



DEPARTMENT OF FINANCE
Terrebonne Parish Consolidated Government

P.O. Box 2768
Houma, Louisiana 70361-2768

tpcg.org
PHONE 985-868-5050

October 31, 2025

Sent Via: Email, Central Auction House & TPCG Website

To All Bidders,

RE: Addendum #1 for Bid 25-WHSE-43 Purchase of New/Unused Transformers for Warehouse Inventory

This letter is considered Addendum #1 for the above referenced bid. Any changes, deletions, and/or additions made by addenda shall take precedence over information in the original document. This addendum is to inform you of the following:

- The opening date of the bid is moved to November 19, 2025 at 2:00 P.M. CST
- Add the following items to the list on page 11 and these will be added to the CAH site, as well
 - Item # 4 - TRANSFORMER 2500 KVA 13.8/7970 277/480 3-Phase Padmount
 - Item #5 – TRANSFORMER 1500 KVA 13.8/7970 277/480 3-Phase Padmount
- Specifications for Items 4 and 5 attached

If you have already submitted your bid through Central Auction House (CAH), you must return to your submittal to acknowledge this addendum. If you have not submitted your bid, you will be prompted to acknowledge any addenda during the submittal process. **Failure by a Bidder to acknowledge each individual addendum shall render your company's bid as non-responsive.** If you should have any questions or require additional information do not hesitate to contact me 985-580-7272.

Sincerely,

Gina M. Bergeron, Purchasing Division
Terrebonne Parish Consolidated Government

cc:
Parish Administration/ File Copy
Kandace Mauldin, Chief Financial Officer
Ernest Brown, Utilities Director
Chantel Comardelle, Warehouse Supervisor
Council Reading File
Bid File

**DETAILED SPECIFICATIONS
FOR
THREE PHASE DISTRIBUTION TRANSFORMER – PAD MOUNT**

I. GENERAL

These specifications are intended to describe a transformer which will perform the functions described in these specifications and will be designed and constructed in accordance with the generally accepted engineering, manufacturing and operating practices observed in the electric utility industry. These transformers shall meet all requirements of the latest applicable American National Standard Institute (ANSI), American Society of Testing and Materials (ASTM), Institute of Electrical and Electronic Engineers (IEEE), and the National Electrical Manufacturers Association (NEMA) standards. These transformers shall be three-phase, 60 hertz, oil filled, self-cooled, compartmental, pad mount type distribution transformers, rated from 150kVA through 2,000kVA. The transformer oil must not contain PCBs.

II. RATINGS

These transformers shall be rated at 13,800GRDY/7,970 volts on the primary side. The BIL shall be 95kV on the primary side and 30kV on the secondary side. Transformer kVA ratings shall be 150, 300, 500, 750, and 1,000 for the 120/240, 208/120-volt class and 300, 500, 750, 1,000, 1,200, 1,500, and 2,000 for the 480/277-volt class as noted on the bid. KVA ratings are continuous and based on not exceeding either a 65-degree Centigrade average winding temperature rise, or an 80-degree Centigrade hot spot temperature rise above a 40-degree Centigrade ambient temperature. Transformer impedance shall be 5.75% ($\pm 10\%$) for sizes 750 to 2,000 kVA. (Not specified for 75 to 500 kVA).

III. CONSTRUCTION

These transformers shall be provided with a five (5) legged wound core. Stacked cores will not be accepted. All transformers are to have four (4) 2-1/2" high voltage taps, 2 above and 2 below rated voltage. The tap changer shall be externally operable. A dead front design shall be utilized. The transformer tank and door(s) shall be of a tamper resistant design as per the latest Western Underground Committee Guide. The unit shall be suitable for mounting on a pad with no additional protective housing. There shall be no exposed screws, bolts, or other fastening devices, which may be externally removed. There shall be no opening through which foreign objects such as sticks, rods or wires might be inserted to contact live parts.

