. Keller, P.E.

7-12-2021  
Date





**FRASER STRYKER**

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**SBRUCKNER@FRASERSTRYKER.COM**

July 9, 2021

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

RE: Nebraska City Station Unit 1 - Engineer's Certification for original equipment manufacturer, air preheater baskets

Ladies and Gentlemen:

We have reviewed the Engineer's Certification of Kevin E. Keller, P.E., a registered professional engineer in the State of Nebraska employed by the District. Mr. Keller's Engineer's Certification states that the District has determined that the cold end heating elements (baskets) in the two combustion air preheaters are nearing the end of their service life. Replacement is scheduled to occur during the planned 2022 Nebraska City Unit 1 spring outage. The Certification further states that the fabrication of replacement components for the air preheaters involves proprietary dimensional information held by Arvos-Ljungstrom (Arvos), the original equipment manufacturer. Mr. Keller also explains that previous responses to requests for proposals for this type of equipment have required dimensional information to ensure proper fit which OPPD cannot provide because the information is proprietary to Arvos.

Section 70-637(6) of the Nebraska Revised Statutes authorizes the District's Board of Directors, by a two-thirds vote, to approve an Engineer's Certification to purchase replacement parts or services for any generating unit from the original manufacturer of such equipment upon certification that such manufacturer is the only available source of supply for such replacement parts or services and that such purchase is in compliance with standards established by the board. After receipt of such Certification, but not necessarily before Board review, the District is required to advertise notice of such purchase once a week for at least three consecutive weeks in one or more newspapers of general circulation in the District's service area.

It is our opinion that Mr. Keller's Engineer's Certification complies with Section 70-637 and is in a form that is appropriate for approval by the District's Board of Directors. Therefore, the Board of Directors may approve the Engineer's Certification and authorize Management to negotiate and enter into the necessary contract with Arvos, the original equipment manufacturer, for the NC1 air preheater baskets. We recommend that any such contract be subject to review and approval by the District's General Counsel.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Stephen M. Bruckner". The signature is fluid and cursive, with a long horizontal stroke at the end.

Stephen M. Bruckner  
FOR THE FIRM

SMB/sac  
2612024



# Nebraska City Unit 1 Combustion Air Preheater Replacement Baskets



2021 OUTAGE INSPECTION



NEW BASKETS