

**ADVERTISEMENT FOR BIDS**

**NEW OR REFURBISHED  
PADMOUNTED TRANSFORMERS**

Pursuant to Section 143-129 of the General Statutes of North Carolina, sealed proposals for supplying padmounted transformers for the Town of Landis, North Carolina, will be received on or before 4:00 p.m., Thursday, April 27, 2023, at the office of Southeastern Consulting Engineers, 600 Minuet Lane, Charlotte, North Carolina 28217.

Instructions for submitting bids and complete specifications may be obtained from the City's Engineer, Southeastern Consulting Engineers, Inc., [aj@scepower.com](mailto:aj@scepower.com).

The City reserves the right to reject any and all proposals.

**TOWN OF LANDIS  
LANDIS, NORTH CAROLINA  
Owner**

SOUTHEASTERN CONSULTING ENGINEERS, INC.  
600 MINUET LANE  
CHARLOTTE, NORTH CAROLINA 28217  
N.C. LICENSE NO. F-0181

CONTRACT DOCUMENTS  
FOR  
NEW OR REFURBISHED  
PADMOUNTED TRANSFORMERS  
FOR  
TOWN OF LANDIS  
LANDIS, NORTH CAROLINA



Table of Contents

<u>Title</u>	<u>Section</u>	<u>Number of Pages</u>
Notice and Instructions to Bidders	NB	2
Proposal	P	2
Affidavit of Compliance		2
Contract	C	2
Specifications	S	4

## NOTICE AND INSTRUCTIONS TO BIDDERS

1. Proposals for furnishing new or refurbished padmounted transformers to the Town of Landis, North Carolina (hereinafter called the "Owner") will be received on or before 4:00 PM, Thursday, April 27, 2023, at the Office of the Engineer, at which time and place the proposals will be publicly opened and read.

2. Proposals and all supporting documents required to be attached thereto must be submitted in a sealed envelope addressed to Southeastern Consulting Engineers, Inc., 600 Minuet Lane, Charlotte, North Carolina 28217, Attention: Mr. A.J. Molnar. The name and address of the bidder, and the date and hour of the opening of bids must appear on the envelope in which the proposal is submitted. Bidders will be required to comply with all applicable statutes, regulations, etc. and those attached to and made a part of the bid. Mark all envelopes "Sealed Proposal - Landis Padmounted Transformers".

Bids may also be submitted electronically to aj@scepower.com. The proposal must be submitted as an attachment and the subject line shall read "Sealed Bid for Landis Transformers, Do Not Open Until Bid Deadline."

3. The successful Bidder will be required to enter into a contract with the Owner. The successful Bidder will also be required to complete the enclosed E-Verify Affidavit and Iran Divestment Certification.

4. The Bidder's proposal shall specify price, any applicable price terms and delivery time, with price to include transportation charges F.O.B. to the Electric Operations Center located in Landis, North Carolina. Delivery shall be on open trailer.

5. The Bidder's proposal shall specify the manufacturer, rating, and catalog number of each item of equipment which is to be furnished. Names of certain brands, makes or definite specifications are to denote quality standards of the articles desired, but do not restrict bidders to the specific brand, make or manufactured name; it is only to set forth and convey to the prospective bidders to general style, type, character and quality of the article desired.

6. The Owner reserves the right to waive minor irregularities or minor errors in the proposal, if it appears to the Owner that such irregularities or errors were made through inadvertence. Any such irregularities or errors so waived must be corrected on the proposal prior to its acceptance by the Owner.

7. The Owner reserves the right to reject any and all proposals.

8. Specifications may be obtained at the office of the Owner's Engineer, Southeastern Consulting Engineers, Inc., 600 Minuet Lane, Charlotte, North Carolina 28217, 704-523-6045.

9. Due to current scarcity, proposals for transformers with similar function that may not include all specified features will be considered. Exceptions to specifications shall be clearly noted with proposal.

