MEPNN Supplier Scouting Opportunity Synopsis

Section 1: General Information

Scouting Number	2025-049
Item to be Scouted	Enclosed Circuit Breaker
Days to be scouted	15
Response Due By	03/07/2025
Description	Enclosed Circuit Breaker
Notify Requester Immediately	No
State item to be used in	Alabama

Section 2: Technical Information

Type of supplier being sought	Manufacturer
Reason	BABA
Describe the manufacturing processes (elaborate to provide as much detail as possible)	Welding, assembly, inspection, electronics, OTS, and tooling.
Provide dimensions / size / tolerances / performance specifications for the item	Please see attached information sheet for list of specifications, dimensions, etc.
List required materials needed to make the product, including materials of product components	Circuit Breaker: Trip unit, operating mechanism, molded frame, arc chutes, contacts.
Are there applicable certification requirements?	No
Are there applicable regulations?	No
Are there any other stndards, requirements, etc.?	Yes
Details	ANSI//NECA 1 - Standard Practices for Good Workmanship in Electrical Contracting NEMA AB 1 - Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit Breakers Enclosures NEMA KS 1 - Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum) NFPA 70 - National Electrical Code UL 98 - Enclosed and Dead Front Switches UL 486A-486B - Wire Connectors UL 489 - Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit Breaker Enclosures UL 869A - Reference Standard for Service Equipment
NAICS 1	335313 Switchgear and switchboard apparatus manufacturing
NAICS 2	
Additional Technical Comments	Product shall comply with BABA.

Section 4: Business Information

Estimated potential business volume	One time purchase of one unit.
Estimated target price / unit cost information (if unavailable explain)	As this is related to BABA, acceptable pricing is to be determined in negotiation.
When is it needed by?	9/1/2025

Describe packaging requirements	Store in clean, dry space. Maintain factory wrapping or provide additional canvas or plastic cover to protect from dirt, water, construction debris, and traffic.
Where will this item be shipped?	Tuscaloosa, Alabama

Additional Comments

Is there other information you would like to include?	State of Alabama, University of Alabama. For information related to BABA requirements please contact: University of Alabama Joshua Bollinger- Senior Project Manager, Construction Administration jsbollinger@ua.edu. Funds: Department of Commerce / National Institute of Standards and Technology

SECTION 262816 - ENCLOSED SWITCHES AND CIRCUIT BREAKERS

PART 1 - GENERAL

1.1 RELATED WORK

A Section 260519 - Low-Voltage Electrical Power Conductors and Cables

B Section 260526 - Grounding and Bonding for Electrical Systems

C Section 260529 - Hangers and Supports for Electrical Systems

D Section 260548 - Vibration and Seismic Controls For Electrical Systems

E Section 260553 - Electrical Systems Identification

F Section 260573 - Power System Studies

G Section 260812 - Power Distribution Acceptance Tests

H Section 260813 - Power Distribution Acceptance Test Tables

I Section 262813 - Fuses

1.2 DESCRIPTION

A Section includes fusible and non-fusible disconnect switches and circuit breakers in individual enclosures.

1.3 REFERENCE STANDARDS

A ANSI//NECA 1 - Standard Practices for Good Workmanship in Electrical Contracting

B NEMA AB 1 - Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit Breakers Enclosures

C NEMA KS 1 - Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum)

D NFPA 70 - National Electrical Code

E UL 98 - Enclosed and Dead Front Switches

F UL 486A-486B - Wire Connectors

G UL 489 - Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit Breaker Enclosures

H UL 869A - Reference Standard for Service Equipment

1.4 SUBMITTALS

A Product Data:

1. Submit catalog cut sheet indicating voltage, amperage, HP ratings, enclosure type, and dimension, fuse clip features, terminal lugs and all accessories including interlock devices, short circuit current ampere rating and factory settings of individual protective devices.

B Manufacturer's Installation Instructions:

1. Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, installation, and starting of product.

C Test Reports:

1. Indicate field test and inspection procedures and interpret test results and corrective action taken for compliance with specification requirements.

