

# REQUEST FOR PROPOSAL



## BURLINGTON ELECTRIC DEPARTMENT

585 Pine street  
Burlington, VT 05401-4891  
Phone: 802-865-7456

RFP #

**047-26**

DATE:

1/7/2025

**REQUEST FOR QUOTATION**

**THIS IS AN INQUIRY,**  
**NOT AN ORDER**

**PLEASE QUOTE PROMPTLY**

ALL RFP'S RESPONSES ARE TO BE  
UPLOADED TO OUR SECURE  
WEB SITE USING YOUR UNIQUE LOGIN

DELIVERY REQUIRED BY:	QUOTATION DUE BY	REQUISITION NO:	DEPT:
ASAP	NLT 2/6/2026 5pm EST		ENGINEERING

QTY	DESCRIPTION					
3	Transformer Size (kVA):	Primary Voltage	Secondary Voltage	Description	Spec Impedance	BED Specification
	50	13800 Grd Y/7970	277V	50KVA Single Phase, Liquid Filled, Submersible (Vault Type), Loop Feed, Distribution Transformer	1.60% - 2.25%	S0112
	<b>Purchase Price Constant</b>	<b>Load Loss Factor (\$/Watt)</b>	<b>No Load Loss Factor (\$/Watt)</b>	Loss Evaluation formula " First Cost Multiplier" NAMEPLATE SHALL INDICATE NON-PCB Quote both Amorphous & Steel Core... If not quoting one type please specify why!		
	1.281	\$1.43	\$28.26			

**(when order is placed approval drawings will be required but should not effect the delivery time)(XFRSUB00140) This must be on the data plate)**

UNIT COST=\$ \_\_\_\_\_ DELIVERY= \_\_\_\_\_ WEEKS ARO

LOSS EVALUATION FORMULA APPLIES TO QUOTE & PURCHASE PRICE:

No load = (Avg) \_\_\_\_\_ (Max) \_\_\_\_\_ Load =(Avg ) \_\_\_\_\_ (Max) \_\_\_\_\_ Total = (Avg) \_\_\_\_\_ (Max) \_\_\_\_\_

IMPEDANCE: \_\_\_\_\_ Bid will be evaluated on average values.

Please confirm freight is included in unit cost. It is **Y/N** (circle one quoted)

CERTIFIED TEST REPORTS SHALL BE emailed AT THE TIME OF SHIPMENT TO [engineering@burlingtonelectric.com](mailto:engineering@burlingtonelectric.com) . PAYMENT OF THE ABOVE ITEM SHALL BE HELD UNTIL RECEIVED AND ACCEPTED BY B.E.D.

DELIVERY REQUIREMENT: SHIP FOB DESTINATION FREIGHT ALLOWED . Hours are 7:30 am to 2:30pm M-F

BED RESERVES THE RIGHT TO ACCEPT OR REJECT ANY OR ALL PROPOSALS RECEIVED IN RESPONSE TO THIS RFP OR TO TAKE OTHER ACTION CONSISTENT WITH THE BEST INTEREST OF BED. BED RESERVES THE RIGHT TO NEGOTIATE SEPARATELY WITH ANY SOURCE TO SERVE THE BEST INTEREST OF BED.

EXCEPTIONS TO THIS RFP SHALL BE SUBMITTED IN WRITING & ACCEPTED BY B.E.D. ON THE AWARDED P.O. TO BE BINDING. ALL SUBMITTED BIDS BECOME THE PROPERTY OF BURLINGTON ELECTRIC DEPARTMENT. AFTER THE AWARDING OF THE CONTRACT TO THE SUCCESSFUL BIDDER, ALL BIDS ARE OPEN FOR PUBLIC VIEWING

ALL PROPOSALS MUST BE SUBMITTED VIA THE SECURE WEB SITE. BED WILL NO LONGER ACCEPT FAXED BIDS. EMAIL OR MAILED. ALL RFQ'S MUST INCLUDE OUTLINE DRAWING SHOWING DIMENSIONS OF TRANSFORMER. IF ANY INFORMATION IS MISSING THE RFP WILL BE DEEMED INVALID AND WILL NOT BE EVALUATED

### VENDOR MUST COMPLETE THIS INFORMATION

- SHIPMENT CAN BE MADE \_\_\_\_\_ DAYS FROM RECEIPT OF ORDEF
- F.O.B. DESTINATION FREIGHT ALLOWED BURLINGTON ELECTRIC DEPT. DOCK.
- TERMS \_\_\_\_\_ DISCOUNT OF \_\_\_\_\_ % IF PAID NET \_\_\_\_\_ DAYS
- QUOTE VALID \_\_\_\_\_ DAYS

