

## Changes to the Technical List of Materials

### May 5, 2025

1. Pages av-1, av-6, av(1), av(5)
  - a. Renewed Apar Industries Ltd. (5/2025 – 5/2026)

### April 30, 2025

1. Page aj-1
  - a. Added TE Connectivity (4/2025 – 4/2026)

### April 25, 2025

1. Pages b-1, b-2, f-1, f-3
  - a. Renewed Powerline Hardware (Hobb) (4/2025 – 4/2026)

### April 18, 2025

1. Pages k-2, ea-4
  - a. Added Jiangsu Shemar Electric Co. Ltd. (4/2025 – 4/2026)

### April 16, 2025

1. Pages y-1, y-2, av-1, av-4, av-5, av(5), av(5.1), Uhv-2, Uhv-3, Uhv-4
  - a. Added new listings for Xiantong Wire and cable Co., Ltd. (Priority Wire & Cable) (4/2025 – 4/2026)
  - b. Renewed Xiantong Wire and cable Co., Ltd. (Priority Wire & Cable) (4/2025 – 4/2026)
  - c. Renewed Shanghai Silin Special Equipment Co. Ltd. (Priority Wire & Cable) (4/2025 – 4/2026)

### February 20, 2025

1. Page cx-1
  - a. Added Mosdorfer (2/2025 – 2/2026)

### February 13, 2025

1. Pages ai-1, ai-3, ai-4, ai-5
  - a. Renewed Kopell (2/2025 – 2/2026)

### February 12, 2025

1. Pages b-1, f-1
  - a. Renewed Line Hardware (2/2025 – 2/2026)

### February 11, 2025

1. Pages av-1, av-6, av(4)
  - a. Added Intelli (2/2025 – 2/2026)

### February 4, 2025

1. Page al-2
  - a. Added Milwaukee (2/2025 – 2/2026)

### January 23, 2025

1. Pages c-1, d-2, o-1
  - a. Added Line Hardware, Inc. (1/2025 – 1/2026)

### January 14, 2025

1. Pages av-1, av-5, av-6, Uhv-3.

- a. Added KLC Cable (1/2025 – 1/2026).

#### December 20, 2024

- 1. Pages u-2, u-3, bv-1, dt-1
  - a. Renewed Technical Acceptance for Mosdorfer (12/2024 – 12/2025).

#### December 13, 2024

- 1. Page ah-1, by-1
  - a. Added Mosdorfer (Thailand) Co., Ltd. (12/2024 – 12/2025).

#### December 12, 2024

- 1. Page a-2
  - a. Added Vanguard Electric, LLC (12/2024 – 12/2025).
    - i. P55-3 SG4, P55-4 SG4

#### December 6, 2024

- 1. Pages b-1, c-1, d-1, f-1, i-1, l-1, l-2, n-1, o-1, q-1, s-1, u-2, v-1, v-2, w-1, x-1, aa, ab, ao-1, as-1, aw-1, ba-1, bh-1, bj-1, bo-1, br-1, bs-1, bx-2, ci-1, cs-1, cz-1, da-1, eb-1, ej-1, ek-1, ft-1
  - a. Renewed GPP Solutions (12/2024 – 12/2025).

#### December 5, 2024

- 1. Pages a-1, a-1.1, cm-1, ea-1, ea-5
  - a. Renewed Vanguard (12/2024 – 12/2025).

#### December 4, 2024

- 1. Pages b-1, c-1, d-1, f-1, i-1, n-1, o-1, q-1, x-1, aa, ab, ac-1, ai-2, ao-1, ba-1, bs-1, cs-1, dy-1, ek-1.
  - a. Renewed Romagnole (12/2024 – 12/2025).
- 2. Pages u-2, u-3, ah-1, bv-1, by-1, dt-1.
  - a. Renewed MacLean (12/2025 – 12/2025).

#### October 4, 2024

- 1. Page be-1
  - a. Renewed and Revised Tavrida (10/2024 – 10/2025).

#### September 11, 2024

- 1. Pages c-1, d-1, n-1, o-1, u-1, x-1, aa, ab, ai-1, ai-2, ai-4
  - a. Renewed Powerline Hardware (Hobb) (9/2024 – 9/2025).

