



# University of Kentucky®

*Procurement Services*

## REQUEST FOR PROPOSALS

UK-2617.0-5-24

AG RESEARCH FACILITY 1 – ELECTRICAL EQUIPMENT

ADDENDUM #1

06/21/2024

**ATTENTION: This is not an order. Read all instructions, terms, and conditions carefully.**

**IMPORTANT: RFP MUST BE RECEIVED BY 06/28/2024 @ 3:00 P.M. LEXINGTON, KY TIME**

Offerors should acknowledge receipt of this, and any addendum, as directed in the Request for Proposals.

**ITEM #1: CLARIFICATIONS AND MODIFICATIONS TO THE CONTRACT DOCUMENTS:**

Offerors are directed to use the updated Financial Offer Summary included in this addendum.

Offerors are directed to review and incorporate the enclosed Addendum 1 from Turner Construction Company and BHDP Architecture into their offers.

**OFFICIAL APPROVAL**  
**UNIVERSITY OF KENTUCKY**

A handwritten signature in blue ink, appearing to read 'Corey W. Leslie'.

Corey W. Leslie, AD Construction Procurement

**SIGNATURE**

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Typed or Printed Name

**FINANCIAL OFFER SUMMARY**

Offerors are to provide a fixed price for the services offered.

**8.1 Mandatory Services (Section 7.1)**

Please complete and attach Section 7.1 to provide support for your firm fixed price offer.

The Offeror agrees to furnish all labor, materials, supplies and services required to complete the Work, for the above referenced Project, for the Capital Construction Procurement Section, University of Kentucky, as described in the Specifications and Contract Documents and shown on the Drawings enumerated below and as modified by the Addenda listed above.

**BASE OFFER**

FOR THE LUMP SUM OF \_\_\_\_\_  
(USE WORDS)  
\_\_\_\_\_ DOLLARS AND \_\_\_\_\_ CENTS.  
(USE WORDS) (USE WORDS)  
(\$\_\_\_\_\_)

**8.2 Optional Services (Section 7.2)**

None

**8.3 Alternate Pricing**

Alternate No. 1: Automatic Transfer of Main-Tie-Main for Switchboards.

Provide automatic transfer of Main-Tie-Main for switchboards C0110NSWBD1 and C0110NSWBD2 as indicated on Drawing E701.0 and as specified in Section 262413 "Low-Voltage Switchboards" additional information provided in Addendum 1 attachment.

ADD to the base offer the sum of: \_\_\_\_\_  
(USE WORDS)  
\_\_\_\_\_ DOLLARS AND \_\_\_\_\_ CENTS.  
(USE WORDS) (USE WORDS)  
(\$\_\_\_\_\_)

**Bond Cost**

Cost of Performance and Payment Bond (Base Offer + Alternates) \$\_\_\_\_\_

**DO NOT INCLUDE THIS COST IN YOUR BASE OFFER OR ALTERNATES**

### 8.5 Cost Breakdown

Fill in the following breakdown of costs included in your base offer. Each item is to include labor, material & equipment. These will neither be considered unit prices nor will the numbers listed here limit obligations required in the solicitation documents. It will be used only to aid in verifying completeness of the offers.

<u>DESCRIPTION OF WORK</u>	<u>COST INCLUDED IN OFFER</u>
Engineering, design coordination, permits & fees	\$ _____
Shop drawings & submittals	\$ _____
Panelboards	\$ _____
Medium Voltage Switches	\$ _____
Transformers	\$ _____
Main Gear	\$ _____
Generator	\$ _____
Surge Suppression Devices	\$ _____
Metering Devices	\$ _____
Remaining work not listed above,	\$ _____
Freight	\$ _____
<b>TOTAL BASELINE AMOUNT (SHOULD MATCH PROPOSAL)</b>	\$ _____

### 8.6 Unit Prices

None

### 8.7 Allowances

None

### 8.8 Schedule of Values

Within seven (7) days after the contract signing, the SUCCESSFUL OFFEROR is to provide a breakdown for Monthly progress billing purposes in a format furnished by the Construction Manager. Each item is to be separated into Labor and Material, except Allowances. Minimum line items will be included for CCIP, Mobilization, Engineering/ Submittals, Safety, Clean Up, Close-Out, Punchlist, Record Drawings, Warranty, etc. The Successful Contractor is to list MBE/WBE Subcontracts and Purchase Orders separately in the Schedule of Values.