SIGNED \_\_\_\_\_ DATE: \_\_\_\_\_

TITLE: \_\_\_\_\_ COMPANY: \_\_\_\_\_

B.E.D. RESERVES THE RIGHT TO ACCEPT OR DECLINE ANY AND ALL BIDS.  
ALL BIDS BECOME THE PROPERTY OF BURLINGTON ELECTRIC DEPARTMENT

Paul Charbonneau

Director of Purchasing & Facilities

TO INQUIRE ON ABOVE QUOTE PLEASE CALL  
PURCHASING DEPARTMENT DIRECT AT:

PAUL CHARBONNEAU 865-7456  
email: [pcharbonneau@burlingtonelectric.com](mailto:pcharbonneau@burlingtonelectric.com)

**BURLINGTON ELECTRIC DEPARTMENT (BED)  
MATERIAL SPECIFICATION**

**Single Phase, Liquid Filled, Submersible (Vault Type), Loop Feed,  
Distribution Transformer**

1) Scope:

- a) This specification covers the electrical characteristics and mechanical features of single phase, 60 Hz, mineral oil immersed, self-cooled, 55°C rise, submersible type, distribution transformers.
- b) All transformers shall be in accordance with the latest revision of each referenced industry standard (listed below) for severe service, except as modified by this specification.

ANSI/IEEE C57.12.00	ANSI/IEEE C57.12.23	ANSI/IEEE C57.12.32
ANSI/IEEE C57.12.70	ANSI/IEEE C57.12.80	ANSI/IEEE C57.12.90
ANSI/IEEE C57.91	ANSI/IEEE 386	

2) Ratings:

- a) The kVA rating shall be as specified on the purchase order.
- b) The nominal high voltage rating and the basic impulse insulation level (BIL) shall be the following:

13800 Grd Y/7970	95 kV BIL
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- c) The nominal low voltage rating and the basic impulse insulation level shall be one of the following:

120 / 240	30 kV BIL
277	30 kV BIL

3) Impedance Voltage:

15 - 250 kVA	1.60% - 2.25%
333 kVA and larger	3.25% with tolerance +/- 7.5%

4) Testing:

- a) All transformer testing shall comply with ANSI/IEEE C57.12.00 and ANSI/IEEE C57.12.90.
- b) All transformers shall be tested for no load losses (20°C/100% voltage), total losses (85°C/100% voltage), percent impedance (85°C) and exciting current (100% rated voltage). Guaranteed average and guaranteed maximum losses shall be included with the quotation.
- c) All transformers shall be subjected to a full wave voltage impulse.
- d) The manufacturer shall supply verification that the design has passed Short Circuit criteria per ANSI/IEEE C57.12.00 and ANSI/IEEE C57.12.90.

- e) Complete certified test reports, by serial number, shall be provided to BED prior to shipment for BED approval. These reports must either be signed by an authorized individual at the factory, or be accompanied by a cover letter referring to P.O. number and signed by an agent authorized to conduct transformer sales business for the manufacturer.

5) Construction:

- a) The manufacturer shall certify that the transformer and the oil are PCB free. This will be indicated on the transformer nameplate.
- b) The transformer tank and cooling fins shall be corrosion resistant construction, 304 grade stainless steel with finish coating and undercoating suitable for severe service vault application.
- c) The first 24" from the base of the transformer tank and cooling fins shall be treated with an epoxy, asphalt coating or equivalent protection to minimize corrosion.
- d) The transformer tank cover shall be welded and pressure tested prior to leaving the factory.
- e) The transformer shall be constructed such that it can be lowered into place through a 36 inch diameter clear round opening. The maximum overall diameter of the transformer shall be 30 inches. Exception: 167 kVA and above transformers shall have a maximum overall diameter of 33 inches.
- f) The maximum height from base to cover for the transformer shall be 66 inches.
- g) The nameplate shall be made of a corrosion resistant material and permanently marked meeting ANSI/IEEE C57.12.00, for nameplate A.
- h) The internal secondary leads shall be permanently identified corresponding to the lead markings on the nameplate.
- i) All insulating components, oil, paper, and wire enamel shall be made of thermally upgraded material which are all compatible at a 55 degree C temperature rise.
- j) All insulating paper used as layer insulation in transformer coils shall be bonded type, coated on both sides with a thermosetting adhesive and properly cured prior to impregnating with oil or the coils shall be wound with primary conductor containing a thermosetting adhesive that when properly cured will form an effective bond, both turn to turn and layer to layer.
- k) The transformer shall be capable of being loaded in accordance with ANSI/IEEE C57.91. In particular, ancillary equipment shall not limit the loading the transformer to this guide. The self-cooled temperature rating shall be 55°C.
- l) Lifting lugs for a balanced lift and provisions for jacking shall be included.