The termination compartment shall be divided into two sections that are separated by a metal barrier. The low voltage section shall be on the right side when facing the transformer. The transformer must be capable of being padlocked and it must have a recessed captive

one-half inch (1/2") penta-head bolt to further secure the unit. The tank shall be fabricated from a minimum of 12-gauge steel and the door(s) from 14-gauge, minimum. The door(s) must be easily removable, but only in the completely open position.

Construction of the unit shall be such that it can be lifted, skidded, and slid into place on the mounting pad without disturbing the entrance cables. The unit shall be provided with externally welded or bolted lifting flanges, so arranged to provide a balanced total transformer lift.

All transformers shall have a pressure relief valve that is rated for 15 PSI with a flow rate of 50 SCFM minimum as specified by ANSI. The valve shall vent into the terminating compartment. The valve shall have a retained pop-off cap to indicate that the valve has operated. The valve shall be a Beta 1750K-5 or equivalent. The transformer tank shall have two (2) one-half inch (1/2") tapped ground pads that are welded to the tank with a continuous seam. The pads shall be located below the high and low voltage bushings. Standard eyebolt grounding lugs shall be provided with the pads.

All three phase transformers shall have a one inch (1") drain valve with a built-in sampling device.

IV. BUSHINGS

The primary side of the transformer shall have six (6) 15kV load break, universal bushing wells and bushing inserts installed in a loop feed design. One-piece bushing wells/inserts are not acceptable. The bushing inserts must be compatible with either RTE or Elastimold load break elbow terminators. A terminator-parking stand shall be included between the high voltage bushings. Staggered required on low voltage bushing for three phase transformers.

The secondary side of the transformer shall have four (4) 600-volt bushings. The bushing shall consist of an epoxy insulator that is bolted to the tank front or a notched epoxy insulator that is held in place by a keyed, spade type connector, which extends from the tank. The bushings can be changed out without entering the tank. The bushings shall be made of tin-plated copper pads.

V. TAPS

All transformers shall have four (4) 2 1/2" high voltage taps, two (2) above and (2) below rated voltage. The tap changer shall be externally operable.

VI. PAINTING

All transformers shall be painted a Munsell green color in strict accordance with the latest Edison Electric Institute (EEI) guidelines for pad-mounted equipment. The contractor shall submit certification that these specifications have been met, upon request.

VII. FUSING

A bayonet type transformer fuse shall be included. This fuse shall be externally removed. A drip shield shall be provided directly beneath the bayonet to prevent oil from falling on high voltage terminations. The transformer shall be fused with the appropriate fuse link.

VIII. DIMENSIONS

The minimum secondary compartment cable opening shall be 24" wide by 19" deep. For other dimensions, see the attached diagram.

IX. IDENTIFICATION

All transformers shall have the kVA size, in three-inch (3") letters, located on the front of the transformer door. Safety labels shall be affixed to the transformer in accordance with the latest NEMA specifications. The transformer shall have a nameplate in accordance with the ANSI/IEEE located on the inside compartment area that is visible when the compartment has all cables in place. The attached transformer warning label should also be affixed to the transformer prior to delivery.

Terminal designation shall be as defined by ANSI and shall be marked on the transformer tank.

X. TESTING

Routine tests on all transformers shall be conducted as specified in ANSI/IEEE Standard C57.12.90-1993. Dielectric and impulse tests must be conducted as specified by ANSI/IEEE. A certified copy of actual test values shall be submitted on the transformer before shipment to: Terrebonne Parish Consolidated Government, Attn. Electric Distribution Superintendent, 301 Plant Road, Houma, Louisiana 70363. Test data shall include, but not necessarily be restricted to the following:

No load losses; Full load losses; Regulation at 100% power factor; Regulation at 80% power factor; Percent resistance; Percent impedance; Top oil temperature rise at full load.

XI. SHIPPING

Transformers shall be shipped on individual pallets and secured with a banding strap connected to the lifting lugs. Transformers shall be "side loaded" on flatbed truck or trailer. The flatbed truck or trailer shall permit unloading from sides and back. Box trailers shall be permitted; however, the vendor shall make provisions to conveniently place the transformers at the rear of the box trailer to allow customer unloading with forklift.

