

**Transmission & Distribution**  
**Material & Installation Specification**

**High Potential Power Cable Test**

**I. Quantity**

The base bid shall include the indicated number of High Potential Power Cable Test units furnished and installed as hereinafter specified.

**II. Material**

A. Equipment - Hi-Pot Tester.

**III. Procedure**

- A. Disconnect both ends of all phases of the cables to be tested. Cables must be disconnected from all equipment, such as transformers, CT's, PT's and Lightning Arrestor's.
- B. Test one phase at a time. Phases to be separated and insulated from each other at both ends.
- C. Phases not being tested shall be grounded.
- D. Weather conditions and cable must be dry. Test area, (both ends of conductor under test), shall be barricaded and warning signs posted to exclude the public or other non-authorized persons.
- E. Apply high voltage to the cable using the following steps:
1. Gradually increase voltage to the cable in 2KV increments, at 10 seconds intervals, until reaching 15KV phase to ground. Log data at each increment.
  2. Maintain 15KV for 5 minutes. Log data at end of 5 minutes.
  3. Gradually decrease voltage to the cable in 2KV increments, at 10 second intervals. Log data at each increment.

4. Discharge cable.
  5. Record results both in spread sheet format and graph.
- F. Repeat steps A thru E for each phase.

CITY OF COLUMBUS DEPT. OF PUBLIC UTILITIES – DIVISION OF POWER HIGH POTENTIAL POWER CABLE TEST		
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APPROVED: <i>[Signature]</i>		
	SHEET 1 of 2	

### HIGH POTENTIAL TEST

Work Order Number \_\_\_\_\_ Date \_\_\_\_\_

Job Name \_\_\_\_\_

Circuit Number \_\_\_\_\_

Rating \_\_\_\_\_ KV \_\_\_\_\_ %

Length \_\_\_\_\_ Ft. Date installed \_\_\_\_\_ Number of Splices \_\_\_\_\_

Method of Termination \_\_\_\_\_

System Voltage \_\_\_\_\_ KV \_\_\_\_\_ Delta \_\_\_\_\_ Wye

Grounded \_\_\_\_\_ Ungrounded \_\_\_\_\_

Weather Conditions \_\_\_\_\_

Air Temperature \_\_\_\_\_ Humidity \_\_\_\_\_

Voltage Increments \_\_\_\_\_ KVDC Hold Time \_\_\_\_\_ Seconds

Test Instrument Make \_\_\_\_\_ Model \_\_\_\_\_ Tool No. \_\_\_\_\_

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APPROVED: <i>Kirk Spruce</i>		
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