The Successful Contractor is to list MBE/WBE Subcontracts and Purchase Orders separately in the Schedule of Values.

### 8.9 Supplemental Information

1. Company Financial Statement

\* Pursuant to KRS 45A.110, if the offeror wishes nondisclosure of certain information he/she shall enclose the confidential information in a separate envelope marked CONFIDENTIAL and forward it with the information and other submittals required by this document.

9.0

**DRAWINGS AND SPECIFICATIONS**

The Offeror, in compliance with your Request for Proposal for the above referenced Project, having carefully examined the site of the Work, the Drawings and complete Contract Documents as defined in Article I of the General Conditions, as well as the Specifications affecting the work as prepared by the Consultant, hereby proposes to furnish all labor, materials, supplies and services required to construct the Project in accordance with the Contract Documents, within the time set forth therein, and at the price stated below without qualification. Offeror understands that successful offeror will enter into a contract with the University of Kentucky.

The Offeror hereby acknowledges receipt of the following Addenda:

ADDENDUM NO. _____	DATED _____

(Here insert the number and date of any Addenda issued and received. If none has been issued and received, the word NONE should be inserted.)



UK AG Research Building  
BID PACKAGE – 03.1 RFP Electrical Equipment  
ADDENDUM No. 1  
Project No. UK-2617.0  
06/21/2024

*TCCO Addendum #1 Items*

**Attachment “B” Scope of Work**

**RFP Proposal No. UK-2617.0**

- **Section 7.1 Detailed Services Defined**
  - Add line 17.n:
    - This supplier shall provide Electrical Studies as required by the specifications

**Attachment Changes**

- See attached BHDP Electrical Equipment RFP – Addendum 1
- See written responses to bidder questions

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<b>Date</b>	6/21/2024
<b>Project Title</b>	University of Kentucky Agriculture Research Facility 1 <b>Electrical Equipment RFP</b>
<b>To</b>	All Plan Holders
<b>Purpose</b>	Modify the Bid Documents
<b>Distribution</b>	All Plan Holders University of Kentucky Turner Construction A/E Design Team

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**TO ALL BIDDERS:** This Addendum modifies the Contract Documents and shall be taken into account in preparing bid proposals and shall become a part of the Contract Documents.

**Specifications:**

- Item 1.** Section 012300 - Alternates
  - Added spec section for Alternate 1.
- Item 2.** Section 262413 - Low-Voltage Switchboards
  - Add the automatic transfer requirements information per the attachment.

**Drawings:**

- Item 3.** Sheet E701.0 - ELECTRICAL DISTRIBUTION RISER DIAGRAM (480/277V & 208/120V MAIN)
  - Switchboard C0110NSWBD1 - Overall dimensions shall not exceed 360" long by 48" deep by 91.5" tall.
  - Switchboard C0110NSWBD2 - Overall dimensions shall not exceed 360" long by 48" deep by 91.5" tall.
  - Switchboard C0110NSWBD1 - 4000 amp Main and Tie circuit breakers to be 100% rated.
  - Switchboard C0110NSWBD2 - 4000 amp Main and Tie circuit breakers to be 100% rated.
  - Pad mounted electrical distribution transformers (262450) secondary section shall be designed to accept twelve (12) 4" conduits for feeders to the switchboards.
  - Include Bid Alternate 1:
    - i. Add automatic transfer of Main-Tie-Main for switchboard C0110NSWBD1.
    - ii. Add automatic transfer of Main-Tie-Main for switchboard C0110NSWBD2.
- Item 4.** Sheet E702.0 - ELECTRICAL DISTRIBUTION RISER DIAGRAM (480/277V EMERGENCY)
  - Revise Generator to be 2750kw / 3438kvs.
  - Switchboard C0129ESWBD1 - Overall dimensions shall not exceed 222" long by 48" deep by 91.5" tall.
  - Switchboard C0129ESWBD1 - 2500 amp circuit breaker to be located at the end of the line-up, furthest from the feeder entrance.
  - Switchboard C0129ESWBD1 - Provide Schneider Electric PowerLogic METSEPM5563RD.