XII. WARRANTY

The manufacturer's warranty shall apply for one (1) year. The effective period of warranty shall commence when the purchaser installs the transformer, but the period from the time of receipt by the purchaser to the commencement of the warranty shall not exceed six (6) months.

XIII. DATA

Bidders shall provide the following upon request:

Manufacturer's specifications: detailed description and drawings, which shall include dimensions, size, capacity, weight, etc.; Guaranteed Test Data; Guaranteed Performance Data sheets.

XIV. GUARANTEED PERFORMANCE DATA

Bidders shall be required to submit all the Guaranteed Performance Data, for transformers they bid, as described below upon request.

GUARANTEED PERFORMANCE DATA (DESCRIPTION):

1. No load losses (watts) per transformer at rated voltage.
2. Total losses (watts) per transformer at rated voltage and current to 85 degrees Centigrade (total temperature).
3. Regulation at 100% power factor (%).
4. Regulation at 80% power factor (%).
5. Full load resistance on rated kVA base (%) corrected to 85 degrees C.
6. Full load reactance on rate kVA base (%).
7. Full load impedance on rated kVA base (%).
8. Temperature guarantee based on full load and ambient air temperature of 100 degrees F.
9. Net weight (lbs.)
10. Shipping weight (lbs.)
11. Exciting current at rated voltage (amps).

TABLE 1
Three Phase Transformer Bay-o-net Fusing Chart

Transformer Size (kVA)	13.2 Fuse Catalog Number	24.9 kV Fuse Catalog Number	Manufacturer
150	4000358C08	4000358C05	RTE
300	4000358C10	4000358C10	RTE
500	4000385C12	4000358C10	RTE
750	4000358C14	4000358C12	RTE
1,000	4000358C14	4000358C12	RTE
1,200	4000358C14	4000358C12	RTE
1,500	4000358C16	4000358C12	RTE
2,000	4000358C16	N/A	RTE

NOTE: Alternate manufacturers must be truly equivalent to be acceptable

**SPECIFICATION
TERREBONNE PARISH CONSOLIDATED GOVERNMENT**

2500 KVA PAD-MOUNT TRANSFORMERS

1.0 GENERAL

- 1.1 This specification covers the electrical and mechanical characteristics of three-phase, 60 Hz, oil-immersed, self-cooled, tamper resistant Pad-Mounted Distribution Transformers.
- 1.2 All characteristics, definitions, and terminology, except as specifically covered in this specification shall be in accordance with the latest revision of the following ANSI Standards:
 - C57.12.00 IEEE Standard General Requirements for Liquid-Immersed Distribution, Power and Regulating Transformers.
 - C57.12.26 IEEE Standard for Pad-Mounted, Compartmental-Type, Self-Cooled, Three-Phase Distribution Transformers for Use With Separable Insulated High-Voltage Connectors (34,500 GrdY/19,920 and Below; 2500 kVA and Smaller).
 - C57.12.28 Pad-Mounted Equipment - Enclosure Integrity.
 - C57.12.90 IEEE Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers and IEEE Guide for Short-Circuit Testing of Distribution and Power Transformers.
 - C57.12.91 IEEE Guide for Loading Mineral-Oil-Immersed Overhead and Pad-Mounted Distribution Transformers Rated 500 kVA and Less with 65°C or 55°C Average Winding Rise.

2.0 RATINGS

- 2.1 The transformer shall be designed in accordance with this specification and shall have 2500 standard kVA rating.
- 2.2 The primary voltage and the basic insulation level (BIL) shall be accordance with Table 2 of ANSI C57.12.26. The applicable voltage rating shall be 14.4 kV-95kVBIL.
- 2.3 The secondary voltage shall be 480Y/277. The basic insulation level (BIL) of the secondary voltage shall be 30kV.

