LITTLETON ELECTRIC LIGHT AND WATER DEPARTMENTS

39 AYER ROAD LITTLETON, MA 01460 978-540-2222

LITTLETON ELECTRIC LIGHT & WATER DEPARTMENT
REQUEST FOR PROPOSALS (RFP) # 2024- 25kV Reclosers

Pursuant to M.G.L. c. 164, § 56D, the Littleton Electric Light & Water Department (LELWD) invites proposals for the purchase of: 25kV reclosers.

SPECIFICATIONS/INFORMATION: can be examined and obtained at LELD between the hours of 8:00 a.m. and 4:00 p.m., Monday through Thursday or by emailing Pat Laverty, Engineering and Operations Manager, at plaverty@lelwd.com.

Vendors must specify their terms for payment, delivery FOB, and warranties.

All proposals must be sealed and marked on the outside "2024- 25kV Reclosers" and be received at the office of Mr. Nick Lawler, General Manager, Littleton Electric Light and Water Departments (LELWD), 39 Ayer Road, P.O. Box 2406, Littleton, MA 01460 until **2:30 p.m., January 30th, 2024**; at which time and place they will be publicly opened and read.

LELWD reserves the right to reject any and all proposals received.

Littleton Electric Light & Water Department
Nick Lawler, General Manager

LITTLETON ELECTRIC LIGHT AND WATER DEPARTMENTS

39 AYER ROAD LITTLETON, MA 01460 978-540-2222

# SPECIFICATIONS

## 25 kV Pole-mount Reclosers

1. It is the intent of this specification to specify pole-mount reclosers. The equipment covered by this specification shall be designed, assembled and tested in accordance with the latest applicable standards of the National Electrical Manufactures Association (NEMA) and the American Standards Institute (ANSI).

2. Reclosers should have a microprocessor-based control that meets or exceeds the following specifications:

   The microprocessor-based recloser control shall provide a combination of functions including protection, monitoring, control, fault locating, and automation. Recloser control self-checking functions shall be included. Specific operational and functional requirements are as follows:

   A. **Compatibility.** Depending on ordering option, the recloser control shall be compatible with Traditional Retrofit, G&W Viper®-ST, G&W Viper-LT, ABB Elastimold MVR, ABB Joslyn TriMod™ 600R, ABB OVR-3/VR-3S (24-pin, 15 and 27 kV models), ABB Gridshield (32-pin and 42-pin models), Control-Power Eaton NOVA, G&W Control Power Viper-S, Eaton NOVA-TS or NOVA-STS Triple-Single, Eaton NOVA NX-T, Tavrida OSM Al_2, Tavrida OSM Al_4, Siemens SDR/3AD, or Togami FAULT CLEAR reclosers. The recloser control shall be capable of single-phase control, tripping, and reclosing when connected to a single-phase capable recloser.

   B. **Voltage Inputs.** The recloser control shall have six voltage inputs in order to monitor three-phase voltage on both sides of the recloser. Both of the three-phase voltage input sets shall be able to be ordered as low-energy analog (LEA) inputs.

   C. **Autoreclosing.** The recloser control shall provide as many as four reclosures in an autoreclosing sequence, whether three-phase or independent single-phase operation. Autoreclose parameters such as reclose initiation, drive-to-lockout, and reclose supervision shall be settable, for realization of unique autoreclosing schemes. Sequence coordination shall be provided to keep reclosers in step for fast and delay curve operation, thus avoiding overtripping.

   D. **Power Supply.** The recloser control shall be orderable with a 120 Vac, 230 Vac, 48 Vdc, or 125 Vdc power supply.

E. **Auxiliary Power Supply.** A 12 Vdc, 40 W continuous (90 W surge) power supply shall be available to power such auxiliary equipment as a radio.

F. **Accurate Time.** The product shall provide an optional accessory for synchronizing the internal product clock to satellite GPS time. The satellite-synchronized clock shall provide an IRIG-B demodulated output accurate to within ±100 nanoseconds (average) of UTC time.

G. **Coordination With Upstream or Downstream Reclosers.** The recloser control shall include 38 standard recloser curves, plus 5 U.S. and 5 IEC time-overcurrent curves.

H. **Phase Fault Overcurrent Protection.** The recloser control shall incorporate phase and negative-sequence overcurrent elements for detection of phase faults. Each phase shall have independent phase overcurrent elements available, with separately settable pickup, curve, and time-dial settings. For added security, the recloser control shall provide load encroachment logic, and torque-control capability (internal and external).

