Seattle City Light CONSTRUCTION STANDARD

Installation of Signs on Transmission Towers

1. Scope

This standard covers the installation of signs on Seattle City Light (SCL) transmission towers.

2. Application

This standard provides direction to SCL engineers and crews for the installation of signs on transmission towers.

Signs are used to convey tower identification and related safety information.

Signs referenced in this standard are:

- Danger Keep Out
- Tower/Circuit Identification (ID)
- Aerial ID
- Danger ACCR Conductor

3. Materials, Placement, and Attachment Methods

3.1 General

Locations of signs on tower shall be installed per Figure 3.1a and as determined in the field to meet the requirements of this standard.

Signs shall be placed so as to be legible, create no distractions, or be hazards in themselves.

All signs, except the Aerial ID sign, shall be installed on horizontal tower members 10 to 20 feet above the ground, preferably on angles with the horizontal leg in. If no horizontal member exists within the desired location, contact the SCL engineer for direction on the use of other attachment methods and hardware.

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Figure 3.1a. Sign Placement

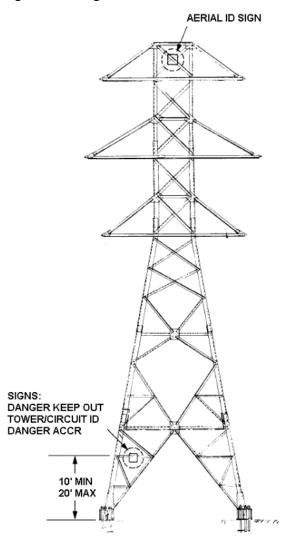
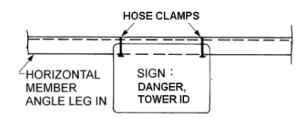


Figure 3.1b. Sign Attachment Detail



3.2 Tower/Circuit Identification (ID) Signs

Tower/Circuit ID signs shall be custom-fabricated per SCL 7652.4 using aluminum blanks (Stock No. 765210).

Tower/Circuit ID signs shall be installed on the tower face oriented toward North. If signs cannot be viewed from the access road, an additional sign shall be installed facing the road.

Tower/Circuit ID signs shall be attached using 20-inch galvanized steel hose clamps and a banding tool (Punch lock #F100, available from the tool rooms). Clamps shall fit snugly around the angle members at each end of the sign.

If hose clamps cannot be used in the desired location, contact the SCL engineer for direction on the use of other attachment methods and hardware.

See figures 3.1a and 3.1b.

3.3 Danger Keep Out Signs

Danger Keep Out signs shall be installed per each tower side that is exposed to traffic or pedestrian view.

Danger Keep Out signs shall be attached using 20-inch galvanized steel hose clamps and a banding tool (Punch lock #F100, available from the tool rooms). Clamps shall fit snugly around the angle members at each end of the sign.

If hose clamps cannot be used in the desired location, contact the SCL engineer for direction on the use of other attachment methods and hardware.

See figures 3.1a and 3.1b.

See SCL 7651.21 for sign material requirements.

3.4 Danger ACCR Conductor Signs

Danger ACCR Conductor signs shall be installed where ACCR conductor exists. Signs shall be installed on the climbing leg of the tower and on each tower side that is exposed to traffic or pedestrian view.

Danger ACCR Conductor signs shall be attached using 20-inch galvanized steel hose clamps and a banding tool (Punch lock #F100, available from the tool rooms). Clamps shall fit snugly around the angle members at each end of the sign.

If hose clamps cannot be used in the desired location, contact the SCL engineer for direction on the use of other attachment methods and hardware.

See figures 3.1a and 3.1b.

See SCL 7651.05 for sign material requirements.

See SCL 1615.03 for a discussion of hazards and guidelines when encountering ACCR.

3.5 Aerial ID Signs

Aerial ID signs shall be installed on the top of the tower on cross members. See Figure 3.1a.

Aerial ID signs shall be fabricated and installed per SCL Drawing C-6257, Tower Identification Sign Installation Details.

4. References

SCL Drawing C-6257; Tower Identification Sign Installation Details, 5-24-1985, Rev. 0

SCL Material Standard 7651.05; "Signs, Danger, ACCR Conductor, 14 in x 20 in, Rigid"

SCL Material Standard 7651.21; "Signs, Danger Hazardous Voltage, 14 in x 20 in, Rigid"

SCL Material Standard 7652.4; "Signs Tower/Circuit Identification 6" x 20"

SCL Work Practice 1615.03; "Hazards and Guidelines When Encountering ACCR (Low-Sag, High-Temperature) Conductor"

5. Sources

Neuansourinh, Ponet; SCL Standards Engineer, originator, and subject matter expert for 0081.21

SCL Construction Guideline D7-2 (canceled); "Tower Sign Installation"