- 2.4 The Delta-Wye connection shall indicate the primary and secondary connections of the transformer. If a special connection is required, it shall be requested on the inquiry.
- 2.5 The transformer shall be furnished with full capacity high-voltage taps. The tap changer shall be clearly labeled to reflect that the transformer must be de-energized before operating the tap changer as required in Section 8.3 of ANSI C57.12.26. The ratings of the primary taps shall be four (4) 2-1/2% below rated voltage. The applicable tap configuration shall be stated on the inquiry.

3.0 HIGH VOLTAGE BUSHINGS AND TERMINALS

- 3.1 The transformer must be supplied with six (6) loadbreak bushing assemblies rated for full three-phase duty in accordance with Figure 6 of ANSI C57.12.26 for loop feed configurations.
- 3.2 Universal high-voltage bushing wells shall be provided. Wells shall be externally clamped and removable to allow for field replacement of bushings without opening the tank.

4.0 LOW VOLTAGE BUSHINGS AND TERMINALS

- 4.1 The low voltage line and neutral bushings shall be an epoxy design, which must be bolted on and externally clamped.
- 4.2 The low-voltage bushing terminals shall be in accordance with Figure 9 of ANSI C57.12.26 to accommodate ten (10) terminations.

5.0 PROTECTION

- 5.1 The protection scheme provided with the transformer shall consist of the following attribute. When a special protection scheme is required, it shall be requested on the inquiry.

Standard - the transformer primary shall include a loadbreak Bay-O-Net assembly with a flapper valve to minimize oil spillage. The Bay-O-Net assembly shall be used in series with an internally mounted isolation link.

6.0 TANK AND TERMINAL COMPARTMENT

- 6.1 The tank shall be constructed in accordance with the latest revision of ANSI C57.12.26.
- 6.2 The tank coating shall meet all requirement in ANSI C57.12. 28.

- 6.3 The transformer tank shall have a bolted cover for units 1000 kVA and below. This eliminates the need for a handhole in the cover.
- 6.4 The tank shall be complete with an anodized aluminum laser engraved nameplate. This nameplate shall be in accordance with Section 7.4 of ANSI C57.12.26.

7.0 ACCESSORIES

- 7.1 The following accessories shall be provided:

- Temperature Gauge
- Liquid Gauge
- Drain Valve/Sampling Device

8.0 SHIPPING

- 8.1 A transformer rated 45-1000 kVA must be placed on a pallet with 4-inch by 4-inch minimum skids to facilitate handling with forklifts. A transformer rated 1500-5000 kVA must be loaded and unloaded with overhead cranes and must be shipped on flatbed trailers.

9.0 TESTING AND LOSSES

- 9.1 All units shall be tested in accordance with all routine tests listed in Table 17 of ANSI C57.12.00, and the manufacturer shall provide certification upon request for all design and other tests in Table 17 of ANSI C57.12.00.
- 9.2 If requested at the time of inquiry, the manufacturer shall provide the guaranteed average no-load and load losses for the unit at 85°C. These losses will be subject to the tolerance specified in Table 19 of ANSI C57.12.00.
- 9.3 When a total owning cost evaluation is used, the economic factors for no-load and load losses used in the analysis shall be provided on the inquiry.

10.0 IDENTIFICATIONS

- 10.1 All transformers shall have the kVA size, in three-inch (3") letters, located on the front of the transformer. Safety labels shall be affixed to the transformers in accordance with the latest NEMA specifications. "NO - PCB" in 3" letters shall be provided on the tank.

11.0 INSTRUCTION NAMEPLATE

- 11.1 The instruction nameplate shall be permanently affixed on the front of the transformer tank wall. The identification of terminal connections shall be shown on the instruction nameplate. The information specified in Section 9, Nameplate A, of

the ANSI Standard C57.12.00 shall be permanently shown on the instruction nameplate. The nameplate shall include the true date of manufacture, month and year. Example 06 93 for June 1993. No codes will be acceptable. The phrase "NO - PCB" shall be permanently shown on the nameplate.

Note: Oil shall have less than 2PPM of PCB allowable.