CITY OF GRAND ISLAND

ADVERTISEMENT FOR QUOTES
FOR
Seven (7) Three Phase 500 kVA 13.2/208/120
Padmount Transformers
Utilities Department

Quotes will be received at the Utilities Service Building, 1116 West North Front Street, Grand Island, NE 68801 (or PO Box 1968, Grand Island, NE 68802-1968) until **11:30 a.m., (Local Time), Tuesday, December 18, 2012,** for furnishing, **Seven (7) 500 kVA 13.2/208/120 Padmount Transformers,** FOB Grand Island, NE.

All quotations must be clearly marked for 500 kVA 13.2/208/120 Padmount Transformers – Quote #111312. Quotes will be publically opened at 11:30 a.m. (local time), Tuesday, December 18, 2012, at the Utilities Service Building, 1116 West North Front Street, Grand Island, NE 68801. Manufacturer, catalog number and delivery time must be specified. Failure to do so will be considered "non-responsive" and the quote will be rejected. No verbal quotations will be accepted. Faxed or e-mailed quotes are acceptable. Quotes received after the specified time will be returned unopened to sender.

Specifications are on file in the office of Utilities Administration. Quotes shall be submitted on forms that will be furnished by the City. The quote proposal package is also available on-line at www.grand-island.com under Calendars.

The successful vendor will be required to comply with fair labor standards as required by Nebraska R.R.S.73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. Successful vendor shall maintain a drug free workplace policy. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

Quotes will be evaluated by the purchaser based on price, delivery, quality, economy of operations, experience of the manufacturer, availability of service for repair and maintenance, and adaptability of the particular equipment for the specific use intended. The Purchaser reserves the right to reject any or all bids, to waive technicalities, and to accept whichever bid that may be in the best interest of the City.

RaNae Edwards, City Clerk

GRAND ISLAND ELECTRIC DEPARTMENT SPECIFICATIONS
THREE PHASE PADMOUNTED TRANSFORMERS
13,200 VOLT DELTA TO 208/120 VOLT WYE

BIDDING INSTRUCTIONS:
Sealed bids will be received until 11:30 am on 18 December 2012 _____, for furnishing the following three phase padmounted transformers for the Utilities Department, City of Grand Island; F.O.B. Grand Island, Nebraska. The bids will be opened in accordance with the cover letter accompanying these Specifications. Units must meet ***D O E Transformer Efficiency Requirements.***

GENERAL:
This specification covers the electrical characteristics and mechanical features of three-phase, dead-front, 60 HZ, mineral-oil filled, self-cooled, padmounted type distribution transformers, rated 1500 KVA and smaller. The average winding temperature rise above ambient at rated KVA shall not exceed 65° C.

All transformers shall be new and constructed entirely of new materials. Remanufactured or reconditioned equipment will not be considered. All prices will be firm.

Primary voltage shall be 13,200 volt Delta, connected to a 13,200Y/7620 volt, grounded distribution system. Secondary voltage for all transformers is 208Y/120 volt.

The transformer KVA sizes shall be in accordance with each item specified below.

ITEM I

Quantity: 7 each.

Size: 500 KVA, continuous, 65° C rise, 60 HZ.

ITEM II

Quantity: _____ each.

Size: _____ KVA, continuous, 65° C rise, 60 HZ.

ITEM III

Quantity: _____ each.

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Size: _____ KVA, continuous, 65° C rise, 60 HZ.

STANDARDS:
Unless otherwise specified, all transformers shall conform to:
ANSI C57.12.26-1993
ANSI C57.12.28
NEMA TR 1
IEEE std. 386 - 1995

IMPEDANCE:
Transformers below 750 KVA shall have an **absolute minimum** impedance of 3% or greater.

Transformers 750 KVA and larger shall have an **absolute minimum** impedance of 5.75% or greater.

CORE:
There shall be three primary and three secondary windings wound on a five-legged or equivalent core design. A three legged core is not acceptable.

OIL:
Insulating oil shall have a PCB content of 1 PPM or less and shall be labeled as non-PCB on the nameplate. Transformers are to be provided with certification of non-PCB status. The number of gallons of oil shall be stamped on the nameplate and shown on the drawings.

NAMEPLATE:
Per – ANSI C57.12.00 - Table 9 – Nameplate - B

NOTE: Percent Impedance is required on all Transformers

PRIMARY TAPS:
Five primary taps with two 2½% taps below and two 2½% taps above 13.2 kva. The tap changer control is for de-energized operation only and must be externally operable with a hotstick and requires at least two operator actions to change taps. The location for the control shall be in the primary compartment; shall be of a single shaft/direct connect style – between external operation handle and interior mechanism.

