## INVITATION TO BID BID NO 022-19 PROJECT EL003-17 SUBSTATION VACUUM 15KV CIRCUIT BREAKERS FOR ELECTRIC DEPT. FAIRHOPE, ALABAMA

BID OPENING DATE: MAY 7, 2019

ITEMS: \_\_\_\_\_\_ SUBSTATION BREAKERS

THE ATTACHED "GENERAL INSTRUCTIONS TO BIDDERS" TO BE CONSIDERED A PART OF THE INVITATION TO BID.

- 11 Vacuum Circuit Breakers (15 KV) Complete with Substation Frame, per attached Specifications.
- NOTE: All bids must be sealed. All prices quoted to be F.O.B. delivered to city of Fairhope, Alabama, unless specified otherwise. The City reserves the right to reject any or all bids when in the opinion of the City, the best interest of the City of Fairhope will be served. Bids must be received no later than 2:00 P.M. on the Bid Due Date as indicated. If you have any inquiries about this particular Bid, please contact:

Lance Junkin - Stewart Engineering, Inc. - Telephone 256-237-0891 or Mike Allison - Fairhope Electric Department - Telephone 251-279-6238

BIDS MUST BE CLEARLY MARKED ON THE ENVELOPE AND WILL BE OPENED AS FOLLOWS:

City of FAIRHOPE 555 SOUTH SECTION STREET (PO Drawer 429) FAIRHOPE, AL 36532 (36533) BID ON SUBSTATION BREAKERS TUESDAY, MAY 7, 2019 AT 2:00 P.M.

All bid items will be expected to be delivered promptly upon receipt of Fairhope Public Utilities purchase order therefore, unless otherwise indicated above.

SIGNED	NAME OF BIDDER	
TYPED SIGNATURE	STREET OR PO BOX	
TELEPHONE NUMBER	CITY & STATE	ZIP

Section 41-16-5, Code of Alabama 1975, requires that public contracts over \$15,000 include the following language: By signing this Contract, \_\_\_\_\_\_ represents and agrees

COMPANY NAME

that it is not currently engaged in, nor will it engage in, any boycott of a person or entity based in or doing business with a jurisdiction with which the State of Alabama can enjoy open trade

## INVITATION TO BID FAIRHOPE PUBLIC UTILITIES FAIRHOPE, ALABAMA

## GENERAL INSTRUCTION TO BIDDERS

- The City of Fairhope will open and read bids on the date stated in the attached Invitation to Bid, at Fairhope City Services and Public Utilities Bldg, 555 South Section Street, Fairhope, AL 36532. Bidders or their authorized representatives are invited to be present at bid opening.
- 2. Prices and notations must be in ink or typewritten on the form provided by the City of Fairhope. All bid prices must be fully extended. Bids must conform to any attached detailed specifications to be eligible for consideration. Please state brand and delivery date of each item quoted.
- 3. No taxes of any kind are to be included in the bid prices unless requested. City of Fairhope will provide assistance with tax exemption certificates through the State of Alabama, when necessary, and <u>when requested by the awarded Vendor, before purchases are initiated.</u>
- 4. All prices must be firm for a minimum of 60 days.
- 5. Factors to be considered in awarding bids will be delivery, price and suitability for use by City of Fairhope. The City reserves the right to:
  - (a) Award bids by Lump Sum or individual items unless otherwise noted by bidder. NOTE: No purchase will be made on Lump Sum awards until individual item prices are furnished.
  - (b) Reject any or all bids and to waive technicalities when in the opinion of the City the best interest of the City of Fairhope will be served.
  - (c) Make null and void the purchase order with the successful bidder if delivery cannot be made at the specified time.
- 6. If you do not quote, please return the specifications sheet to Purchasing Manager at City of Fairhope, <u>deedeeb@cofairhope.com</u>, and state reason for not quoting. Otherwise, your name may be removed from our mailing list.
- 7. Bid awards will not be official until bidder is formally notified by receipt of purchase order.
- 8. All prices quoted are to be F.O.B. Fairhope, Alabama.
- 9. These "General Instructions to Bidders" are hereby made an official part of all bids. Please observe the above instructions and conditions, as failure to do so may constitute grounds for rejection of your bid.
- 10. All Federal, State, and Local License and Fee requirements will be applicable.
- 11. Bidder shall complete, and submit with bid, the attached Affidavit for Business Entity/Employer/Contractor (EXHIBIT A). No bid shall be awarded to a Bidder prior to receipt of this document.
- 12. A cashier's check or bid bond (EXHIBIT B) payable to <u>CITY OF FAIRHOPE</u> in an amount not less than five (5) percent of the amount of the bid, but not to exceed \$10,000.00 must accompany the Bidder's proposal.

