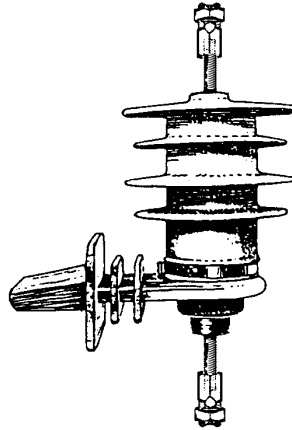


**3 kV HEAVY DUTY DISTRIBUTION CLASS
 METAL-OXIDE SURGE ARRESTER**



680002

1. Scope

This Material Standard applies to surge arresters used on a 4160GrdY/2400 volt power system. Surge arresters will be installed on riser poles to protect underground cable and equipment.

2. Industry Standards

Surge arresters shall meet all applicable requirements of the following national standard:

IEEE C62.11-1999, Standard for Metal-Oxide Surge Arresters for AC Power Circuits (> 1 kV)

3. Electrical Requirements

Class (recognized by IEEE C62.1 1): Heavy Duty Distribution

Subclass (recognized by industry): Riser Pole

Type: Metal-Oxide

Duty-Cycle Rating: 3 kV rms

Maximum Continuous Operating Voltage (MCOV): 2.55 kV rms




Maximum Front-of-Wave Voltage Cresting in 0.5 Microseconds for 10 kA Wave: 10.3 kV crest

Maximum Discharge Voltage for 8 X 20 Microsecond 5 kA Wave: 8.6 kV crest

Maximum Discharge Voltage for 8 X 20 Microsecond 20 kA Wave: 10.4 kV crest

Minimum Symmetrical RMS Fault-Current Withstand Rating: 20 kA rms

Minimum Temporary Overvoltage Capability for Three Seconds at 60 Degrees Centigrade Ambient and No Prior Energy Absorption (Overvoltage/MCOV): 1.4 per Unit

STANDARDS COORDINATOR	STANDARDS SUPERVISOR	UNIT DIRECTOR
 John Shipek	 John Barnett	 Hardev Jui

SEATTLE CITY LIGHT
MATERIAL STANDARD

STANDARD NUMBER: **6800.1**

PAGE: 2 of 2

SUPERSEDING: October 27, 2004

EFFECTIVE DATE: June 9, 2006

4. Construction

Housing Material: Polymer.

Housing Material/Hanger Bracket Color: Gray.

Ground Lead Isolator: Required.

Terminal - Top: 3/8-16" stainless steel stud with Penn Union STS-4, Burndy KF-23, or Dossert DGG-6 connector (Stock No. 668872).

Terminal - Bottom: 3/8-16 stainless steel stud with Penn Union STS-4, Burndy KF-23, or Dossert DGG-6 connector (Stock No. 668872).

Nameplate: Required per IEEE C62.11-1999, Section 10.1 Identification data.

6. Marking and Packaging

Surge arresters shall be packaged fully assembled, one per cardboard box. Each package shall be legibly marked with manufacturer's name or symbol, product description, and quantity contained. Shipping containers shall be marked with manufacturer's name or symbol and Seattle City Light's purchase order number. A packing slip shall be included with each shipment.

7. Stock Unit: EA

8. Stock Number 680002

Approved Manufacturers	Type	Catalog Number
Cooper Power Systems	Vari-Star	URS0303-0M1X-1A1A
General Electric	Tranquell	9L27HXX003
Hubbell (Ohio Brass)	PVR	221603-7111
Joslyn Manufacturing Co.	ZJP	ZRP003-0000000