Yoke Plate Assemblies, Double String, Suspension

1. Scope

This standard covers the requirements for double string, suspension, yoke plate assemblies.

This standard applies to Seattle City Light (SCL) Stock No. 693060.

2. Application

Double string, suspension, yoke plate assemblies are used to yoke two 230 kV suspension insulators together at the line. The yoke plate assembly limits the transmission line bend radius to 40 degrees minimum at locations where the line changes direction.

A complete yoke assembly requires a tower end assembly (this standard) and a line end assembly (see SCL 6790.15). Contact Transmission Line Design Engineering for more information.

3. Industry Standards

Double string, suspension, yoke plate assemblies shall meet the applicable requirements of the following industry standards:

ASTM A153; “Standardized Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware”

ASTM A47; “Standard Specification for Ferritic Malleable Iron Castings”

ASTM A668; "Standard Specification for Steel Forgings, Carbon and Alloy, for General Industrial Use"

4. Requirements

Each line end assembly consists of rectangular yoke plate that is constructed per SCL Drawing TD-10098. See Figure 4.

Figure 4. Line End Assembly

5. Packaging

Each assembly shall be packaged to prevent damage during shipping, handling, and storage.

Each assembly shall be packaged assembled.

Each standard package shall be legibly marked with the following information:

- Manufacturer identification
- Product description
- SCL stock number
- Quantity

Each shipping container shall be legibly marked with the following information:

- SCL purchase order number

6. Issuance

Stock Unit: EA

7. Approved Manufacturers

Seattle City Light shop.

8. Sources

Lin, Jimmy; SCL Transmission Engineer and subject matter expert for SCL 6970.25

SCL Drawing TD-10098; Double String Suspension Insulator Assemblies, Seattle City Light, Circa 1950.

Shetab, Muneer; SCL Standards Engineer, originator, and subject matter expert for 6970.25

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9. References

SCL Material Standard 6970.15; "Yoke Plate Assembly, Deadend Strain"