I. **Ground Fault Overcurrent Protection.** The recloser control shall incorporate residual-ground and neutral overcurrent elements for detection of ground faults. For added security, the recloser control shall include torque-control capability (internal and external).

J. **High-Impedance Fault Detection.** The relay shall include high-impedance fault detection algorithms capable of detecting HIF signatures without being affected by loads and other system operation conditions. The relay shall make high-impedance fault summary and history information available in ASCII format and as many as 60 minutes of fault data shall be stored in COMTRADE file format.

K. **Harmonic Blocking.** The relay shall provide second-harmonic blocking to block various protection elements during transformer inrush.

L. **Directional Elements.** The recloser control shall trip securely for forward or reverse faults with phase and ground directional elements applied to the overcurrent protection.

M. **Under- and Overvoltage Elements.** The recloser control shall incorporate undervoltage and overvoltage elements for creating protection and control schemes, including but not limited to the following: voltage checks (e.g., hot bus/dead line) for reclosing; blown transformer high-side fuse detection logic; control schemes for capacitor banks.

N. **Sequence Voltage Elements.** The recloser control shall incorporate positive-, negative-, and zero-sequence voltage elements that can be logically configured for either under- or overvoltage applications.

O. **Under- and Overfrequency Protection.** The recloser control shall incorporate six levels of under- and overfrequency elements for detection of power system frequency disturbances. Each setting level shall use an independently set timer for load shedding or generator tripping schemes. Timers shall be settable as either cycles or seconds based. Seconds-based timers shall be settable as high as 1000 s.

P. **Rate-of-Change-of-Frequency Protection.** The recloser control shall include four levels of ROCOF elements with each level having independent pickup/dropout timers and increasing/decreasing frequency detection.

Q. **Fast Rate-of-Change-of-Frequency Protection (81RF).** The recloser control shall include 81RF protection for detecting islanding conditions.

R. **Vector Shift Element (78VS).** The recloser control shall include the 78VS element to detect islanding conditions of distributed generators.

S. **Synchronism Check.** The recloser control shall include two synchronism-check elements with separate maximum angle settings (e.g., one for autoreclosing and one for manual closing). The synchronism-check function shall compensate for close time and constant phase angle differences between the two voltage sources used for synchronism check (constant phase angle differences settable in 30-degree increments).

T. **Autosynchronizer.** The recloser control shall include an autosynchronism element to match the frequency, phase, and voltage of an incoming generator to the frequency, phase, and voltage of the bus before allowing the generator breaker to close.

U. **Operator Controls.** The recloser control shall include 12 configurable operator controls on the recloser control front panel; these functions shall also be accessible in the recloser control logic. The operator-control pushbuttons shall include LEDs with programmable functions and indications and configurable labels.

V. **Event Reporting and Sequential Events Recorder (SER).** The recloser control shall be capable of automatically recording disturbance events of 15, 30, or 60 cycles with settable prefault duration and user-defined triggering. Events shall be stored in nonvolatile memory. The recloser control shall provide all event reports in Compressed ASCII and COMTRADE file formats. The recloser control shall include

an SER that stores the latest 1000 entries. The events shall be made available via communications using Fast SER protocol.

W. **Status and Trip Target LEDs.** The recloser control shall include 26 status and trip target LEDs, 24 of which are programmable.

X. **External Indication.** The recloser control shall provide an optional accessory for external indication of a user-programmable condition using a BEACON® Bolt Display. The display shall provide 360-degree visibility and be configurable for lockout, battery problem, hot-line tag, or other indication.

Y. **Overload and Unbalance Alarms.** The recloser control shall include user-settable demand-current thresholds for phase, negative-sequence, neutral, and residual demand measurements.

Z. **Recloser Wear Monitor.** The recloser control shall include a recloser wear monitor with user-definable wear curves, operation counter, and accumulated interrupted currents by phase.

AA. **Battery Monitor.** The recloser control shall measure and report the battery voltage, current, and status.

BB. **Fault Locator.** The recloser control shall include a fault-locating algorithm to provide an accurate estimate of fault location without communications channels, special instrument transformers, or prefault information.

CC. **Relay-to-Relay Digital Communications.** The recloser control shall have eight transmit and eight receive logic elements in each of two communications ports for dedicated recloser control-to-recloser control communications. These elements shall be available for use in control logic.

