REQUEST FOR PROPOSAL

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

RFP # **027-23**

DATE: 11/15/2022

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 12/20/2022 10:30am		

QTY	DESCRIPTION
	Burlington Electric Department is seeking proposals for the following items. Shipping must be included in all prices. All prices need to include lead-time from date of order. 15 kV,Padmount Switch for Battery st.

ALL TECHNICAL QUESTIONS SHOULD BE DIRECTED TO BURLINGTON ELECTRIC VIA EMAIL and must include the RFP number. purchasing@burlingtonelectric.com. No communications with BED employees on this RFP. Any communications other then described could get your response null and void for this RFP.

When quoting more than one Manufacturer please clearly indicate on each bid what manufacturer is being quoted..

DELIVERY REQUIREMENT: SHIP FOB DESTINATION FREIGHT ALLOWED . 585 Pine Street, Burlington VT 05401

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

1.SHIPMENT CAN BE MADE _____ DAYS FROM RECEIPT OF ORDER

2. F.O.B. DESTINATION FREIGHT ALLOWED BURLINGTON ELECTRIC DEPT. DOCK.

3. TERMS _____ DISCOUNT OF _____ % IF PAID NET _____ DAYS

4. 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

Jeffry W. Turner Jr

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

JEFF TURNER 865-7456
email: jturner@burlingtonelectric.com

BURLINGTON ELECTRIC DEPARTMENT
MATERIAL SPECIFICATION

15 kV, 600 Amp, Outdoor, Deadfront, Air-Insulated, Padmounted Switch

SCOPE

This specification covers the requirements for a manually operated, dead front, load interrupting switch, for use on 13800 Grd Y/7970 volt or 4160 Grd Y/2400 volt, 60 hertz underground electrical distribution systems. The switch shall be three phase, group operated with 200 amp loadbreak bushings and / or 600 amp apparatus bushings per ANSI / IEEE 386. The switch shall be suitable for use in switching load, loop, capacitor, cable charging and magnetizing currents.

A three line diagram indicating the circuit configuration, number of switched ways and type of bushings required will accompany the request for quotation.

Bidders must complete the "15 kV, 600 Amp, Padmounted Switch Data Sheet" (page 5 of this specification) and return it with their quotation.

INDUSTRY STANDARDS

The switch shall meet or exceed the requirements of the latest versions of all applicable ANSI, ASTM, NFPA, IEEE and NEMA standards. In the event that this specification conflicts with these industry standards, this specification shall take precedence. Specific exceptions to this specification or to applicable industry standards shall be clearly noted with each quotation.

ELECTRICAL RATINGS

The switch shall meet or exceed the electrical ratings shown below:

Maximum Design Voltage:	17.0 kV
B.I.L., Impulse Withstand:	95 kV
Continuous and Interrupting Current:	600 Amps
Symmetrical One Second Current:	16,000 Amps

Electrical ratings shown assume the use of 600 amp elbows for all connections. Continuous current, and one second ratings will be derated when 200 amp elbows are specified.

SWITCH CONSTRUCTION

The enclosure shall be outdoor, weatherproof, free standing, self-supporting, and shall be constructed of minimum 11 gauge steel for all structural panels. The enclosure shall meet or exceed the latest revision of ANSI C57.12.28 "Padmount Equipment Enclosure Integrity." Included in this specification are the requirements for enclosure tamper-proofing and coating system performance. The enclosure shall also conform to or exceed the tamper resistance requirements of NEMA TR-1-20.1.

The enclosure shall be of continuously welded construction to maximize strength, minimize weight and inhibit corrosion. A structural frame and bolted sheet metal is not acceptable.
The switch shall be capable of withstanding internal failure without explosion or fire.

The switch shall have a parking stand bracket next to each bushing with the elbows parking to the outside.

Access to the cable compartments shall be made through side opening access doors. The outer doors shall have a three point latching system and include provisions for locking with a padlock. Each door shall also have a pentahead bolt which secures it to the compartment center support member. The pentahead bolt shall only be operable with the padlock removed.

The inside surface of the switch roof shall have a coating of "no-drip" compound to prevent condensation.