D Closeout Submittals:

1. Project Record Documents:
   a. Record actual locations of disconnect switches and ratings of installed fuses.
   b. Record actual locations and continuous current ratings of enclosed circuit breakers.
2. Operation and Maintenance Data:
   a. Include manufacturer's recommended operating instructions, maintenance procedures and intervals, and preventive maintenance instructions.
   b. Include spare parts data listing, source, and current prices of replacement parts and supplies.
   c. Include Manufacturer's Seismic Qualification Certification and Installation Seismic Qualification Certification.

1.5 QUALITY ASSURANCE

A Obtain disconnect switches and enclosed circuit breakers from one source and by single manufacturer.

B Regulatory Requirements:

1. Comply with NFPA 70 for components and installation.
2. Furnish products listed and classified by Underwriters Laboratories, Inc., as suitable for purpose specified and indicated.

1.6 DELIVERY, STORAGE, AND HANDLING

A Store in clean, dry space. Maintain factory wrapping or provide additional canvas or plastic cover to protect from dirt, water, construction debris, and traffic.

B Comply with manufacturer's written instructions.

1.7 WARRANTY

A Refer to Division 01 and Section 260000 - General Electrical Requirements for general warranty requirements.

B Manufacturer shall provide standard 1 yr written warranty against defects in materials and workmanship for products specified in this Section. Warranty period shall begin on date of substantial completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A Schneider Square D

B ABB-GE Industrial Solutions

C Eaton Cutler-Hammer

D Siemens

2.2 DISCONNECT SWITCHES

A NEMA KS 1, UL 98

B Load interrupter enclosed knife switch, heavy-duty type.

C Fusible or non-fusible type as indicated.

D Switch Interiors:

1. Switch blades that are visible in "OFF" position when switch door is open.
2. Plated current carrying parts.
3. Removable arc suppressors to permit easy access to line side lugs.

E Switch Mechanism:

1. Quick-make, quick-break, with visible blades and externally operable handle.
2. Lockable only in "OFF" position and accept three industrial type, heavy-duty padlocks.

3. Dual cover interlock to prevent unauthorized opening of switch door when handle is in "ON" position, and to prevent closing of switch mechanism with door open.
4. Defeater mechanism to bypass interlock.
5. Operating handle integral part of enclosure.
6. Handle to physically indicate "ON" and "OFF" position.

F Ratings:

1. Ampacity as indicated on drawings.
2. Horsepower rated.

G Fusible Switches:

1. Rejection clips for Class R fuses specified.
2. Provisions for Class J or Class L fuses, as applicable.
3. Fuses: Per requirements in Section 262813 - Fuses.

2.3 ENCLOSED CIRCUIT BREAKERS

A NEMA AB 1, UL 489.

B Enclosed molded-case circuit breakers:

1. Tripped indication clearly shown on breaker handle taking position between "ON" and "OFF".
2. 225A frame size and below: thermal-magnetic trip.
3. 250A frame size and above: electronic (solid-state microprocessor-based) trip units interchangeable in the field within the frame size and field-adjustable long time pick-up, long time delay, short time pick-up, short time delay, and instantaneous current settings. Each adjustment shall have discrete settings and shall be independent of other adjustments.
4. Locking provisions on trip handles
5. Shunt trip, where indicated.

C Breaker Mechanism:

1. Quick-make, quick-break.

D Ratings:

1. Ampacity as indicated on drawings.
2. Listed as Type HACR for air conditioning equipment circuits.
3. Listed as Type SWD for lighting circuits.

2.4 LUGS

A Front removable lugs.

B Labeled for 75°C copper and aluminum conductors.

C Multiple lugs to match number of conductors per phase.

D Termination of field installed conductors: Pressure wire connectors, except wire-binding screws for #10 AWG or smaller conductors.

2.5 ACCESSORIES:

A Solid neutral assembly, where required.

B Equipment ground kit.

2.6 ENCLOSURES

A NEMA KS 1, NEMA AB 1, UL 98, UL 489, as applicable.

B NEMA Type 1, Type 3R (outdoor locations) enclosure.

C Code-gauge galvanized steel.

D Manufacturer's standard gray enamel finish over prime coat.

E Surface-mounted.

