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**ADDENDUM NO. 2**

NOTICE is hereby given that the Bidding Documents have been modified and replacement pages issued herewith. Replacement pages have an Issue Date of April 22, 2021, note "Rev. 02" in the header, and indicate text changes for additions by ***bold italic*** and deletions by ~~strikeout~~.

Replacement pages included:

- Table of Contents
- Section 4 – Technical Specification – 69kV Power Transformer (*Page 1 only*)

Replacement drawings included:

- NONE

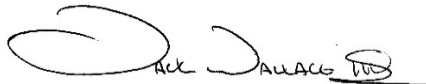
Responses to Questions from Bidder(s):

- Q1. Can we submit proposal for only one of the bid items?  
**A1: Yes, you can bid only one and your proposal will be accepted. You do not have to submit a quote for both Bid Item A and Bid Item B.**
- Q2. When do you expect to award this PO?  
**A2: The PO will be awarded during the City's council meeting in May.**
- Q3: It seems that there is no specification or requirement on transformer insulating oil. Is it acceptable to quote any type of mineral oil in this case?  
**A3: The oil should meet requirements of ASTM D3487 as insulating fluid for electric apparatus**

**BIDDERS ARE REQUESTED TO CONFIRM RECEIPT OF THE ELECTRONIC FILES VIA RETURN EMAIL.**

Issued by:

**Patterson and Dewar Engineers, Inc.**



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## REVISION HISTORY

<b>Rev. No.</b>	<b>Date</b>	<b>Description</b>
00	04/05/2021	Issued for bid
01	04/14/2021	Issued for Addendum No. 1
<b>02</b>	<b>04/22/2021</b>	<b>Issued for Addendum No. 2</b>

## **SECTION 4 – SPECIFICATION FOR 69kV POWER TRANSFORMER**

### **1.01 GENERAL CHARACTERISTICS**

- A. Number of units One
- B. Single phase \_\_\_\_\_; or Three phase X
- C. MVA Ratings
1. MVA (self-cooled) 18 at 55 degrees C by resistance.
  2. MVA (1st stage cooling) 24 at 55 degrees C by resistance.
  3. MVA (2nd stage cooling) 30 at 55 degrees C by resistance.
  4. MVA (~~self-cooled~~) **(2nd stage cooling)** 33.6 at 65 degrees C by resistance.
- D. Supplemental cooling:
- \_\_\_\_\_ Fans-ONAF;  
X Fans-ONAN/ONAF/ONAF;  
 \_\_\_\_\_ Future Fans-ONAF/FONAF;  
 \_\_\_\_\_ Future Fans-ONAN/FONAF/FONAF;  
 \_\_\_\_\_ Fan and Oil Pump-ONAN/ONAF/OFAF;  
 \_\_\_\_\_ Future Fan and Oil Pump-ONAN/FONAF/FOFAF.
- E. The hottest spot temperature rise for the 65 °C average temperature rise ratings shall not exceed 80 °C.
- F. Voltage rating 69-13.2kV, 60 Hertz.
- G. Design Impedance:
1. Bid Item A (without LTC): 8.0% Based on high voltage BIL and low voltage rating at self-cooled (ONAN) rating per IEEE C57.12.10 -2010 Table 3 or latest revision.
  2. Bid Item B (with LTC): 8.5% Based on high voltage BIL and low voltage rating at self-cooled (ONAN) rating per IEEE C57.12.10 -2010 Table 3 or latest revision.
- H. All electrical characteristics and mechanical features not herein specified shall be in accordance with applicable ANSI and NEMA standards.

### **1.02 OPERATING CONDITIONS**

- A. Elevation above sea level is less than 3,300 feet (standard).
- B. Winding connections:
1. High voltage winding rated 69 kV and connected Delta
  2. Low voltage winding rated 13.2 kV and connected Wye
  3. Tertiary winding rated N/A kV and connected N/A
- C. Auxiliary supply voltages:
1. 120/240 volts 3 wire 1 phase  
60 Hertz AC will be supplied for all motors and heaters.
  2. 125 volts DC will be used for alarms and control circuits.