The unit shall have a finish coating conforming to Munsell designation, 7.0 GY3.29/1.5 padmounted green.

The roof of the switch shall be crowned to ensure proper water drainage.

The base of the enclosure shall have a minimum one inch flange around the entire bottom to facilitate cleat clamping.

All hinges, hinge pins, parking stands and permanent lifting provisions shall be stainless steel. The actual tabs used for lifting the switch shall be removable.

The bottom panel of the switch shall be of corrosion resistant material and have a sufficient number of screened drains to allow moisture out, but prevent the entrance of animals, insects, or weeds. The floor shall be affixed to the enclosure such that it is easily removable in the shop.

The interconnecting bus work shall consist of continuous one piece copper bar with no intermediate splices. Flexible braid or cable is not acceptable.

A space heater with sheaths of high-temperature chrome steel shall be provided to maintain air circulation inside the enclosure. The space heater shall be wired to a terminal block in such a way that one, 240 volt AC external power supply can be used.

Switch Components

Switch shall contain two (2) switched ways both of which shall have load interrupting capability and two (2) fused ways.

The interrupter switches shall be enclosed in a steel clad center compartment and be rated for continuous and load interrupting capability in conformance with the requirements of ANSI C37.72.

The switchgear shall provide for visual verification of the switch position. Interrupter switches shall have a readily visible open gap when in the open position to allow positive verification of the correct switch position for all three phases. A window of sufficient size, strength and track resistance shall be used as the view window. The window shall be removable without disassembly of the enclosure. The enclosure, to include the window, shall withstand a fault of 10,000 amps, symmetrical.

600 amp apparatus bushings, meeting the latest version of ANSI/IEEE 386 shall be provided for the load interrupter switch terminations. These bushings must be externally (field) replaceable without requiring any disassembly of the enclosure.

200 amp bushing wells, meeting the latest version of ANSI/IEEE 386 shall be provided for the fused switch terminations. These bushing wells must be externally (field) replaceable without requiring any disassembly of the enclosure, and these bushing wells shall have replaceable studs.
The 200 amp compartments of the switch shall be capable of accepting S&C type SME-4 (or equivalent) fuses, S&C type SME-20 (or equivalent) or Cooper type NX (or equivalent) current limiting fuses. The

actual type of fusing to be quoted will be specified by BED.

Sufficient depth must be provided in the switch side cable compartment to accommodate either:

- A 15 kV, MOV elbow arrester piggyback connected to a 600 amp non-loadbreak elbow or
- Two 600 amp non-loadbreak elbows mounted piggyback.

Switch Dimension

Switch shall be constructed with the dimension to be a minimum of 60" long and 64" wide. Switch shall not exceed 78" long and 80" wide.

Note that the location has restrictions on clearances for operation and/or access from side.

Any deviation from the above maximum dimension will have to be reviewed and approved by a member of Burlington Electric Department engineering team.

Labeling

The switch shall have a stainless steel nameplate in the switch side compartment which is permanently stamped, embossed or engraved with the following information:

- Name of manufacturer.
- Type of load break switch (Number of ways, number of switched ways).
- Catalog number.
- Model number.
- Serial number.
- Date of manufacture.
- Maximum voltage.
- BIL (kV).
- Amps, continuous.
- Amps, load interrupting.
- KA Asymmetrical, momentary and fault close.
- Weight, in pounds.

The following labels will be provided as a minimum.

- Danger labels (in all compartments).
- Schematic diagram (in all compartments).
- Each bushing shall have a phase identification tag ("A", "B" or "C").
- Other warnings and instructional labels, as necessary.

SWITCH OPERATION

The switch shall be operable from outside the enclosure with a recessed, side mounted, operating mechanism. Any necessary operating handles shall be included and be located in the operating mechanism compartment. The operating mechanism compartment door will have provisions for a padlock.

One operating mechanism will be provided per gang switch. The operating mechanism must operate all three phases simultaneously and must be tease proof and provide for quick-make, quick-break operation in either switching direction regardless of the speed of the operator. Position indicators shall clearly identify the "open" and "closed" positions of the contacts. The operating mechanism shall be padlockable in either position. The operating mechanism must be capable of delivering sufficient torque to assure load interrupting, fault closing and momentary ratings.