TOWN OF LANDIS  
LANDIS, NORTH CAROLINA  
(Owner)

SOUTHEASTERN CONSULTING  
ENGINEERS, INC.  
(Engineer)

Date: April 3, 2023

**PROPOSAL SUMMARY**

TO: TOWN OF LANDIS  
LANDIS, NORTH CAROLINA

LADIES AND GENTLEMEN:

The undersigned has carefully examined the Specifications and hereby declares that he will furnish the following items in the Specifications for the following prices:

	<u>Total Price</u>	<u>Applicable N. C. Sales Tax</u>
Twenty New or Refurbished Padmounted Transformers	\$ _____	\$ _____

Additional Comments, Explanations, or Exceptions

**PROPOSAL** (Continued)

**Applicable Price Terms**

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Bidder

By \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Address

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

**AFFIDAVIT of COMPLIANCE**  
**with N.C. E-Verify Statutes**

I, \_\_\_\_\_ (hereinafter the "Affiant"), duly authorized by and on behalf of \_\_\_\_\_ (hereinafter the "Employer") after being first duly sworn deposes and says as follows:

1. I am the \_\_\_\_\_ (President, Manager, CEO, etc.) of the Employer and possess the full authority to speak for and on behalf of the Employer identified above.
2. Employer understands that "E-Verify" means the federal E-Verify program operated by the United States Dept. of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law.
3. Employer employs 25 or more employees in the State of North Carolina, and is in compliance with the provisions of N.C. Gen. Stat. §64-26. Employer has verified the work authorization of its employees through E-Verify and shall retain the records of verification for a period of at least one year.

Employer employs fewer than 25 Employees and is therefore not subject to the provisions of N.C. Gen. Stat. §64-26.

4. All subcontractors engaged by or to be engaged by Employer have or will have likewise complied with the provisions of N.C. Gen. Stat. §64-26.
5. Employer shall keep the Town of Landis informed of any change in its status pursuant to Article 2 of Chapter 64 of the North Carolina General Statutes.

Further this affiant sayeth not.

This the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Affiant

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

Sworn to and subscribed before me, this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

[SEAL]

Notary Public: \_\_\_\_\_

My commission expires: \_\_\_\_\_

Name of Counterparty: \_\_\_\_\_  
\_\_\_\_\_

**IRAN DIVESTMENT ACT AND COMPANIES THAT BOYCOTT ISRAEL CERTIFICATION**

As of the date listed below, the entity listed above is not on list of list of restricted companies created by the State Treasurer pursuant to N.C.G.S. 147-86.58 or 147-86.81(a)(1).

The undersigned hereby certifies that he or she is authorized by the entity listed above to make the foregoing statement.

\_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Printed Name \_\_\_\_\_ Title \_\_\_\_\_



**CONTRACT**

THIS AGREEMENT, made and contracted this \_\_\_\_\_ day of \_\_\_\_\_  
20\_\_\_\_, between the \_\_\_\_\_  
hereinafter called the Purchaser, party of the first part, and \_\_\_\_\_  
hereinafter called the Materialman, party of the second part.

ITEM 1. WITNESSETH: That for and in consideration of the payments and agreements to be made and performed by the Purchaser, and under the penalty expressed in the bond bearing even date with these presents, and hereunto annexed, the Materialman at its own proper cost and expense, and with skill and diligence, will furnish \_\_\_\_\_  
for the total sum of \_\_\_\_\_  
Dollars (\$\_\_\_\_\_)

and furnish same in accordance with the Notice and Instructions to Bidders, Proposal and Specifications attached in full compliance with the agreement.

ITEM 2. And the said Materialman agrees to accept the price stated under Item 1 above in full compensation for the performance of this contract.

ITEM 3. This contract together with the Notice and Instructions to Bidders, Proposal and Specifications constitutes the entire agreement between the Purchaser and the Materialman.

ITEM 4. On completion of this contract by the Materialman and acceptance by the Purchaser as being in accordance with this contract of the work, works, job, material, equipment articles and things done, supplied, contracted and furnished hereunder, the Purchaser shall pay the above named contract price as follows:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ITEM 5. The Materialman shall be responsible for all fees or claims for any patented invention used by him, and shall defend any suit or proceeding for infringement of any patent or patents covering materials purchased hereunder which may be brought against the Purchaser and shall hold said Purchaser harmless for use or infringement of any patented thing or method used in connection with any article, equipment, device or thing furnished or constructed hereunder.

IN WITNESS WHEREOF, the parties hereto have caused the Agreement to be executed by their duly authorized representatives all as of the day and year first above written.