2.7 SHORT CIRCUIT CURRENT RATING

A Each circuit breaker shall have minimum short circuit current rating of not less than that of the upstream panel or equipment supplying it as indicated on drawings, unless noted otherwise.

PART 3 - EXECUTION

3.1 COORDINATION WITH MANUFACTURER

A Instruct manufacturer about the location of incoming lugs, i.e., top or bottom feed based on incoming feeder entrance location.

B Verify that "touch-up" paint kit is available for repainting.

3.2 EXAMINATION

A Examine areas and surface to receive disconnect switches and enclosed circuit breakers for compliance with requirements, installation tolerances, and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

B Verify that space indicated for disconnect switches and enclosed circuit breakers mounting meets code-required working clearances.

C Notify Architect/Engineer of any discrepancies prior to submittal of product data and shop drawings.

3.3 INSTALLATION

A Install disconnect switches and/or enclosed circuit breakers in accordance with ANSI/NECA 1.

B Install disconnect switches and/or enclosed circuit breakers level and plumb, in accordance with manufacturer's written instruction.

C Do not support disconnect switches and/or enclosed circuit breakers by raceway.

D Install top disconnect switch and/or enclosed circuit breaker handle a minimum of 3'-6" and maximum of 6' 6" above finished floor.

E Tighten electrical connectors and terminals according to equipment manufacturer's published torque-tightening values. Where manufacturer's torque values are not indicated, use those specified in UL 486A-486B.

F Install engraved plastic nameplates under provisions of Section 260553 - Electrical Systems Identification. Attach nameplate to exterior of each switch and/or enclosed circuit breaker using small corrosion-resistant metal screws or rivets. Do not use contact adhesive.

1. Include switch and/or enclosed circuit breaker name, amperage, voltage, phase, and number of wires.

G Install fuses in fusible switches at job site per requirements in Section 262813 - Fuses.

3.4 CONNECTIONS

A Ground equipment according to Section 260526 - Grounding and Bonding for Electrical Systems.

B Connect wiring according to Section 260519 - Low-Voltage Electrical Power Conductors and Cables.

3.5 FIELD QUALITY CONTROL

A Inspect for physical damage, proper alignment connections, anchorage, and grounding.

B Correct malfunctioning units on-site and retest to demonstrate compliance. Remove and replace with new units and retest.

C Test disconnect switches and/or enclosed circuit breakers per requirements in Sections 260812 - Power Distribution Acceptance Tests.

D Interpret test results in writing and submit to Engineer.

3.6 REPAINTING

A Remove paint splatters and other marks from surface of equipment.

B Touch-up chips, scratches, or marred finishes to match original finish, using manufacturer-supplied paint kit. Leave remaining paint with Owner.

3.7 ADJUSTING

A Circuit Breakers: Set field-adjustable trip settings or change the trip settings recommended by the overcurrent protective device coordination study per Section 260573 - Power System Studies.

