



1. APPLICATION

- A. Intermediate type surge arresters are installed on riser poles to protect underground cable and equipment on EWEB's 12.47 kV grounded wye electric distribution system.

2. REFERENCE STANDARDS

- A. The surge arresters shall be manufactured, tested and furnished according to the latest edition, revision or amendments to the following standards except as modified herein.
- 1) IEEE Std. C62.11 – IEEE Standard for Metal-Oxide Surge Arresters for AC Power Circuits (>1kV).
 - 2) IEEE Std. C62.22 – IEEE Guide for the Application of Metal-Oxide Surge Arresters for Alternating-Current Systems.

3 PRODUCTS

A. Ratings

- 1) Maximum continuous operating voltage (MCOV) shall be minimum 8.4 kV, rms.
- 2) Maximum IR discharge voltage at 20,000 amps using a 8 x 20 micro-second current wave shall be 30 kV or less.
- 3) Maximum IR voltage at 10,000 ampere 0.5 micro-second front of wave shall be 33 kV or less.
- 4) The arrester shall sustain an overvoltage of 200% of nominal system voltage for 5 minutes.

MATERIAL SPECIFICATION
EUGENE WATER & ELECTRIC BOARD

RISER POLE SURGE ARRESTER

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B. General Requirements

- 1) The riser pole surge arrester shall be a metal-oxide type.
- 2) The arrester shall be polymer enclosed.
- 3) The arrester shall be furnished complete with the following:
 - a) Top terminal hardware including wire clamp, terminal nut and wildlife protective cover.
 - b) Bottom terminal hardware including ground lead isolator, terminal nut, and washer and copper ground strap.

4. TESTS

- A. The vendor shall submit certified test reports on the surge arresters. The reports shall be on similar production units with the same ratings and characteristics as those supplied. The test report shall show protective characteristics, insulation characteristics, temporary overvoltage capabilities, and pressure relief capability.

5. WARRANTY

- A. Provide a warranty period of eighteen (18) months minimum after the date of final acceptance.
- B. Vendor warrants to EWEB that any goods/equipment furnished will operate and function in the manner represented by Vendor and will achieve the performance stated in the material specification when operating within the design conditions described therein.
- C. Vendor warrants the goods/equipment furnished is free from defects in material and workmanship, and agrees to repair or replace any unit that is unsuitable for operating or fails in operation during normal and proper use, including all parts and labor at no cost to EWEB.

6. PACKAGING AND DELIVERY

- A. Items shall be suitably packaged to prevent damage. Manufacturer's name or symbol and catalog number shall be on each part or (and) its packaging.

7. SUBMITTALS

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A. Submit information in accordance with the requirements of the bid documents and as described below.

- 1) Arrester maximum continuous operating voltage (MCOV) rating
- 2) IR discharge at 20 kA, 8 x 20 micro-second current
- 3) Other characteristics to show compliance with this material specification

8. EWEB STORES INFORMATION

A. This material specification shall be used to purchase the material with the following EWEB stock codes:

410-0000766

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