DD. **Automation.** The recloser control shall include 16 local control elements, 32 remote control logic points, 32 latching logic points, 16 counters, 32 display messages in conjunction with a local display panel, and 64 timers. The recloser control shall have the ability to display custom messages.

EE. **Power Elements.** The recloser control shall include four independent directional three-phase power elements that can respond to either real or reactive power.

FF. **Voltage Sag/Swell/Interruption Report.** The recloser control shall include automatic monitoring of system disturbances, triggered by settable, adaptive voltage

thresholds as a percentage of the predisturbance voltage. The report shall be stored in nonvolatile memory.

GG. **Recloser Control Logic.** The recloser control shall include programmable logic functions for a wide range of user-configurable protection, monitoring, and control schemes (e.g., Automatic Network Reconfiguration).

HH. **Time of Year/Week/Day Parameters.** The recloser control shall include the means to vary logic according to time of year/week/day. Such logic variations handle seasonal environment or load changes (e.g., fire season, pumping season, peak load time).

II. **Metering.** The recloser control shall include metering functions for all connected currents and voltages; power, demand, energy, and symmetrical components calculations on fundamental quantities; average power, rms voltage and current, total harmonic distortion (THD), and harmonics measurement up to the 16th. The THD metering values shall be available for logic functions, such as alarming.

JJ. **Web Server.** The recloser control shall allow inspection of settings, metering reports, self-test reports, and configuration via an integrated web server. The control shall allow firmware upgrade via web server at engineering access level only.

KK. **Communication.** The recloser control shall include three independent EIA-232 serial ports, option for one EIA-485 serial port, one USB port, and two metallic Ethernet ports for external communication. In addition, the recloser control shall support Ethernet port options for single fiber, dual fiber, or a combination of one metallic and one fiber.

LL. **Distributed Network Protocol (DNP).** The recloser control shall incorporate compliant DNP3 Serial and LAN/WAN outstation protocol communications capability for as many as six simultaneous sessions.

MM. **Modbus TCP or Modbus RTU Protocol.** The recloser control shall incorporate Modbus protocol with availability on serial or Ethernet ports for as many as three simultaneous sessions.

NN. **IEC 61850.** The recloser control shall incorporate IEC 61850 MMS and GOOSE, with as many as 24 GOOSE subscriptions and seven simultaneous MMS sessions.

OO. **File Transfer.** File transfer protocol (FTP) is provided for high-speed data collection. The recloser control shall make events (regular and COMTRADE) and

reports available via Ymodem, File Transfer Protocol (FTP), and Manufacturing Message Specification (MMS).

PP. **IRIG-B.** The recloser control shall include an interface port for a demodulated IRIG-B time synchronization input signal.

QQ. **Simple Network Time Protocol (SNTP).** The recloser control shall be capable of synchronizing the internal timekeeping to a network time source.

RR. **PC Software.** The recloser control shall include compatibility with a PC software program for use in programming control settings and logic functions, and retrieving event data. The PC software shall be provided, but not be required to use the recloser control.

SS. **Settings Assistance.** The recloser control shall have a method for storing simplified settings templates.

TT. **Specification Compliance.** The recloser control shall comply to IEEE C37.90 standards including, but not limited to, Electromagnetic Compatibility Immunity, Environmental, and Safety categories of tests. The recloser control shall be tested for compliance with the most recent version of ANSI/IEEE C37.60.

UU. **Operating Temperature.** The recloser control shall be rated to operate between –40° and +55°C, allowing 15°C rise from sunlight without additional coolers or heaters.

VV. **Synchrophasors.** The recloser control shall include operation as a phasor measurement unit (PMU) compliant with IEEE Standard C37.118.

WW. **Digitally Signed Firmware.** Firmware files shall be compressed and contain a digital signature computed using the SHA-256 Secure Hash Algorithm.

XX. **Reliability.** The manufacturer shall supply the actual measured mean time between failures (MTBF) for the recloser control upon request.

YY. **Service.** The recloser control shall include no-cost technical support for the life of the product.

ZZ. **Manufacturer.** The recloser control shall be manufactured in the U.S.A.

AAA. **Warranty Return.** The manufacturer will endeavor to support a 72-hour turnaround on all warranty repairs.

BBB. **Warranty.** The recloser control shall include a ten-year warranty for all material and workmanship defects.

3. Reclosers should consist of three phase solid dielectric vacuum reclosers that meet or exceed the following specification:

This specification covers the requirements for an electronically controlled, solid dielectric vacuum recloser with Triple Option trip/close capabilities for use on distribution systems through 38 kV.