#### August 28, 2024

- 1. Pages a-1, a-1.1, k-1, k-1.1, k-2, z-1, z-6, z-7, af-1, cm-1, ea-1
  - a. Renewed Powerline Hardware (8/2024 – 8/2025).

#### July 24, 2024

- 1. Pages av-1, av-5, av-6, Uhv-3
  - a. Renewed Coreal (7/2024 – 7/2025)

#### July 23, 2024

- 1. Pages a-1, a-1.1, cm-1, ea-1
  - a. Renewed PPC (7/2024 – 7/2025)

#### June 5, 2024

1. Pages s-1; w-1; aj-1; ap-2; bh-1.
  - a. Renewed Powerline Hardware (Hobb) (6/2024 – 6/2025).

May 28, 2024

1. Page av-5
  - a. Renewed Sierra Cables PLC (5/2024 – 5/2025).

April 30, 2024

1. Pages y-2, ai-1, ai-3, ai-4, ai-5
  - a. Renewed Coppersteel Bimetalicos Ltda. and Intelli (5/2024 – 5/2025)

April 11, 2024

1. Pages c-1; f-1; i-1; n-1; o-1; aa,ab
  - a. Renewed Aluma-Form (4/2024 – 4/2025)

April 10, 2024

1. Pages b-1, f-1
  - a. Renewed Powerline Hardware (Hobb) (4/2024 - 4/2025)

April 2, 2024

1. Pages av-5, Uhv-3, Uhv-4
  - a. Renewed Interamericana de Cables Venezuela S.A. (ICV, S.A.) (4/2024 – 4/2025)

March 22, 2024

1. Page y-1
  - a. Renewed Hascelik (3/2024 – 3/2025)
  
2. Pages av-1; av-6; av(1); av(5).
  - a. Renewed Apar (3/2024 – 3/2025).
  - b. Added Apar to pages av(1) and av(5).

February 15, 2024

1. Page ap-2
  - a. Powerline Hardware
    - i. Updated to include P1520CC, P1530CC (5/2023 – 5/2024)

January 24, 2024

1. Pages ai-1, ai-3, ai-4, ai-5
  - a. Renewed Kopell (1/2024 – 1/2025)

December 7, 2023

1. Pages a-1; a-1.1; k-1; k-1.1; cm-1; ea-1
  - a. Renewed Newell-PSN, LLC (12/2023 – 12/2024)
  
2. Page ae-1
  - a. Added Balestro/H-J
    - i. PROTÉGÉ+ (12/2023 – 12/2024)

October 17, 2023

1. Pages c-1, f-1, v-2, aa,ab, cu-1, gj-1
  - a. Renewed Hubbell Power Systems (10/2023 – 10/2024)

### October 16, 2023

1. Pages y-1, y-2, av-1, av-4, av-5, av-6, Uhv-2, Uhv-3, Uhv-4
  - a. Renewed Shanghai Silin Special Equipment Co. Ltd. (Priority Wire & Cable) (10/2023 - 10/2024)
  - b. Revised World Lighting Cable Co., Ltd. to Xiantong Wire and Cable Co., Ltd.
  - c. Renewed Xiantong Wire and Cable Co., Ltd. (Priority Wire & Cable) (10/2023 - 10/2024)

### September 13, 2023

1. Pages l-1, ej-1
  - a. Updated GPP Solutions (9/2023 – 9/2024)
    - i. SODC-xxx series

### August 16, 2023

1. Revised “Grid Power Products” to GPP Solutions.
2. GPP Solutions
  - a. Renewed GPP Solutions (8/2023 – 8/2024)
    - i. Pages b, c, d, f, i, l, n, o, q, s, u, v, x, aa, ab, ao, as, aw, ba, bh, bj, bo, br, bs, ci, cs, cz, da, eb, ek, ft
  - b. Added GPP Solutions (8/2023 – 8/2024)
    - i. Page l-1 – Deadend Clamps
      1. AQC57N, AQC52N
    - ii. Page w-1 – Guy Strain Insulators
      1. GL15 Series
    - iii. Page bx-2 - Automatic Splices
      1. ALLS-4, ALLS-40, ALLS- 477-556