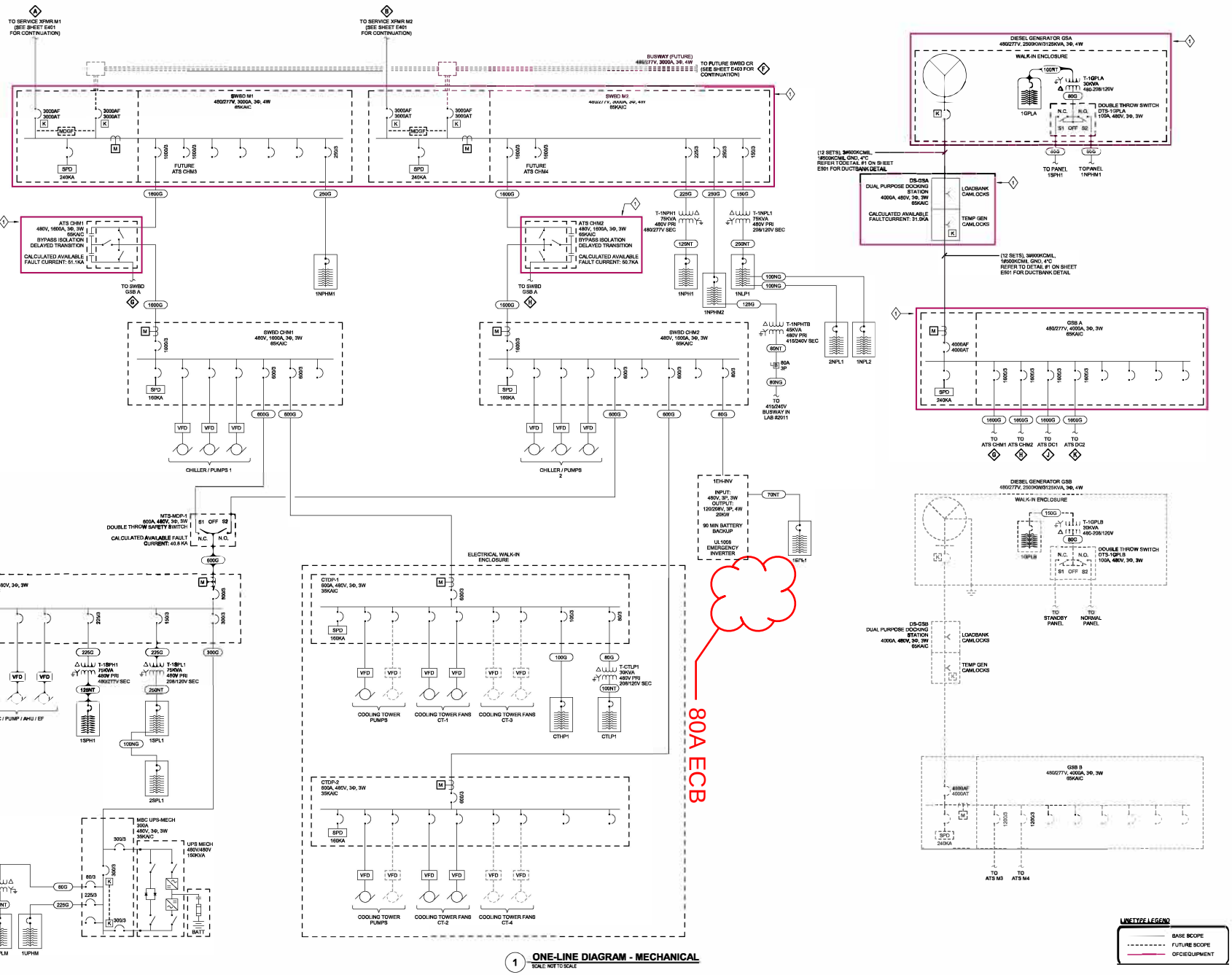
3.8 CLEANING

A Vacuum dirt and construction debris from interior and exterior of equipment; do not use compressed air to assist in cleaning.

END OF SECTION 262816

SHEET KEYNOTES

1. THIS EQUIPMENT TO BE PRE-PURCHASED BY THE OWNER. INSTALLATION AND FINAL CONNECTIONS SHALL BE BY THE CONTRACTOR. REFER TO SPECIFICATION 26 05 25 - OWNER FURNISHED EQUIPMENT FOR ADDITIONAL INFORMATION.



1 **ONE-LINE DIAGRAM - MECHANICAL**
SCALE: NOT TO SCALE

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DAVIS ARCHITECTS, INC.
120 23RD STREET SOUTH
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205-328-7483
ATTN: SKYLAR HOWARD / COURTNEY PITTMAN

DATA CENTER ARCHITECT
GENSLER
999 PEACHTREE STREET NORTH EAST, SUITE 1400
ATLANTA, GA 30309
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MECHANICAL/ ELECTRICAL/PLUMBING/TECHNOLOGY ENGINEER
AFFILIATED ENGINEERS, INC
1414 RALEIGH ROAD, SUITE 300
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ELECTRICAL ONE-LINE DIAGRAM - MECHANICAL

E402

NOTE: SHEET CONTAINS COLOR ELEMENTS AND MUST BE PRINTED IN COLOR. ARCHITECT IS NOT RESPONSIBLE FOR ERRORS MADE DUE TO IMPROPER PRINTING