OPTIONS

The switch shall be suitable for future addition of a motor operator for each three phase gang switch without modification to the basic switch or the switch enclosure.

Vendors are encouraged to quote switches with porcelain or polymer insulators.

QUALITY ASSURANCE

One hundred percent (100%) production testing shall include a contact resistance test and an AC one minute withstand test.

Certified test reports shall be furnished to demonstrate accurate compliance with all required production tests.

MISCELLANEOUS

Any exceptions taken to the specification shall be clearly indicated on the quotation.

An outline drawing of the switch shall be submitted with the quotation.

The manufacturer shall provide warranty information on the switch with the quotation.

Approval drawings shall be submitted prior to the fabrication of the switch. The submittal shall include all dimensions, weights, information on the switch and all associated equipment, changes from specifications and any accessories. The vendor shall allow two (2) weeks for approval drawing review by BED.

Five copies of instructions and checklists for the inspection, installation, operation, and maintenance of the padmounted switchgear shall be provided with the switch.

Elbows and bushing well inserts will be provided by the user.

SHIPMENT

The switch shall be shipped FOB destination.

BURLINGTON ELECTRIC DEPARTMENT
15 kV, 600 Amp, Padmounted Switch Data Sheet

Vendor: _____ Quotation Date: _____

Switch manufacturer: _____ Type of switch: _____ Way, _____ Switched

Catalog number: _____ Model number: _____

Interrupting medium: _____ Insulating medium: _____

Weight, in pounds: _____

Dimensions (In inches)

Length: _____ Width: _____ Height: _____

Electrical Ratings

One Minute AC Withstand: _____ kV

Fifteen Minute DC Withstand: _____ kV

Corona Extinction: _____ kV

Open Gap B.I.L. Flashover Withstand: _____ kV

Load Interrupting and Loop Switching: _____ Amps

Transformer Magnetizing Interrupting Current: _____ Amps

Capacitor or Cable Charging Interrupting Current: _____ Amps

Asymmetrical Momentary and 3 Operation Fault Close: _____ Amps

Symmetrical One Second Current: _____ Amps

8 Hour Overload Current: _____ Amps

10 Operation Overload Interrupting Capability: _____ Amps

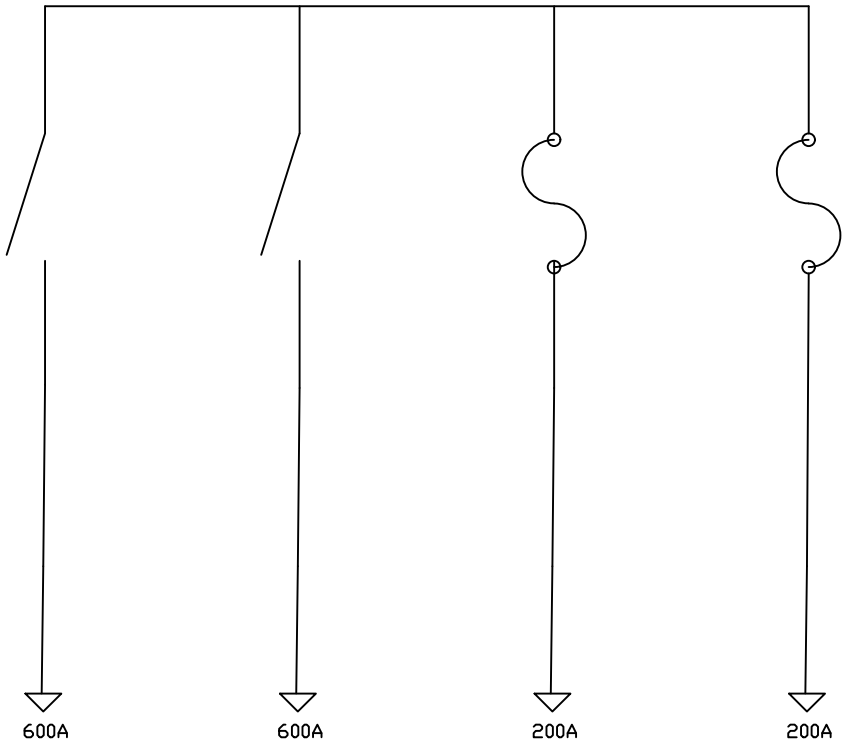
Operations - 600 A Load Interrupting Endurance: _____ Operations