### July 12, 2023

1. Pages a, k, af, cm, ea
  - a. Renewed Powerline Hardware (7/2023 – 7/2024)
2. Pages c-1, d-1, n-1, o-1, u-1, x-1, z-1, z-6, z-7, aa, ab, ai-1, ai-2, ai-4
  - a. Renewed Powerline Hardware (Hobb) (7/2023 – 7/2024)
3. Pages u-2, u-3, bv-1, dt-1
  - a. Renewed Mosdorfer (7/2023 – 7/2024)

### July 7, 2023

1. Pages av-1, av-5, av-6, Uhv-3
  - a. Renewed Coreal (7/2023 – 7/2024)

### June 30, 2023

1. Pages av-1, av-6
  - a. Added JSK Industries Pvt. Ltd. (6/2023 – 6/2024)

### June 26, 2023

1. Pages u-2, u-3, ah-1, bv-1, by-1, dt-1
2. Renewed MacLean Power Systems (6/2023 – 6/2024)

### June 2, 2023

1. Page av-5
  - a. Added Sierra Cables PLC (6/2023 – 6/2024)

May 5, 2023

1. Pages s-1, w-1, aj-1, ap-2, bh-1
  - a. Renewed Powerline Hardware (Hobb) (5/2023 – 5/2024)

March 28, 2023

1. Page y-1
  - a. Renewed Hascelik (3/2023 – 3/2024)

March 23, 2023

1. Pages c-1, n-1
  - a. Renewed Centennial (3/2023 – 3/2024)

March 22, 2023

1. Pages a-1, a-1.1, cm-1, ea-1
  - a. Renewed PPC Insulators (3/2023 – 3/2024).

March 17, 2023

1. Page ai-3, y-2
  - a. Renewed Intelli and Coppersteel Bimetalicos (3/2023 – 3/2024)

March 14, 2023

1. Page av-6
  - a. Revised technical acceptance period to 3/2023 – 3/2024.

March 13, 2023

1. Pages av-1, av-6
  - a. Renewed Apar Industries, Ltd.

February 15, 2023

1. Pages b-1, f-1, f-3
  - a. Added Powerline Hardware (Hobb) (2/2023 – 2/2024)
    - i. Catalog numbers: P720, P720Z, P740, P740Z, P25179, P25179Z, P203, P203Z, P221, P221Z, P647, P647Z, P3322, P3322Z, P3324 and P3324Z.

January 30, 2023

1. Pages av-5, U hv-3, U hv-4
  - a. Renewed Interamericana de Cables Venezuela (ICV) (1/2023 – 1/2024)

January 24, 2023

1. Pages c-1, d-1, n-1, o-1, u-1, x-1, z-1, z-6, z-7, aa, ab, ai-1, ai-2, ai-4
  - a. Renewed Powerline Hardware (Hobb) (1/2023 – 1/2024)

July 26, 2022

1. Added page U hv-4
  - a. Cable, Underground, 600 Volt Cable (Alternative Cable Constructions)

July 20, 2022

1. Pages y-1, y-2, av-1, av-4, av-5, av-6, U hv-2, U hv-3
  - a. Renewed Priority Wire & Cable (7/2022 – 7/2023)

July 19, 2022

1. Pages a-1, a-1.1, k-1, k-2, af-1, cm-1, ea-1

- a. Renewed Powerline Hardware (7/2022 – 7/2023)

July 6, 2022

1. Page ap-2
  - a. Added TE Connectivity (7/2022 – 7/2023)
    - i. Catalog numbers THLA, THLB

June 10, 2022

1. Pages p-8, p-9, p-11
  - a. Added TE Connectivity (6/2022 – 6/2023)
    - i. Catalog numbers TCC and BAT

May 25, 2022

1. Renewed Grid Power Products (5/2022 – 5/2023).

March 29, 2022

1. Pages ai-3, ai-5.
  - a. added TE Connectivity (3/2022 – 3/2023).
    - i. Catalog number GRCU-58, GRCU-34, GRCS-58, GRCS-34.