A) **Manufacturer Qualifications:** The chosen manufacturer shall have at least 10 years experience in manufacturing solid dielectric reclosers. The manufacturer of the reclosers shall be completely and solely responsible for the performance of the reclosers as well as the complete integrated assembly as rated.

B) The manufacturer shall furnish certification of ratings of the reclosers upon request.

C) The recloser shall comply with requirements of the latest revisions of applicable industry standards, including:
- IEEE C37.60
- IEEE 386

D) The recloser manufacturer shall be ISO 9001 and 14001 certified.

E) Reclosers shall be shipped preassembled at the factory. No field assembly shall be required.

F) The contractor, if applicable, shall handle, transfer, and move the reclosers in accordance with manufacturer's recommendations.

G) Recloser configuration shall be:

- Pole mount, center
- Site-ready with options including lightning arresters, primary/secondary connections, Accusense voltage sensors, and voltage transformers preassembled

H) **Mechanism Enclosure**: The magnetic actuator and corresponding linkage assembly shall be housed within a high impact, UV stable, air insulated, poly-carbonate enclosure. A contact position indicator and air vent shall be provided. Lifting provisions shall be provided.

I) **Operating Mechanism**: The operating mechanism shall utilize a magnetic actuator for

opening and closing of the vacuum interrupters. The magnetic actuator shall be powered by capacitors located in the control enclosure. The manual trip and lockout handle shall be made of stainless steel for maximum corrosion resistance. A mechanical block device shall further prohibit accidental closing when the manual trip handle is used. Vacuum interrupter contact position indication shall be accomplished using green (open) and red (closed) indicators located on the bottom of each mechanism enclosure and through LEDs located in the control.

J) **Vacuum Interrupters**: Interruption of the fault or load current shall be accomplished through vacuum interrupters located inside the solid dielectric modules.

K) **Solid Dielectric Modules**: The solid dielectric modules shall utilize a time proven EPOX solid dielectric insulation to fully encapsulate each of the three vacuum interrupters. The solid dielectric modules shall be fully shielded and incorporate a high impact poly-carbonate, track resistant, UV stable covering. The modules shall be dead tank or dead front technology and shall conduct a fault to ground through their external surface in case of a flash over. The operating temperature range shall be -60° to +65°C. A dual ratio, 500/1000:1 current transformer or optional dual ratio, 400/200:1 current transformer shall be integrally molded into each module. Voltage sensor(s) shall be integrally molded into each module. Modules shall be molded with one (1) source side and one (1) load side, IEEE 386 bushing interface.

L) **Smart Grid / Distribution Automation**: The recloser shall be automation ready simplifying conversion for any future automation requirements. The recloser shall have an option for up to six (6) integral LEA (Low Energy Analog) capacitive voltage sensors that are encapsulated within each recloser module, permitting voltage sensing for network reconfiguration. The integral voltage sensing accuracy shall be +/-2% at -20°C through +40°C and +/-4% at -60°C through +65°C when tested as a system. The phase angle accuracy of the integral voltage sensors shall be +/-1°. The recloser shall have an option for external voltage sensors with 0.5 accuracy class (±0.5% Magnitude, ±0.344° Phase) at -40°C to + 65°C temperature range. These external voltage sensors shall have a 5000:1 ratio and Low Energy Analog (LEA) outputs. A dual-ratio current transformer shall be encapsulated within the module. The current transformer ratio shall be field changeable. CT accuracy shall be +/-1%. Integrated communications options can be provided.

M) **Electronic Control**: The recloser shall be controlled using a microprocessor controlled relay.

N) **RATINGS**:

- Reclosers

  The recloser shall be rated:

| SELECTION OF RATINGS | IEEE/IEC |
|---|---|
| Maximum Design Voltage, kV | 27 |
| Impulse Level (BIL) Voltage, kV | 125 |
| Continuous and Load Break Current, Amperes | 800/1000* |
| 8-hour Overload, Amperes | 960 |
| 60 Hz Withstand, kV rms: One minute (dry) | 60 |
| 60 Hz Withstand, kV rms: 10 seconds (wet) | 50 |
| Interrupting Current, kA rms sym. | 16** |
| Making Current: RMS, asym, kA | 25.6** |
| Making Current: Peak, asym, kA | 42** |
| Short Circuit Current, kA sym. , 3 seconds | 16** |
| Mechanical Endurance, Operations | 10k |

*1000A continuous current available with the following conditions: 12.5kA Interrupting Current, L-shaped module configuration, NEMA-4 hole or clamp style lugs, and operating temperature range of -60°C through +40°C
**12.5kA Interrupting Current available.

