ADDENDUM #2

for

RFP – Exhibit Hall & Trainshed New Unit Substation Purchases – Design/Build

(11/25/2024)

Questions:

- 1) Drawing E-1: 4.C.II. Clarify if 600AF Breakers with lower trip ratings require LSIG and Arc Energy Reduction Modules: There are 500A Trip/500A Frame breakers on the project and want to know if the 500AT breakers would require LSIG & ARMS. Answer: Yes This is intended to eliminate miscoordination with existing upstream circuit breakers that have ground fault trip protection when the new circuit breaker serves downstream motor branch circuit motors for VFDs that could have a single phase to ground diode short circuit. If desired provide a deduct to eliminate LSIG & ARMS for circuit breakers that are less than 800 Amps only.
- 2) Drawing E-1: 4.C.IV Clarify Control Component in separate N12 Enclosure: Can you advise if this is to be a permanently mounted control station required for ALL substations or is the intent to have a portable control station that will "Plug" into the main breaker in order to perform the required functions that can be used and moved to different substations? Answer: These will be permanently mounted and should be NEMA Type 4/13, Watertight/Oiltight with Allen Bradely Bullin 800T Switches and Pilot Lights, instead of NEMA 12 enclosures.
- 3) Drawing E-2, Low Voltage Unit Substation Specifications: 3.B Calls for 200K AIC rating & 3.E. Calls for 85KAIC and alternate for 65KAIC. Can you confirm which is required or clarify the intent? Answer: The busbar shall be braced for 200,000 ampere short circuit current, the notation 200K AIC is not correct. 65KAIC is required and should be proposed as a minimum, for the circuit breakers.
- **4)** Confirm that USS #13,17 & 21 Transformers are to be AA only and not AA/FA (Fan cooled). Answer: The existing transformers are AA only. However, given that the highest demand on 13 has exceeded the AA rating by 5% and that the highest demand on 17 is at 80% of its rating, provide an alternate price to provide AA/FA transformers for 13, 17 and 21.
- 5) For existing substations that are top feed and have existing pull boxes: Will the existing pull boxes remain and be re-used or should we cover the cost for new top cover mounted pull boxes? Answer: The existing pull boxes will likely be reused. Do not include new top cover mounted pull boxes.
- 6) Will the main digital meter in each switchboard be tied into a BMS, or just read locally? If they are being tied into a BMS, should they be MODBUS or BACnet protocol? Answer: The base bid, per the specifications, shall be based on providing the ION 9000 Metering System or equal. The intent is to tie the substations' meters into the existing BMS. The existing BMS system is a Siemens BACnet system. Modbus protocol would also be acceptable.
- 7) Will the metering information from the feeder breaker trip units be tied into a BMS, or just read locally? Answer: Refer to the answer for Question 6.
- 8) On Drawing E-1, General Project Information Note 4.C.IV calls for remote NEMA 12 stations to open and close the main breaker and to initiate arc energy reduction. Is there more

- detailed information or examples previously being used that can be provided? Answer: Refer to the answer for Question 2. If these functions cannot be activated remotely with the electrically operated main circuit breakers you are providing, so state.
- 9) Since the breakers are all solid-state adjustable type, should we provide a cost for a power systems study so settings can be determined? All breakers come set at factory minimum settings and field service would require a study to set breakers. Answer: Do not provide the cost for a power system study.
- 10) For the Alternate #1, are there any spec items that must remain and should not be taken out for this "basic" version of the equipment? Answer: Alternative #1 should be the standard product that the manufacturer provides and meet the specifications stated on the drawings. With the proposal for alternate #1, state if there is physical separation or barriers that would not permit the propagation of vapors from an arc flash in the distribution section to propagate to the line side of the main secondary circuit breaker and cause a second arc flash event. The PACC will evaluate both the base proposal and alternate #1 to determine which option it desires, even if separation and barriers do not exist.
- 11) When do you anticipate awarding the first group of substations for purchase? Answer: After July of 2025.
- **12)** Does this project need to conform with any Buy American, BABA, PA Steel, or Steel procurement Act clauses? Answer: No, it does not.
- **13)** Sheet t E-1 Paragraph 5 includes the PECO table showing they guarantee a maximum of 6.3KA at 13.2kV but on E-2 3.B the spec calls for 200,000 AIC on the low voltage. Would 65 or 100KAIC be acceptable as they should cover the available fault current? Answer: The circuit breakers shall be rated for 65KAIC.
- 14) Is group-mounted construction acceptable for the secondary Low Voltage Switchboards? (Similar to what is existing on Substations 22 & 23) Answer: Substations 22 and 23 are included for replacement because that have incident energies higher than 100 cal/cm². Provide a written statement from the manufacturer that an arc flash within the group mounted switchboards will not propagate into an arc flash on the line side of the secondary main circuit breaker.
- 15) When submitting Bid how do we distinguish what portion is going to be M/W/DBE? Answer: MWDBE's should be listed on exhibits BB and CC and the work/service they will be providing should be outlined along with the diverse spend (amount they will be paid) and the percentage of the total amount of the bid that diverse spend represents. You must also include a letter of intent to the MWDBEs you intend to use specifying the amount committed to them for the project if your company is awarded the project.