Mechanical Life - Operations: _____ Operations

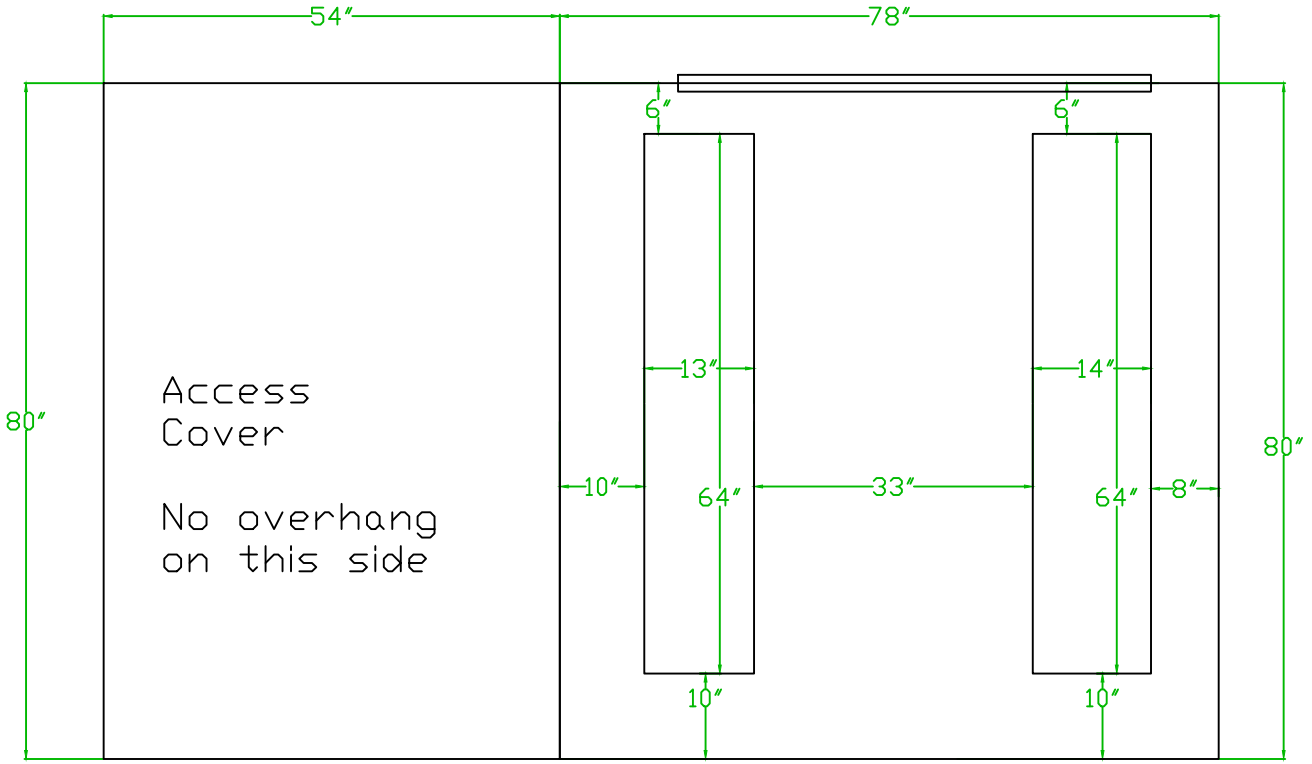
Maximum Switch Operating (Open / close) Time: _____ Seconds or Cycles

(Total time to operate a switch equipped with an electrical operator = the total time for the electrical operator to operate + the total time for the switch to extinguish the arc.)

Exceptions to specifications: _____


600A
600A
200A
200A

Vault is against a wall. There is a removable cover for access from this side 56″ long by 51″ high, starting 8″ from right edge



12″ of clearance on this side