O) IEEE C37.60 Fault Interrupting Duty

| Percent of Maximum: Interrupting Rating | Approx. Interrupting: Current Amps | No. of Fault: Interruptions |
|---|---|---|
| 15- | 200 | 44 |
| 45- | 600 | 56 |
| 90- | 1200 | 16 |
| Total Number of Fault Interruptions: 116 | | |

P) **Cable Bushings**: Cable bushings shall be Air insulated, removable silicone insulators over an IEEE 386 apparatus bushing interface.

Q) **Factory Production Tests:** Each individual recloser shall undergo a mechanical operation check verifying contact trip/close velocity, travel profile, timing and phase synchronicity. The recloser shall be AC hi-pot tested one minute phase-to-phase and across the open contacts. Circuit resistance shall be checked on all phases. Timing tests shall be conducted to verify TCC performance.

R) **Standard Components**: The following shall be included as standard:

- Aluminum pole mount center bracket
- Lifting provisions
- Grounding provisions
- Operations counter for each phase located in the control
- Manual trip and lockout handle(s) with mechanical block
- Triple option close capabilities
- Solid dielectric epoxy modules with 3 internal voltage sensors and dual-ratio 1000/500:1 CT's
- Arrester mounting provisions (overhead applications only)
- Field changeable silicone insulators
- Junction box with all strain relief connections and twist connection for control cable

The following options shall be supplied:

- NEMA 4-hole aerial lug
- 4/0 brass eyebolt style ground lug
- Stainless steel pole mount center bracket with arrester provisions on the load and source side
- Stainless steel polemount alley-arm bracket with arrester provisions on the load and source side
- Lightning arresters
- High impact, UV stable wildlife protectors for source and load insulators
- Junction box with all twist connections
- Six (6) integral voltage sensors
- Dual ratio 400/200:1 current transformer
- 42 pin cable with 52B and cable disconnect alarm

**Approval drawings with fully outlined dimensions to be submitted with proposal.**

Delivery is to be on a flat bed truck with 48-hour notice.

Please refer to Exhibit 1 for the quantities.

Proposals will be accepted in the vendor standard formats. Proposals must include terms of payment, delivery FOB, and warranties. Please itemize any additional items or accessories not specified as needed in the proposal.

## 4. Awarding of RFP:

LELWD reserves the right to reject any and all proposals received. LELWD also reserves the right to partially award the RFP to different vendors, and vary the quantities ordered from zero up to the quantities listed in Exhibit 1.

LELWD must enter into an equipment contract with the awarded vendor(s). The sample equipment contract is shown in Exhibit 3.

LITTLETON ELECTRIC LIGHT AND WATER DEPARTMENTS

39 AYER ROAD LITTLETON, MA 01460 978-540-2222

## EXHIBIT 1

| ITEM | QTY | Description |
|---|---|---|
| 1 | 4 | 25kV pole mounted recloser and control, with triple single capabilities, rated for 800A, (3) epoxy insulated vacuum interrupter modules, (1) magnetic actuator per phase, (1) manual trip and lockout handle per phase, (6) integral bushing PTs and CTs, L shaped vacuum interrupters, 42 pin control cable, with microprocessor control |
| 2 | | |
| 3 | | |
| 4 | | |

**Note:** LELD reserves the right to partially award the bid to different vendors, and vary the quantities ordered from zero up to the quantities listed above.

**CATALOG** cuts with fully outlined dimensional drawings to be submitted with bid.

**EVALUATION** of the transformers by LELD based on the total cost of ownership, lead time, and other factors.

LITTLETON ELECTRIC LIGHT AND WATER DEPARTMENTS

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# EXHIBIT 2

**Littleton Electric Light & Water Department**

**VENDOR**
**SUPPLIES/EQUIPMENT**
**CONTRACT #2024- 25kV Reclosers**

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AGREEMENT

This agreement for materials, equipment and/or services as described herein ("Agreement") is hereby entered into by and between the Littleton Electric Light & Water Department, a Massachusetts municipal light department with offices at 39 Ayer Road, Littleton, Massachusetts ("Owner") and VENDOR, VENDOR ADDRESS ("Vendor") (collectively, the "Parties").