PRIMARY TERMINATIONS:
All applicable components shall be capable of meeting – IEEE Std. 386
The primary connections shall be deadfront with bushings arranged per. –
ANSI C57.12.26 – 7.2.3 and figures 6A and 7.

Cable accessory parking stands shall be located per. - ANSI C57.12.26 - figure 6A, adjacent to the bushing wells IEEE Std.386 - figure 3 with 6½ inches from the center

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line of the bushing to the center line of the parking stand - ANSI C57.12.26-1993, fig. 6A, dimension k.
Each of the six 200 ampere bushing well interfaces shall be equipped with 200 ampere loadbreak interface – IEEE Std. 386 figure 5 and have a yellow indicator ring to determine if the elbow is fully seated – Cooper LB1215 or Elastimold 16014-1

PRIMARY FUSING:
All transformers will be protected by three RTE Bay-O-Net type fuses (or interchangeable and exact equivalent, as noted in the exceptions), located in the primary compartment. Fuseholders shall be provided with plastic spill pans and flapper valves. The fuses shall be oil immersed one fuse per phase; dual (load) sensing for 500 KVA and below, and current (fault) sensing for 750 KVA and above. Fused 1½ times to 2 time's full load current. An under-oil partial range current limiting fuse will be in a series with the Bay-O-Net fuse to provide interrupting up to 30,000 amperes.

LOOP FEED PRIMARY SWITCHES:
Provide three loop-feed, internal, oil-immersed, 3-phase gang operated, loadbreak, manually operated switches.

The switches shall be:
Three - two-position switches
Rated for a minimum of 200 amps at 15 kv.
Located in the primary compartment
Hot stick operable
Properly labeled - One switch – A - on / off
One switch – B - on / off
One switch – Transformer - on / off

NOTE: The switches must have METAL locknuts on the handle side of the switch!

LOW VOLTAGE BUSHINGS / TERMINALS:
The fully insulated neutral bushing spade shall be solidly bonded to the tank wall, externally, with a removable ground strap(s) per. ANSI C57.12.26 – 7.2.6

A staggered low-voltage terminal arrangement and minimum height per. – ANSI C57.12.26 - 7 and figure - 8a

Shall be equipped with serviceable one piece spade lugs and sized according to the kva listed below, with reference to ANSI C57.12.26-Figures 9a, 9b, 9c:

300 kva and less – ANSI C57.12.26-1993, Fig. 9a

500 kva - ANSI C57.12.26-1993, Fig. 9b

750kva and larger - ANSI C57.12.26-1993, Fig. 9c

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Bushing supports as noted in - ANSI C57.12.26 – figure 9 - note 5

CABINET :
Shall meet or exceed - ANSI C57.12.28 (* Note – deeper cabinet depth)
American National Standard for Pad- Mounted Equipment Enclosure Integrity

*750 kva and larger shall be dimensioned per ANSI C 57 12.26 Figure 3 – (F of 21" minimum).

Cabinet, tank, sill & hood shall be STAINLESS STEEL (#304L). Entire Transformer shall be painted standard padmount GRAY (as per ANSI standards).

ACCESSORY EQUIPMENT:
Top oil dial thermometer
Liquid level gauge
1" (National Pipe Thread) - Upper fill plug
1" (National Pipe Thread) – Drain valve with sampling valve assembly – (located in the primary voltage compartment)
1 - Grounding lug - (Burndy - #K2C26 or exact equivalent) shall be installed into the tank ground provision - reference ANSI C57.12.26 – 7.6.4 – (located in the primary side)
The KVA Rating & Secondary voltage shall be permanently affixed or painted on the outside, at the top of the door(s) Fuse catalog number, amperage and brand if other than RTE, shall be permanently affixed or painted on inside of primary compartment door.

CERTIFIED TEST REPORTS:
The following standard tests are to be made, with copies of the results for each transformer identified by serial number.

1. Resistance measurements of all windings on the rated voltage connection for each transformer.
2. Ratio tests on the rated voltage connection and on all tap connections. (If no taps, remove final phrase - same for other tests).
3. Exciting current at rated voltage on the rated voltage connection.
4. Impedance and load loss at rated current on the rated voltage connection of each unit.
5. Applied potential tests.