6) High Voltage Connectors:

- a) The high voltage terminations shall be 200 amp loadbreak, separable, insulated connectors and shall conform to all applicable ANSI/IEEE and IEEE standards.
- b) Two (2) 200 amp universal bushing wells (for loop feed) shall be provided.

- c) Primary bushings shall be a two-piece design with universal bushing wells and load break bushing well inserts, rated for 8.3 kV/14.4 kV.
- d) Bushing wells shall be welded to the tank cover.
- e) Bushing well studs shall be field replaceable.
- f) Provisions for an insulated bushing (parking stand) shall be included for each bushing.
- g) All bushing well inserts shall be supplied by the customer.

7) Low Voltage Connectors:

- a) The low voltage bushings shall be cover mounted.
- b) The low voltage terminals shall be copper alloy NEMA 4 hole pads mounted on threaded studs.
- c) The low voltage terminals shall accommodate either aluminum or copper conductors.

8) Over-current Protection:

- a) A loadbreak, BAY-O-NET type, oil immersed fuse shall be provided in series with an oil immersed, back-up current limiting fuse (CLF). The BAY-O-NET fuse element shall be externally replaceable with a distribution hot stick.
- b) The BAY-O-NET fuse shall be current sensing, RTE type 353C, or equal.
- c) The BAY-O-NET fuse size shall be per Table 4 of Cooper Power Systems publication 240-98.
- d) The BAY-O-NET fuse and fuse holder must be interchangeable with RTE brand components.
- e) The back-up CLF shall be RTE type ELSP, or equal.
- f) The back-up CLF shall be coordinated with the BAY-O-NET fuse, per Table 4 of Cooper Power Systems publication 240-98 and sized to melt only on internal transformer faults.
- g) The back-up CLF shall be connected on the source side of the BAY-O-NET fuse.
- h) The BAY-O-NET fuse housing operating mechanism shall be interlocked with a primary switch to prevent the fuse from being removed or inserted while the transformer is energized.

9) The transformer shall be equipped with the following accessories:

- a) An automatic pressure relief device designed to re-seal after operating.
- b) A means of manually venting tank pressure
- c) ANSI/IEEE tank grounding provisions.

10) Information to be provided with quotation:

- a) Outline drawing of a typical unit, including a one-line diagram of the transformer.
- b) Average percent positive impedance, X/R, and percent exciting current.

- c) Average and guaranteed maximum Total Load Losses at 85°C and 100% voltage.
- d) Average and guaranteed maximum No Load Losses at 20°C and 100% voltage.
- e) A description of the method used to minimize tank corrosion (design details or type of treatment).
- f) Warranty information and location of the nearest service shop, owned and operated by the manufacturer, which is capable of repairing all components of the transformer shall be provided.

11) Information to be provided prior to Shipment of Transformer:

- a) Certified test report by serial number consisting of results from all required tests.

12) Information to be provided with Shipment of Transformer:

- i) Manufacturer shall provide BED with the final X/R and percent positive impedance.

13) Exceptions:

Any exceptions to this specification shall be clearly documented when quoting. Exceptions must be specifically granted in writing by BED. Failure of BED to acknowledge exceptions when placing an order requires the manufacturer to comply with this specification if the order is accepted. Manufacturer shall not provide exception to the transformer impedance specified in part 3 of this specification.

14) Approval of final drawings:

Manufacturer shall provide BED with final transformer drawings after P.O. is placed. Approval of final drawings by BED shall be required.

15) BED's loss evaluation formula applies to all bids.

16) Penalties:

Failure of test results to meet quoted losses may result in a financial penalty being assessed the manufacturer. The penalty will be determined via BED's loss evaluation formula.