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- Generator connection cabinet (GCC) shall be designed to accept twelve (12) 4" conduits in both the incoming and outgoing sections.
- Add 480/277v, 4p, closed transition, 300 amp rated automatic transfer switch for Teaching Greenhouse.
- Add manual by-pass to 2500 amp automatic transfer switch.
- Add 100 amp, 3-phase, 30 circuit, 22kaic load center with generator. Mount inside generator housing.

Respectfully Submitted,



Kelly Gardner  
Senior Architect  
BHDP Architecture

#### ATTACHMENTS

1. Section 012300 - Alternates\_ADD-1
2. Section 262413 - Low-Voltage Switchboards - Additional Information\_ADD-1

**END OF ELECTRICAL EQUIPMENT RFP - ADDENDUM 1**

**SECTION 01 2300  
ALTERNATES**

**PART 1 - GENERAL**

**1.1 SUMMARY**

A. Section includes administrative and procedural requirements for alternates.

**1.2 DEFINITIONS**

A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.

1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

**1.3 PROCEDURES**

A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.

1. Include, as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation, whether or not indicated as part of alternate.

B. Execute accepted alternates under the same conditions as other Work of the Contract.

C. Schedule: A Part 3 "Schedule of Alternates" Article is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

**PART 2 - PRODUCTS (Not Used)**

**PART 3 - EXECUTION**

**3.1 SCHEDULE OF ALTERNATES**

A. Alternate No. 1: Automatic Transfer of Main-Tie-Main for Switchboards.

1. Alternate: Provide automatic transfer of Main-Tie-Main for switchboards C0110NSWBD1

University of Kentucky  
Agriculture Research Facility 1  
Lexington, Kentucky

UK-2617.0  
BHDP-UKx05.00

Electrical Equipment RFP  
Addendum 1  
June 21, 2024

and C0110NSWBD2 as indicated on Drawing E701.0 and as specified in Section 262413  
"Low-Voltage Switchboards" additional information provided in Addendum 1 attachment.

**END OF SECTION 01 2300**

## SECTION 26 2413 – LOW-VOLTAGE SWITCHBOARD

### 2.9 SWITCHBOARD - AUTOMATIC THROW-OVER SYSTEM

- A. Provide with Square D #XBTGT6330 HMI touch screen interface at each switchboard line-up. Total of 3 touch screen interfaces. Equal by Eaton Electrical Inc. or General Electric Company.
- B. Main-Tie-Main (\* indicates to be coordinated during shop drawing review)
  - 1. Standard functions shall include the following:
    - a. Automatic Transfer to Alternate Source, Automatic Re-transfer to Normal Source for Main-Tie-Main
    - b. Open Transition with control program interlocking to prevent paralleling
    - c. Bypass of Retransfer delay if alternate source fails
    - d. Electrically Interlocked
    - e. Manual Circuit Breaker Close Buttons Inhibited
    - f. Time Delay On Transfer \* seconds
    - g. \* Second Time Delay On Retransfer, Open Transition
    - h. Source Stabilization Before Retransfer \* seconds
    - i. Under-voltage sensing on Both Sources(27 Device) , \*% differential, strap adjustable with local LED indication
    - j. Phase Sequence( reverse phase) Sensing on Both Sources(47 Device) , 2 cycles with local LED indication
    - k. Phase Loss(47 Device), 68% of nominal with local LED indication
    - l. Phase Imbalance(47 Device) \*% Strap Adjustable with local LED indication
    - m. Auto / Manual Switch with Removable Key and light indication
      - 1) White Light for Auto
      - 2) Blue Light for Manual
    - n. Control Power Transfer Between Sources
    - o. Full Automatic Mode with Drawout Breakers in the Test Position
    - p. Open(Green)/Close(Red) Lighted Push Buttons for Manual Operation of the Circuit Breakers
    - q. Test Switch for Simulating Loss of either Source
    - r. Circuit Breaker Electrical Trip Lockout with Amber Light indication
    - s. Uninterruptible Power Supply for 120Vac Control Power
    - t. UPS Bypass relay
    - u. White Lights for Sources Available
    - v. Operator Interface Panel
    - w. Wire Labels for Control Wiring
    - x. Fused Control Circuits With Individual Blown Fuse Indication
  - 2. Optional Functions shall include the following:
    - a. Manual Retransfer to Normal Switch for Main-tie-Main
    - b. Remote Alarm Contact ( System Inoperative), 5A @ 120Vac
    - c. Closed Transition on Retransfer
    - d. Sync Check(25), 2 seconds maximum paralleling when sources synchronized, Voltage 30% adjustable(10-30%), phase relationship is 6° to 20° and frequency is 0.15 Hz to 0.5 Hz
    - e. Preferred Source Selector
    - f. Pilot Lights Test Switch

3. Documentation shall include the following:
  - a. Wiring diagram of each assembly in system.
  - b. System schematic diagram.
  - c. Input/Output listing.
  - d. Sequence of operation.
  - e. Test procedures.
4. The manufacturer shall provide a qualified service representative for one day to initialize the automatic throw-over system.