ATTEST:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Materialman

By \_\_\_\_\_

Title \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Party of the First Part

By \_\_\_\_\_

Title \_\_\_\_\_

Financial Officer's Certificate

I certify that this instrument (the attached Contract Documents) has been pre-audited in the manner required by the Local government Budget and Fiscal Control Act.

This the \_\_\_\_\_ day of \_\_\_\_\_, 2022. \_\_\_\_\_  
Signature

**SPECIFICATIONS  
FOR  
SINGLE-PHASE PADMOUNTED TRANSFORMERS**

These specifications cover the electrical and mechanical features of new or refurbished single-phase, 60 hertz, 65 degrees C rise, mineral oil filled, padmounted, compartmental type distribution transformers with separable insulated high voltage connectors rated 167 KVA and smaller, high voltage 12,470 Grd. Y/7200 and low voltage 240/120 unless otherwise noted. Transformers shall be furnished completely assembled and filled with oil. Bidder shall certify that transformer oil contains no PCB contaminants.

Transformers shall comply with the latest revision of ANSI C57.12.25, except where it conflicts with the specific requirements of these specifications.

All transformers manufactured under this specification shall be tested for no load (85 degrees C) and total (85 degrees C) losses, percent impedance (85 degrees C) and exciting current (100% voltage) and subject to a full wave voltage impulse. Actual loss data shall be prepared in accordance with the attached form.

Each vendor shall supply verification that the design has passed short circuit criteria per ANSI C57.12.00 - 1980 and ANSI C57.12.90 - 1980.

All ANSI standards contained in the specifications refer to the latest revision.

All transformers shall pass the following test:

- 1) Connection Test
- 2) Demagnetization
- 3) High to Low Iron Continuity
- 4) Low to High Iron continuity
- 5) 400 Hertz over Potential
- 6) Iron Loss
- 7) Impulse Test

The transformers shall be of the sealed tank construction and of sufficient strength to withstand a pressure of 7 PSI without permanent distortion. In addition to regular locking provisions, all access doors or hoods shall be secured by a recessed, captive, pentahead bolt.

The transformer shall have a corrosion resistance finish that shall be capable of meeting the following requirements and shall meet or exceed Proposed EEI Finishing Requirements, Draft 4, dated 02/23/83.

1. Salt spray (relates to coastal environments and/or presence of snow-melting salts or fertilizers).

Scribe to bare metal and test for 1000 hours in 5% salt spray per ASTM B-117. Loss of adhesion from bare metal should not extend more than 1/8" from the scribe. Underfilm corrosion should not extend more than 1/16" from the scribe.

2. Crosshatch adhesion (relates to adhesion after scratching of the finish)

Scribe to bare metal a crosshatch pattern and test per ASTM D 3359, latest revision. Use Method A for films thicker than 5 mils. and Method B for films less than or equal to 5 mils. There shall be 100% adhesion to the bare metal and between layers.

3. Humidity (relates to environments with high humidity)

Test for 1000 hours subject to 98% humidity at 45 degrees C  $\pm$  1 degree C per ASTM D-2247. There should be no blisters.

4. Impact (relates to transit and handling damage, and abuse by the public)

Impact the test panel with 160 in.-lb. falling dart per ASTM D-2794. There should be no cracking or chipping of the paint on the impact side of the test panel.

5. Oil resistance (relates to probable contact with mineral oil)

Immerse two test panels in mineral oil (or other liquids, as specified) for 72 hours, one at room temperature (20 to 25 degrees C) and one at 100 to 105 degrees C. There shall be no apparent changes, such as color shift, blisters, loss of hardness or streaking.

6. Exposure (relates to exposure to sunlight and rainfall, loss of gloss, color fading, and chalking)

Exposure for 500 hours per ASTM G-53 with a cycle for four hours UV at 55 degrees C followed by four hours condensation of 40 degrees C. Loss of gloss as a result of this test should not exceed 50% per ASTM D-523.

7. Abrasion Test - Taber Abrader (relates to wear encountered during installation)

Test a panel having the minimum dry build thickness (-0 to +0.1 mil) using a CS-10 wheel, 1000 gram weight, per ASTM D 4060, latest revision. The number of cycles of abrasion required to wear the coating through to the substrate shall be at least 3000 cycles.