# <u>BID FORM</u>

# Bid No 022-19 PROJECT EL003-17 Substation Vacuum 15 KV Circuit Breakers for Electric Dept FAIRHOPE, ALABAMA

Eleven (11) -	Vacuum Circuit I	Breakers (15 KV)	Dual Trip – 48	3 V DC)
See attached S	pecifications for c	letails.		
Eleven (11) @	\$	Each	\$	Total
Brand Quoted:				
Accessories Qu	ioted:			
Are all accesso	ries shipped with	breakers (YES/N	0)?	
Warranty Quot	ed (Time):			
Shipment Quot	ted (Time):			
Exceptions:				

#### GENERAL SPECIFICATIONS FOR SUBSTATION VACUUM CIRCUIT BREAKERS (15 KV)

## GENERAL – ELEVEN (11) BREAKERS

A. Breaker shall be Siemens type SDV7. Automatic vacuum circuit breakers specified shall be furnished complete with all accessories, control cabinet, and interconnect wiring, factory installed and assembled.

All equipment furnished under these specifications shall conform to the latest applicable standards of ANSI, NEMA, and IEEE. The automatic vacuum circuit breakers shall be designed, fabricated, and tested in accordance with ANSI C37.06, NEMA SG-4, and these specifications.

#### B. RATINGS

The automatic vacuum circuit breakers shall meet the following requirements:

Number of Phases	3
Rated Maximum Voltage	15.5 KV
Nominal System Voltage	14.4 KV
Continuous Current Amps	1200
Basic Insulation Level	110 KV
Operating Voltage	14.4 KV
Interrupting Capacity, RMS	
Amperes Symmetrical at 14.4KV	20,000
Maximum Interrupting Time	3 Cycles

## C. MECHANICAL CONSTRUCTION DETAILS

The following paragraphs describe the general construction of the vacuum circuit breaker.

- 1. Substation mounting frame adequate to insure 9'-0" minimum phase to ground clearance with breaker mounted and wired.
- 2. 6 Bushings and six (6) bushing terminals, with standard threaded pad to bolt-on pad connector (Standard NEMA 4 hole pad). Utilize four (4)  $\frac{1}{2}$ " bolts on these connector pads.
- 3. 6 Current transformers, 1200/5 ampere (C400), 5-tap, multiratio bushing type, one per bushing. The #6 Terminal on CT blocks shall be grounded to a connection on bottom of Control Cabinet with #10 copper.
- 4. Stored energy mechanism with 48 V DC, charging motor. Close coil shall be 48 V DC. Mechanism shall have standard Control Scheme for anti-pump. Include provisions for mechanically closing and tripping.

5. Breakers shall have DC tripping (primary), with an auxiliary (backup) 48 V DC trip coil. Design such that field change between these two trip coils is simple (two switch throws – maximum), with clear instructions on the breaker. Connect such that Trip Coil monitoring function (described below) of the SEL Relay (in Control House – by others) will work when the primary coil is in service, and when the backup coil is in service.

Breaker wiring should be designed such that two SEL optoisolated inputs are wired in parallel with the relay tripping contacts, and in series with the trip coil, in such a way that trip coil continuity can be remotely monitored, whether breaker is open or closed.

Also, breaker shall be wired with one SEL optoisolated output in series with "hot" <u>close</u> button such that programming can disable this button when "HLT" is enabled.

- 6. Grey porcelain (Munsell #5BG7.0/0.4 color) for all bushings.
- 7. The breaker shall be painted with Standard Light Grey finish, ANSI 70.
- 8. Breaker tank lifting eyes or hooks shall be provided and arranged so that slings will not damage bushings.

Breaker is to be equipped with two ground pads with two  $\frac{1}{2}$ " holes on 1  $\frac{3}{4}$ " centers, welded to tank base for attaching ground connectors.

Bolts, cap screws, nuts unpainted metal, etc., exposed to the weather shall be made of non-corrosive material.

- 9. Each vacuum interrupter shall contain a pair of butt type contacts of a special non-welding alloy with a construction to insure interrupter integrity for a proper dielectric level over a 40 year service life. The interrupters shall be mounted in such a way to prevent mechanical stresses from being transmitted to the seals. Test points along with a detailed test procedure to facilitate testing the integrity of the interrupter shall be provided.
- 10. Heavy duty steel cabinet mounted on the side adjacent to bushings #1, #3, and #5 shall be provided complete with the following equipment:
  - a. Trip and Close Control (push buttons), with red and green position–indicating lamps (L.E.D. type). Lamps wired in series with trip coil, for local indication of breaker position, and trip-circuit continuity.
  - b. Local-Remote Selector Switch. Prevents remote

operation of breaker when selector switch is placed in "local" mode, such as during testing/inspection.