C. Main-Main Automatic Throw-over System (\* indicates to be coordinated during shop drawing review)

1. Main-Main standard functions shall include the following:
  - a. Automatic Transfer to Alternate Source, Manual Return to Normal Source for Main-Main
  - b. Open Transition with control program interlocking to prevent paralleling
  - c. Bypass of Retransfer delay if alternate source fails
  - d. Electrically Interlocked
  - e. Manual Circuit Breaker Close Buttons Inhibited
  - f. Time Delay On Transfer \* seconds
  - g. \* Second Time Delay On Retransfer, Open Transition
  - h. Source Stabilization Before Retransfer \* seconds
  - i. Undervoltage sensing on Both Sources(27 Device) , \*% differential, strap adjustable with local LED indication
  - j. Phase Sequence( reverse phase) Sensing on Both Sources(47 Device) , 2 cycles with local LED indication
  - k. Phase Loss(47 Device), 68% of nominal with local LED indication
  - l. Phase Imbalance(47 Device) \*% Strap Adjustable with local LED indication
  - m. Auto / Manual Switch with Removable Key and light indication
    - 1) White Light for Auto
    - 2) Blue Light for Manual
  - n. Control Power Transfer Between Sources
  - o. Full Automatic Mode with Drawout Breakers in the Test Position
  - p. Open(Green)/Close(Red) Lighted Push Buttons for Manual Operation of the Circuit Breakers
  - q. Test Switch for Simulating Loss of either Source
  - r. Circuit Breaker Electrical Trip Lockout with Amber Light indication
  - s. Uninterruptible Power Supply for 120Vac Control Power
  - t. UPS Bypass relay
  - u. White Lights for Sources Available
  - v. Operator Interface Panel
  - w. Wire Labels for Control Wiring
  - x. Fused Control Circuits With Individual Blown Fuse Indication
2. Optional Functions shall include the following:
  - a. Automatic Return from Alternate Source for Main-Main
  - b. Closed Transition on Retransfer
  - c. Sync Check(25), 2 seconds maximum paralleling when sources synchronized, Voltage \*% adjustable(10-30%), phase relationship is 6° to 20° and frequency is 0.15 Hz to 0.5 Hz
  - d. Preferred Source Selector

- e. Pilot Lights Test Switch
- 3. Documentation shall include the following:
  - a. Wiring diagram of each assembly in system.
  - b. System schematic diagram.
  - c. Input/Output listing.
  - d. Sequence of operation.
  - e. Test procedures.
- 4. The manufacturer shall provide a qualified service representative for one day to initialize the automatic throwover system.

UK-2617.0-5-24 Ag Research Facility 1 - Electrical Equipment  
 Question and Response Log  
 Question Deadline 06/19/2024

#	Date	Question	Responder	Response
1	5/22/2024	I was looking at the drawings this morning regarding the generator and noticed it says "2750kva/3438kw." It is fair to assume it should read "2750kw/3438kva?"	CMTA	yes that is correct, "2750kw/3438kva"
2	6/18/2024	The acceptance or commissioning testing involved, will that be provided by the suppliers or the electrical contractor? As a 3rd party, independent testing company, we usually partner with the owner (to ensure independent results) or with the EC. Just trying to figure out where I should start.	CMTA	Commissioning of the building energy systems will be performed by a certified Commissioning Provider (CxP) under a separate contract with the Owner. The Electrical Contractor shall assist the commissioning provider as required in Section 019113.
3	6/19/2024	Are the transfer switches on this project to include Bypass/isolation? This is recommended with closed transition switches to provide a means of manual switching between the sources.	CMTA	The only transfer switch to be provided with a manual by-pass is the 2500 amp transfer switch.