WHEREAS, on or about December 14th, 2023, pursuant to the provisions of M.G.L. c. 164, § 56D, Owner requested proposals for the procurement of 25 kV Reclosers pursuant to Owner's RFP #2024- 25kV Transformers (Exhibit A); and

WHEREAS, on January 30th, 2024, Vendor submitted its Proposal in response to Owner's RFP #2024- 25kV Reclosers (Exhibit B), and

WHEREAS, Owner desires to purchase, and Vendor desires to provide 25kV reclosers, subject to the specifications, terms and conditions set forth herein;

NOW THEREFORE, in consideration of the foregoing, the mutual covenants set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Owner and Vendor agree as follows:

1. Contract Documents: The following documents are incorporated into this Agreement as fully as if stated within the body of this Agreement and shall be appended as Exhibits A through D hereto:

- Owner's RFP including any Specifications (Exhibit A);
- Vendor's Proposal dated _____ (Exhibit B);
- Purchase Order ____(Exhibit C);
- Owner's Terms and Conditions (Exhibit D);

In the event of a conflict between this Agreement and any Exhibits attached hereto, the Owner's Terms and Conditions shall take precedence.

2. Payment: The Parties have agreed to the following payment terms.

Owner shall make payment to Vendor as follows:

As shown on Purchase Order No. __ for materials, equipment and/or services delivered, invoiced, and accepted by the Owner, with payment due thirty (30) days thereafter.

3. Purchase Order: Owner has issued a Purchase Order in the amount of $XX,XXX for Items as set forth in the Proposal (Exhibit B) to be paid in accordance with the terms of the Agreement. Upon receipt of the Purchase Order, which is issued pursuant to the terms of this Agreement, Vendor shall consider such receipt as its "notice to proceed" and shall commence performance under the Agreement.

4. Delay LDs: Time is of the essence. Vendor shall deliver _____ no later than _____, 2024, which shall as a condition of acceptance by Owner, meet all of Owner's Specifications.

5. Waiver/Amendment. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively), only by a writing signed by an authorized representative of each Party and declared to be an amendment hereto. No waiver by either Party of any default(s) by the other Party in the performance of any provision, condition or requirement herein shall be deemed to be a waiver of, or in any manner release such other Party from, performance of any other provision, condition or requirement herein, nor deemed to be a waiver of, or in any manner release the defaulting Party from, future performance of the same provision, condition or requirement.

6. Severability. If any provision of this Agreement is declared invalid or unenforceable by a court of competent jurisdiction, such declaration shall in no way affect the validity or effectiveness of the other provisions of this Agreement, which shall remain in full force and effect, and the Parties shall thereafter use their best efforts to modify or reform this Agreement so as to effect the original intent of the Parties as closely as possible with respect to the provision that were held to be invalid or unenforceable.

7. Counterparts. This Agreement may be executed in any number of counterparts with the same effect as if both parties had signed the document. All counterparts shall be construed together and shall constitute one and the same agreement.

8. Governing Law. This Agreement shall be governed by and construed, interpreted and performed in accordance with the laws of the Commonwealth of Massachusetts, without giving effect to its conflict of law principles. Any action or proceeding concerning this Agreement shall be brought in a court of competent jurisdiction located in the Commonwealth of Massachusetts. By execution of this Agreement, each of the Parties hereto accepts for itself and its property, generally and unconditionally, the jurisdiction of the aforesaid courts. Each of the Parties hereto

irrevocably consents to the service of process of any of the aforementioned courts in any such action or proceeding by the mailing of copies thereof by certified mail, postage prepaid, to the Party pursuant to the notice provisions hereof. Should any action be brought pursuant to this Agreement, the Parties waive their right to a jury trial.

9. Notice. Any notice required or permitted under this Agreement or required by law must be in writing and must be delivered by email and by certified mail (return receipt requested), or by a nationally recognized prepaid overnight service, to the address set forth below. Notices will be deemed to have been given upon receipt (as evidenced by return receipt or overnight delivery verification). Either Party may change its address for notices by written notice to the other Party in accordance with this Section.

Vendor:

Owner: Littleton Electric Light &
Water Department
39 Ayer Road
Littleton, MA 01460
Attention: Pat Laverty
Email: plaverty@lelwd.com

10. Entire Agreement. This Agreement, including the Exhibits and any written amendments expressly made part of this Agreement shall constitute the entire agreement between the Parties with respect to the subject matter of this Agreement and all prior agreements, representations, and statements with respect to such subject matter are superseded hereby.