**TERMS and CONDITIONS**

1. These Terms and Conditions, together with the purchase order and/or contract issued by the Burlington Electric Department's (B.E.D.) Purchasing Office, constitute the entire agreement between B.E.D. and the supplier/contractor. Any modification to said agreement shall be submitted in writing by the party seeking said modification, to the other party. Said modification shall be agreed upon in writing by both parties in order for it to be enforceable. Absent said written modification, this form and said purchase order shall exclusively control the terms of the agreement between the parties.
2. Except as herein provided, no purchases ordered by unauthorized individuals shall be enforceable against B.E.D. Only individuals expressly designated as those vested with the authority to purchase on behalf of B.E.D. shall be considered persons possessing binding purchasing authority. Agreements entered into with unauthorized individuals shall be void and B.E.D. shall not be liable for any such unauthorized agreements.
3. Sellers, suppliers and contractors shall not assign, delegate, transfer, convey, sublet, or otherwise dispose of their rights, titles, interests or obligations under this contract, or their power to execute such contract to any other person, firm or corporation, without the previous written consent of B.E.D.'s Purchasing Office.
4. The parties to this agreement hereby agree that this contract is subject to the laws of the State of Vermont. The parties to this agreement further agree that Vermont's version of the Uniform Commercial Code, found in Title 9A of Vermont Statutes Annotated, shall apply.
5. B.E.D. may return any materials which are defective, unsatisfactory, or of inferior quality or workmanship, or fail to meet specifications or other requirements of this order.
6. B.E.D. reserves the right to cancel this order if goods are not shipped as directed. B.E.D. reserves the right to terminate its obligations under this order or any part hereof if any delivery/awarded service is not made in the time provided or, if no time is specified, within a reasonable time or if the material that is delivered/service provided is not as specified.
7. Seller shall ship in accordance with any instructions from B.E.D. and the requirements of common carriers to secure the lowest transportation costs. No shipments are to be made C.O.D., nor shall any such shipments be accepted. When goods or materials are shipped F.O.B. point of shipment, all freight charges are to be PREPAID by the Seller and added to the invoice total. An original copy of paid express or freight bill shall be attached to the invoice.
8. Seller shall furnish a packing slip with all shipments showing the purchase order number, seller name, catalog numbers, quantities (including back orders) and a full description of materials shipped.
9. Contractor shall furnish current Certificate of Insurance as outlined by B.E.D.'s Insurance Requirement Contractor's Order, a copy of which will be provided by B.E.D.'s Purchasing Office to the Seller. Such evidence of insurance shall be received at B.E.D. before the commencement of work, or Purchase Order and/or Contract is awarded, whichever is sooner, and such insurance shall be maintained throughout the duration of awarded contract. Seller shall be liable for any and/or all damages/claims (including but not limited to bodily/personal injury, property damage, loss of income, business interruption, or wrongful death), while performing or as a result of work assigned/related to the awarded contract.
10. The contractor shall be responsible for ensuring that all utilities are properly located, marked and identified through utilization of, and compliance with, the requirements of the "Dig Safe" program (30 V.S.A. §7001 et seq. and Vermont P.S.B. Rule 3.800). Contractor is responsible for working around existing utilities and agrees to indemnify and hold B.E.D. harmless for any damages to such utilities except for such damages whose sole proximate cause is due to negligence by B.E.D.
11. Seller shall follow all B.E.D. Safety Rules, a copy of which shall be provided, as well as follow good utility practices on details not covered in specification documents with preference given to B.E.D. Standard practices if suitable. Seller is responsible for following all applicable EPA/VOSHA/OSHA/NEC and NEC rules and regulations.
12. When the contract is awarded to provide services, the cost of service shall be a fixed fee or a time and material basis with a Not To Exceed amount. Expenses shall be billed at cost unless otherwise specified on the awarded contract. Seller shall furnish an invoice detailing Purchase Order number, scope of work, mileage and other expenses. If the contract is awarded on a time and material basis, the invoice shall also include dates worked, name of personnel, number of labor hours worked (traveled if chargeable), rate per hour and total labor, equipment rental hours and rates and materials. Seller shall be responsible to obtain all necessary permits and copies shall be furnished with each invoice. Seller shall also furnish documentation of all reimbursable expenses with each invoice.
13. Unless otherwise specified, payments shall be made on partial deliveries accepted by B.E.D. when the amount due on such deliveries so warrants. Progressive billing for services rendered shall be accepted unless fixed fee is quoted. Where there is a question of non-performance involved, payment in whole or part against which to charge back any adjustment required, shall be withheld. In the event cash discount is involved, the withholding of payment as provided herein shall not deprive B.E.D. from taking such discount.
14. In accordance with city regulations, invoices for completed purchase orders must be received by B.E.D.'s Accounts Payable by the 27th of each month to assure payment by approximately the 15th of the following month. Invoices received after that date shall be carried forward to the following month.
15. **All invoices shall be mailed to the ATTENTION of B.E.D.'s Accounts Payable.** Inquiries regarding the status of unpaid invoices shall likewise be directed to B.E.D.'s Accounts Payable.