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6. Pressure leak test on tank.

7. Certification that the transformer will operate at full nameplate rated load, without exceeding 65° C rise. Temperature test on similar unit per ANSI design standard, along with manufacturer's guarantee, is acceptable.

8. Certification of no-load and full-load losses, from actual test data for each transformer.

9. ANSI short-circuit tests, 40 times rated current. Six tests total (four symmetrical, and two asymmetrical). Certification of passing results on ANSI short-circuit tests on identical units (design and size) must be provided.

10. Certification of passing results of ANSI C57.12.28 section 5 certification of passing results on comparable units is acceptable.

If these are not standard tests, please take exception, and provide the cost of performing the specified tests. The costs of the additional testing will be considered in bid evaluation; the City will have the option of purchasing these tests.

DOCUMENTATION:
For each item, there will be three complete copies of transformer documentation including, but not limited to, instruction manuals, drawings, replacement part manuals, certified test reports for each transformer, and all other pertinent information. Documentation must be received before payment is approved.

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DELIVERY DATE:
F.O.B. Grand Island, Nebraska.

The Bill of Lading is to be marked ***"NOTIFY STOREROOM (CALL 308-385-5469), WEEKDAYS, 8-12 OR 1-5."*** However, notice for a Monday delivery must be received by 4:00 p.m. on Friday.

Delivery will be accepted only during normal working hours (from 8:00 a.m. to 12:00 noon, and from 1:00 to 4:00 p.m., weekdays).

Unloading delays will be encountered, if the carrier fails to comply with the above procedure.

Transformers shipped in an enclosed truck will be rejected

WARRANTY:
The transformers are to carry the standard warranty. The warranty must be for a minimum of one year from date of installation or 18 months from date of purchase.

LOSS ADJUSTMENT:
An adjusted bid price will be calculated, by adding to the base bid: $5.25 for each watt of no-load loss, plus $2.50 for each watt of full-load loss.

Actual transformer losses must meet or be less than those stated on the bid form, for both no-load and full-load losses, for the total quantity of each type of transformer. Any transformer with no-load or full-load losses exceeding the specified losses will be rejected, or the additional cost of operation will be deducted from the invoice.

EVALUATION:
Evaluation will be based on: compliance with the Specifications, Adjusted Bid Price, Warranty, Selling Policy, Delivery Date, City's experience with Vendor, and the Manufacturer's reputation.

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BID DATA

All transformers: Primary, 13.2 kv Delta, Secondary, 208Y/120 volts.

ITEM I:

Size_____ KVA Quantity_____ Price of Each Unit $_____

$_____ (Total Price of Item I) – Including ___7___% Sales Tax

Delivery Date _____ Manufacturer _____

Losses: No-Load_____watts. Full-load_____watts. Total _____ watts

Impedance _____% Weight _____

ITEM II:

Size _____KVA Quantity _____ Price of Each Unit $_____

$_____ (Total Price of Item II)

Delivery Date _____ Manufacturer _____

Losses: No-Load _____watts. Full-load _____watts. Total _____watts

Impedance _____% Weight _____

ITEM III:

Size _____ KVA Quantity _____Price of Each Unit $_____

$_____ (Total Price of Item III)

Delivery Date _____ Manufacturer _____

Losses: No-Load _____watts. Full-load_____watts. Total _____watts

Impedance _____% Weight _____

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The Utilities Department is required by law to pay sales tax; therefore, bids shall include _5.5____% for State of Nebraska sales tax and _1.5___% for City of Grand Island sales tax. (Exceptions taken to sales tax are not valid, and all bids will be considered to include sales tax). Should the sales tax rate change, payment will be adjusted to reflect the tax rate in effect on the date of delivery.

EXCEPTIONS:

_____

_____

_____

_____

_____

Exceptions must be written out on this sheet, or an attached sheet to be inserted after this page. No references to manufacturer's standard selling policy shall be considered valid.

BIDDER_____

BY_____ TITLE _____

DATE_____

ADDRESS _____

_____

_____

All sheets of the Specifications must accompany the bid. All conditions specified in all bid documents must be complied with, and all blanks must be filled out.

All prices are to be firm for 30 days, to allow adequate time for evaluation and award.

A Purchase Order(s) will be issued to the successful Bidder(s) for each item. Payment will be approved for each item, after satisfactory receipt of transformers, documentation, and test reports. Processing of payment will take approximately three weeks.

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