<u>Transmission & Distribution</u> Material & Installation Specification

Cable Splice

I. Quantity

The base bid shall include the indicated number of 15KV, "Cable Splices" and appropriate accessories included but not limited to silicon lubricant, grounding kits, assembly tools, abrasives, cleaners, and all necessary items for complete and operational 15KV splicer.

II. Material

- A. The material shall be equal in quality, design, performance, and appearance to the items specified on drawing TDMIS-1105. All components shall be Raychem Heat Shrink Type HVS, 3M Cold Shrink or engineer approved equal.
- B. All steel hardware to be 302 Stainless Steel.
- C. Completed single conductor splice shall include but not be limited to a compression connector, semi-conductive tape and compound tape, semi-conductive shrink tube, insulating shrink tubes, rejacketing shrink tube, ground kits, shield tape, and all accessories required for a complete and operational splice.
- D. Splice kits shall be designed specifically for use with solid dielectric 15KV single conductor jacketed tape shield cables.

III. Installation

- A. The installation shall be as appropriate on drawing TDMIS-1105 and as required by this specification.
- B. Size and type splice kit shall be Raychem type HVS or 3M cold shrink, and shall not be substituted without express approval of engineer.

- C. Only qualified personnel with at least 5 years' experience with high voltage splices or certificate from a certified framing school as approved by COC-DOP may be assigned to splice MV cables. A resume' of personnel's experience shall be submitted to DOP for approval 30 days prior to beginning splices.
- D. Cables, splice kits and cable accessories shall be kept clean and dry at all times during splicing process. Suitable tents and heaters shall be employed as needed. Person performing cable splice shall clean hands frequently with MEK or other approved solvent to assure semi-conductive materials are not transferred from component to component.
- Medium voltage cable splices specified herein are not to be used for new installations. Cable splices are to be used only for repairs, not for poor planning. MV cables shall be continuous from point to point without splices. When reels of cable are short, a new reel shall be provided to avoid splicing.
- F. Cables and components shall be cleaned and prepped according to the connector manufacturers' directions.
- G. Splice components shall be considered complete when in final position and energized at operating voltage.
- H. Shrink tube shall be applied using a manufacturer recommended torch with a large bushy flame so as to avoid burning shrink tube.

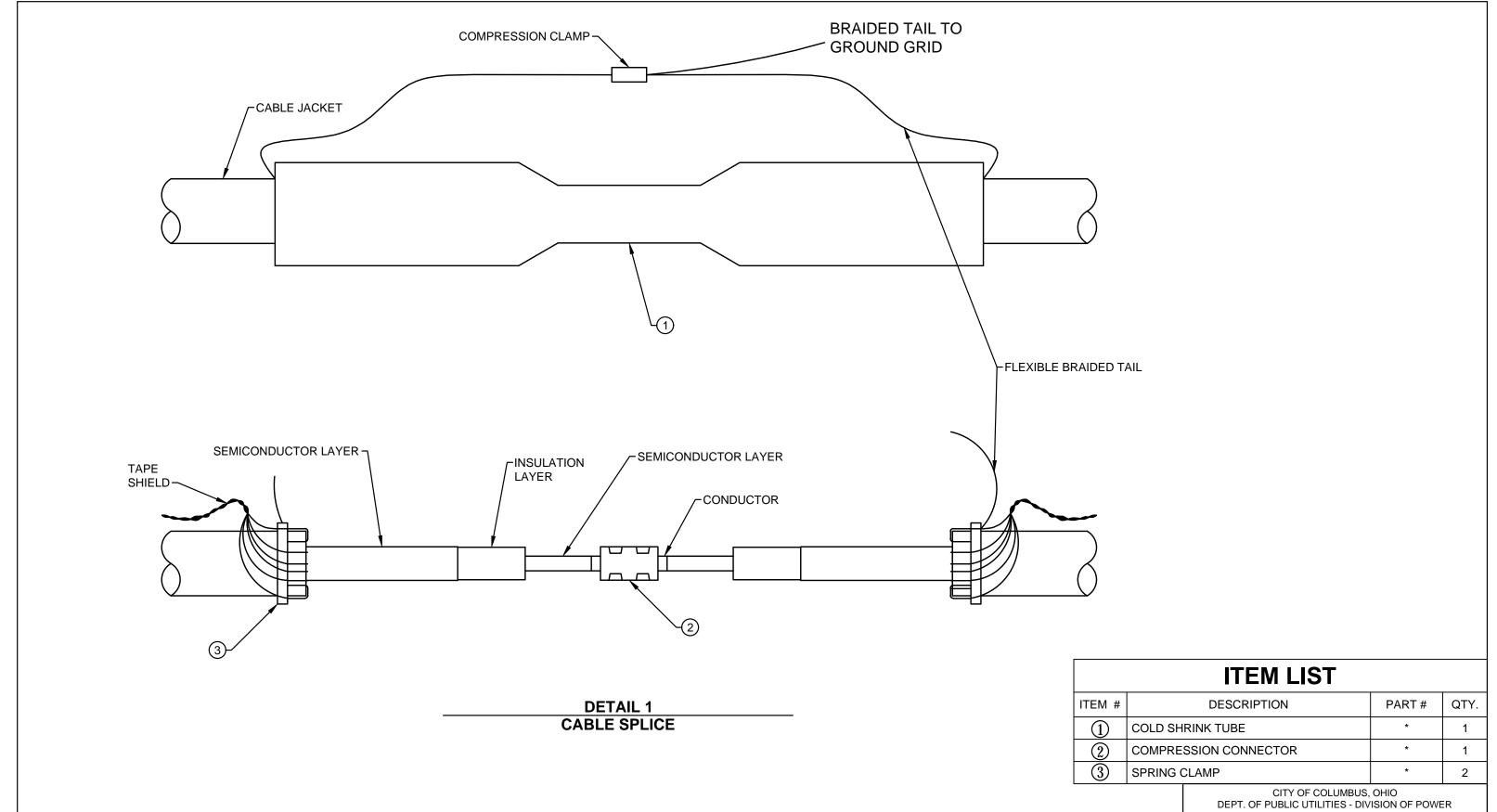
IV. <u>Method of measurement</u>

Shall be per each single conductor splice and shall include all materials, accessories, lubricants, abrasives, tools, labor, equipment excavation and backfill, and supervision required for a complete and operational splice.

V. <u>Basis of payment</u>

| Items | Unit | Description |
|------------|------|---|
| TDMIS-1105 | Each | Single conductor completed and operational splice |

| CITY OF COLUMBUS | | | | | |
|---|------------------|------------|--|--|--|
| DEPT. OF PUBLIC UTILITIES – DIVISION OF POWER | | | | | |
| CABLE SPLICE | | | | | |
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| DRAWN BY: AEC | DATE: 01/01/2018 | | | | |
| APPROVED: R. SPRITE | | TDMIS-1105 | | | |
| | SHEET 1 of 2 | | | | |



CABLE SPLICE

| DRAWN BY: AEC | DATE: 01/01/2018 | | | |
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| APPROVED: R. SPRITE | | | | |
| SCALE: NTS | SHEET: | 2 OF 2 | | |

TDMIS-1105