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

ACCEPTED AND AGREED TO THIS _____ DAY OF _____, 2024

LITTLETON ELECTRIC LIGHT & WATER DEPARTMENT

By: _____

VENDOR

By: _____

LITTLETON ELECTRIC LIGHT AND WATER DEPARTMENTS

39 AYER ROAD LITTLETON, MA 01460 978-540-2222

# LELWD PURCHASE AGREEMENT

## TERMS AND CONDITIONS

**AGREEMENT**

The following terms and conditions will be incorporated by reference in to the Agreement that shall constitute the entire understanding between LELWD and the Vendor, and no modifications, rescission, waiver or termination of the Agreement or any of its terms and conditions, shall be binding on LELWD unless agreed to in writing by LELWD. Capitalized words not defined herein shall have the meaning set forth in the Agreement. Pursuant to the terms of this Agreement, Vendor agrees to provide the equipment and work for the price and by the date(s) specified therein.

**PERFORMANCE/ DEFAULT**

If the Vendor shall fail in any respect to perform his obligations under the Agreement with promptness and diligence; or defaults on any obligations under the Agreement; or files for bankruptcy protection or is the subject of an involuntary bankruptcy petition or makes a general assignment for the benefit of creditors or becomes unable to pay debts when due, LELWD may cancel the Agreement in part or in its entirety without liability whatsoever for any portion(s) so canceled and in addition may pursue any and all remedies available at law and in equity for such breach or default.

**WARRANTY**

The Vendor represents and warrants that through the end of the Warranty Period, the equipment will: (i) be free from errors, defects and damage in material and workmanship; (ii) be new when installed unless the Parties agree otherwise in advance and in writing; (iii) be of good quality, workmanship and in good condition; (iv) be delivered, handled, stored (whether onsite or offsite) and installed in accordance with all manufacturer's instructions, in a manner that does not void or impair manufacturer warranties; and (v) conform to the specifications and instructions of LELWD.

If the equipment does not meet the warranties above, LELWD, after determining a defect or non-conformance, will notify the Vendor. At the sole discretion of LELWD, the Vendor shall replace, repair or restore without cost to LELWD (including disassembly, removal, storage and transportation), any defects or non-conformance arising within ___years after date of acceptance of the equipment furnished. Vendor shall use its commercially reasonable efforts

to remedy any failure or breach of Warranty so as to minimize revenue loss to Owner and to avoid disruption of Owner's operations.

Any replacement, repair, or reperformed equipment furnished by the Vendor under aforesaid warranty shall carry warranties on the same terms and conditions or said replacement, or repaired equipment.

PERFORMANCE/TERMINATION FOR CAUSE/FORCE MAJEURE

LELWD reserves the right to terminate this Agreement for its convenience. Time is of the essence. In the event of Vendor's default by reason of failure to deliver the equipment as and when specified, LELWD may cancel this Agreement in its entirety, or any part thereof, by written notice to Vendor, all for cause, without prejudice to LELWD's other rights and all without liability to itself. In such event, LELWD may replace it by contract or otherwise. In such cases, Vendor shall be liable to LELWD for any additional costs incurred by LELWD thereby. These rights and remedies are in addition to any rights and remedies provided by law or under this Agreement. LELWD shall not be liable to Vendor for any amounts, and Vendor shall be liable for, and shall hold LELWD harmless from, any damages occasioned by the Vendor's breach or default. Vendor shall not be entitled to any claim for loss of anticipated revenue, including overhead and profit, due to cancellation or termination of this Agreement for cause. If it should be determined that the LELWD has improperly terminated this contact for default, such termination shall be deemed to be for the LELWD's convenience. If LELWD terminates this Agreement for convenience, all payments due to the Vendor under the Agreement up to the date of termination, in accordance with all Agreement terms, shall be paid by LELWD to Vendor.

Except as set forth in this Agreement, neither Party shall hold the other responsible or liable for damages or delays in performance caused by acts of God, or other events beyond the control of the other Party, that could not have been foreseen or reasonably prevented. Such acts or events shall include unusually severe weather affecting performance, floods, epidemics, war, riots, strikes and lockouts. Notwithstanding the foregoing, the Parties acknowledge that this Agreement is being entered into during the pandemic caused by COVID-19. Delays within the scope of this provision which continue for ninety (90) days shall, at the option of either Party, make this Agreement subject to termination.