- c. Two (2) 250 watt, 240 volt heaters, with guard, connected in series shall be provided, with thermostat.
- d. States Company shorting type, hard wired terminal blocks for all circuits connecting external to the relay cabinet. No sliding link type terminal blocks shall be used.
- e. Test Switches: (Multi-Amp Type or equivalent) Current Test Switch - MTS C4208PB(Black); Voltage Test Switch -MTS C4206AB(Red)
- f. A provision shall be made for remote tripping and closing contacts.
- g. Additional four (4) spare 52a and 52b contacts are to be prewired to main terminal block.
- h. A 120 volt AC GFCI receptacle shall be supplied inside the relay cabinet, on the front panel.
- 11. It is understood that the purchaser will provide a suitable source for tripping, closing, motor, and heater elements.
- 12. Furnish the following set of accessories (include in breaker pricing):
  - 1 Maintenance closing device, for each breaker.
  - 1 Complete set of special tools, wrenches and other equipment necessary or convenient for maintenance by Contractor or Owner.
  - 1 Gallon of touch-up paint to match finish coat on breaker.
  - 2 Set of control relay coils and contacts.
  - 2 Closing coil and trip coil.
  - 2 Spare bushing assembly.

Other accessories recommended by manufacturer.

- 13. Vacuum Circuit Breakers that meet the above requirements can be supplied by Siemens or ABB. ABB RMAG type breakers will also be acceptable, if each breaker is supplied with a spare ED2 Board. Submit Specifications with bid.
- 14. The Manufacturer shall submit shop drawings and catalog

sheets to Engineer for approval, prior to fabrication, in both .dwg and .pdf format.

Four complete sets of instruction books and record drawing prints shall be sent to the Owner. One set of instruction books, record drawing prints, and 1 copy of all drawings in ACAD format shall be sent to the Engineer. One instruction book containing final drawings and test report shall be supplied inside each breaker.

- 15. Test Reports. Test reports of all tests performed on the breaker during manufacture shall be provided to the engineer.
- 16. Warranty. Breaker shall be covered by Manufacturer's Warranty for at least 24 months after installation by Owner, or 36 months from receipt of breakers.
- 17. Supplier must give Owner 72 hour notice prior to delivery. The breakers are to be shipped F.O.B., and unloaded by Owner at the following locations:
  - Six (6) Breakers Nichols Avenue Substation
  - Four (4) Breakers Morphy Avenue Substation
  - > One (1) Breaker Fairhope Electric Warehouse (Spare)

# EXHIBIT A

# AFFIDAVIT FOR BUSINESS ENTITY/EMPLOYER/CONTRACTOR

(To be completed as a condition for the award of any contract, grant, or incentive by the State of Alabama, any political subdivision thereof, or any state-funded entity to a business entity or employer that employs one or more employees)

State of \_\_\_\_\_

County \_\_\_\_\_

As a condition for the award of any contract, grant, or incentive by the State of Alabama, any political subdivision thereof, or any state-funded entity to a business entity or employer that employs one or more employees, I hereby attest that in my capacity as \_\_\_\_\_\_ (state position) for \_\_\_\_\_\_

(state business entity/employer/contractor name)

that said business entity/employer/contractor shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien.

I further attest that said business entity/employer/contractor is enrolled in the E-Verify program. (ATTACH DOCUMENTATION ESTABLISHING THAT BUSINESS ENTITY/EMPLOYER/CONTRACTOR IS ENROLLED IN THE E-VERIFY PROGRAM)

Signature of Affiant

Sworn to and subscribed before me this \_\_\_\_\_day of \_\_\_\_\_, 2\_\_\_\_,

I certify that the affiant is known (or made known) to me to be the identical party he or she claims to be.

Signature and Seal of Notary Public

# EXHIBIT B

**NOTE:** PROPOSAL WILL NOT BE ACCEPTED AND BIDS WILL NOT BE CONSIDERED UNLESS THIS FORM FOR BID BOND IS USED AND SIGNED BY PRINCIPAL AND SURETY, OR UNLESS A CASHIER'S CHECK (DRAWN FROM AN ALABAMA BANK) IN THE PROPER AMOUNT IS FURNISHED.

## **BID BOND FORM**

KNOW ALL MEN BY THESE PRESENTS:

That we, the undersigned,\_\_\_\_\_\_\_as **PRINCIPAL**, and \_\_\_\_\_\_as **SURETY**, are held and firmly bound unto the **CITY OF FAIRHOPE** as **OBLIGEE** in the full and just sum of 5% of total bid amount (Maximum amount - \$10,000), lawful money of the United States, for the payment of which sum, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed, this \_\_\_\_\_\_ day of \_\_\_\_\_\_,2019.

Whereas the said Principal is herewith submitting to the City of Fairhope a certain Bid, attached hereto and hereby made a part hereof to enter into a contract in writing, for the Power Transformers for Electrical Substations.

NOW, THEREFORE,

- a. If said Bid shall be rejected, or in the alternate.
- b. If said Bid shall be awarded by the Obligee and the Principal shall deliver the subject material as described in said bid, and shall in all other respects perform the agreement created by the acceptance of said Bid.

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

# EXHIBIT B

PRINCIPAL	
	Name of Corporation, Partnership, etc.
_	
Ву:	
lts:	
SURETY	
By (agent):	
	Attorney-in-Fact
Agent's Address	:
U	
NOTICE:	Valid Power of Attorney MUST be attached