The transformer shall meet the requirements for tamper resistance as set forth in Guide 2.13, Revision 4, dated 04/02/79, Western Underground Committee.

The transformer shall be furnished with two nameplates conforming to ANSI/IEEE C57.12.00 - 1980. One nameplate shall be located inside the transformer low voltage compartment and one nameplate shall be located on the outside of the door or hood of the transformer. Transformers shall have provisions for bolting to a foundation pad via hold-down clamps provided with each unit and shall conform to the attached drawing arrangement for dimension interchange ability.

The transformer shall be low profile with a height not to exceed 32".

Upon acceptance and execution of a contract, the successful Bidder shall, within six weeks, furnish for approval drawings covering the physical size, weight, arrangement, dimensions, electrical characteristics, wiring diagrams and other pertinent data for the transformers. The Bidder shall also supply prints of the finally approved issue of each drawing for use in the field and for the Purchaser's records.

Bidder shall provide guaranteed average no load and total load losses as defined by ANSI Standards, including the standard that no transformer losses shall exceed 10% of the guaranteed no load losses and 6% of the guaranteed load losses.

Transformer losses will be evaluated as follows:

TNLL = Transformer No-Load Loss in Watts

TLL = Transformer Load Loss in Watts  
(Total Full-Load Loss minus TNLL above plus breaker losses.)

PP = Purchase Price

Transformers 5 - 99 KVA

Evaluated Cost = PP + \$4.25 (TNLL) + \$1.80 (TLL)

All transformers in this bid shall be manufactured and tested according to the latest ANSI Standards and no transformer that exceeds 10% of the No Load Losses quoted and/or 6% of the Full Load Losses quoted will be accepted.

Transformers shall be single-phase, pad-mounted, deadfront, oil-insulated, 65 degrees C Rise, 60 Hertz, 12,470 Grd. Y/7200 - 240/120 volts and shall be furnished with the following features:

1. Two high-voltage universal bushing wells suitable for use of Cooper LBI215 bushing inserts connected for loop-feed, externally replaceable, with parking stand.
2. Three externally clamped low voltage bushings with threaded 5/8 inch - 11 studs for 75 KVA transformers and below and threaded 1 inch - 14 studs for 100 KVA transformers and above.
3. Removable front sill.

4. Recessed locking provisions.
5. Oil fill-plug, oil level plug, two high voltage and one low voltage ground pads.
6. Automatic pressure relief valve.
7. Standard secondary breaker.
8. Primary oil-immersed bayonet fuse, expulsion type, load and fault sensing, non-interrupting isolation link, externally replaceable, hotstick operable and capable of breaking transformer load current and with oil drip shield.
9. Nameplate both inside and outside the low-voltage compartment.
10. High and low-voltage compartments 16" deep.
11. Transformer BIL shall be 30 KV for secondary terminals and 95 KV for primary terminals.
12. Hold-down clamps.
13. Height not to exceed 32 inches.
14. KVA rating shall be noted on the front, top center of cabinet in 2" block letters.

LOSS DATA INFORMATION

<u>KVA</u>	<u>PP</u>		<u>TNLL</u> in <u>Watts</u> <u>@ 85 C</u>		<u>TLL</u> in <u>Watts</u> <u>@ 85 C</u>	<u>Evaluated</u> <u>Cost</u>
<u>25</u>	\$ _____	+ \$ <u>4.25</u>	x _____	+ \$ <u>1.80</u>	x _____	= \$ _____
<u>50</u>	\$ _____	+ \$ <u>4.25</u>	x _____	+ \$ <u>1.80</u>	x _____	= \$ _____

Single Phase Padmounted Transformers

<u>Qty.</u>	<u>Description</u>	<u>Manufacturer/ Catalog #</u>	<u>Delivery</u>	<u>Unit Price</u>	<u>Extended Price</u>
2	25 KVA Padmounted Transformer			\$ _____	\$ _____
18	50 KVA Padmounted Transformer			\$ _____	\$ _____
<b>Subtotal</b>					\$ _____
<b>Applicable NC Sales Tax</b>					\$ _____
<b>Total</b>					\$ <u>_____</u>