PATENTS, TRADEMARKS, COPYRIGHTS

It is mutually agreed and understood that the Agreement includes all royalties and costs arising from patents, trademarks and copyrights in any way involved with the work. If the Vendor, or any of its sub-vendors or subcontractors, are required or desires to use any design, device, material or process covered by letters, patents, trademark or copyright, the Vendor shall indemnify and hold harmless LELWD from any and all claims for infringement by reason of use of any such patented design, device, material or process to be performed under the Agreement and shall further indemnify LELWD for any actions, claims, expenses and damage which LELWD incurs or may be obligated to pay by reason of such infringement at any time during the performance or after the completion of the work. LELWD will give to the Vendor notification of any such action, claim, or proceeding and shall furnish the Vendor (at the Vendor's expense) all reasonably necessary information and assistance to enable the Vendor to defend the same.

If any material, equipment or work in any action, claim or proceeding is held to constitute infringement or its use is enjoined, the Vendor, within a reasonable time, shall either secure for LELWD, at the Vendor's own expense, the right to continue using said material, equipment or work by suspension of the injunction, by procuring for LELWD a license, or otherwise, or shall at the Vendor's own expense and as LELWD may elect, replace such material, equipment or work or modify it so that it becomes non-infringing, or remove such infringing material, equipment or work and refund the sums paid theretofore by LELWD, all without injury or damage to any other property of LELWD.

INSPECTIONS/ ACCEPTANCE

All materials and equipment to be supplied under the Agreement are subject to inspections by LELWD or its representatives. LELWD is not required to accept any materials or equipment that does not meet the requirements of the Agreement or its specifications and instructions. LELWD's acceptance of, and/or payment for equipment shall not constitute a waiver by it of any claims it may have or warranties under this Agreement or acceptance or approval of any equipment.

COMPLIANCE WITH LAW

The Vendor shall comply with all applicable Federal, State and local laws, regulations, ordinances, by-laws and orders that govern this Agreement ("Laws") whether or not specifically referenced. Vendor also agrees to indemnify and hold harmless LELWD from any and all damages, claims and liabilities arising from Vendor's noncompliance with said Laws.

TAXES

LELWD is an organization exempt from the payment of state and local sales and use taxes on tangible property and services and will not reimburse the Vendor for such taxes incurred by the Vendor in the performance of the Agreement.

RISK OF LOSS/ TRANSPORT

Risk of loss and/or liability for damages for any of the materials or equipment specified in the Agreement shall remain with the Vendor until such items are delivered and accepted by LELWD.

All transportation costs are included in the Purchase Price.

IDENTIFICATION

The Vendor shall properly identify each shipment, by Purchase Order or Contract Number, commodity description and packing list. All items, packages, etc. will have clearly identifiable external markings or tags for ease of identification.

ASSIGNMENT

Neither the Agreement nor any payment due or to become due hereunder shall be assignable by the Vendor without the prior written consent of LELWD. Any such assignment(s) without LELWD's prior written consent shall be void. Should LELWD agree to an assignment, the Vendor shall remain fully responsible for the acts and omissions of the Vendor's assignee and the Vendor shall indemnify and hold LELWD harmless from any and all loss and expense arising out of the assignment.

RECORDS/AUDIT

The Vendor shall, at its own expense, keep and maintain complete records and books of account of its costs and expenses relating to the work under the Agreement in accordance with generally accepted accounting practices. Vendor shall maintain such records for at least six (6) years after final payment, which in reasonable detail accurately and fairly reflect the

dispositions of the Vendor under this Agreement. Until the expiration of six (6) years after final payment, LELWD and any other public official authorized by law shall have the right to examine such records that directly pertain to and involve transactions relating to Vendor under the Agreement. Vendor hereby grants LELWD or its Representative permission to audit such records and books of account at the Vendor's usual place of business at reasonable times.

CONFIDENTIALITY

Any of LELWD's drawings, specifications or technical information used by the Vendor hereunder, shall remain the property of LELWD and shall be held in confidence by the Vendor and shall not be reproduced or disclosed to others without the written permission of LELWD.

WAIVER

In the event LELWD fails to insist on strict performance of any of the terms and conditions or fails to exercise any of its rights and privileges hereunder, such a failure shall not constitute a waiver of such terms, conditions, rights or privileges.

COMPLETION OF CONTRACT

The Agreement will not be considered complete until all Specifications and requirements have been met and the equipment and work are accepted by LELWD. These requirements include, but are not limited to, LELWD's acceptance of all documentation, drawings, manuals, plans and publications, as applicable.