March 28, 2022

1. Pages av-1, av-5, av-6, Uhv-3.
  - a. Renewed Coreal (3/2022 – 3/2023).

March 25, 2022

1. Section ai – Ground Rods
  - a. Revised page numbering for consistency: page ai(1) changed to ai-4; page ai(3) changed to ai-5.

March 23, 2022

1. Pages s-1, bh-1
  - a. Added Powerline Hardware (3/2022 – 3/2023).
    - i. Catalog numbers P0322, P1626, P0313, P1300, P1399, P093.

March 10, 2022

1. Page w-1
  - a. Renewed Powerline Hardware (3/2022 – 3/2023).
  - b. Corrected “PCE” to “PCTE”.

March 7, 2022

1. Pages aj-1, ap-2
  - a. Renewed Powerline Hardware (3/2022 – 3/2023).

January 18, 2022

1. Pages f-1, v-2, aa,ab, cu-1, gj-1
  - a. Renewed Hubbell Power Systems (1/2022 – 1/2023).

December 2, 2021

1. Pages av-1, av-6
  - a. Renewed Apar Industries (12/2021 – 12/2022).

December 1, 2021

1. Pages c-1, d-1, n-1, o-1, u-1, x-1, z-1, z-6, z-7, aa, ab, ai-1, ai-2, ai-3, ai(1), ai(3)

- a. Renewed Powerline Hardware (Hobb) (12/2021 – 12/2022).
- b. Renewed Kopell Grounding Systems (12/2021 – 12/2022).

#### November 26, 2021

1. Pages u-2, u-3, ah-1, bv-1, by-1, dt-1
  - a. Renewed MacLean Power Systems (11/2021 – 11/2022).

#### November 24, 2021

1. Pages ai-3, y-2
  - a. Renewed Intelli - Coppersteel Bimetalicos (11/2021 – 11/2022).

#### November 23, 2021

1. Pages be-1, el-1
  - a. Renewed Tavrida (11/2021 – 11/2022).
  - b. Added OSM35 model.
  - c. Revised Tavrida product descriptions on page be-1.

#### November 17, 2021

1. Pages av-5, Uhv-2, Uhv-3.
  - a. Renewed for Interamericana de Cables Venezuela, S.A (ICV) (11/2021 – 11/2022)

#### October 15, 2021

1. Page y-1
  - a. Renewed for Hascelik.

#### October 14, 2021

1. Pages c-1, f-1, i-1, n-1, o-1, aa,ab
  - a. Renewed Technical Acceptance for Aluma Form (10/2021 – 10/2022).

#### September 15, 2021

1. Pages a-1, cm-1, ea-2, ea(6)
  - a. Added Vanguard Electric, LLC (9/2021 – 9/2022)
    - i. Catalog Numbers: 53-1 SG1, 53-2 SG1, 53-4 SG1
    - ii. Catalog Numbers: 55-2 SG1, 55-3 SG1, 55-4 SG1, 55-5 SG1, 55-6 SG1
    - iii. Catalog Numbers: 5601SG1, 5603SG1, 5604SG1
    - iv. Catalog Numbers: 5701SSG1, 5702SSG1, 5703SSG1, 5711SSG1, 5712SSG1, 5713SSG1

#### June 15, 2021

1. Pages a-1, a-1.1, k-1, k-1.1, k-2, af-1, cm-1, ea-1
  - a. Renewed Technical Acceptance for Powerline Hardware (6/2021 – 6/2022)

#### June 10, 2021

1. Pages b-1, f-1
  - a. Added Line Hardware (6/2021 – 6/2022)
    - i. Catalog numbers PTP-202, PTP-202A, LVP-585A, HVP-587

#### May 18, 2021

1. Pages y-1, y-2, av-1, av-4, av-5, av-6, av(5), Uhv-2, Uhv-3.
  - a. Renewed Technical Acceptance for Shanghai Silin Special Equipment Co., Ltd. (Priority Wire & Cable, INC) (5/2021 – 5/2022).

#### April 26, 2021

1. Pages a-1, a-1.1, k-1, k-1.1, cm-1, ea-1
  - a. Renewed Technical Acceptance for Newell-PSN (April 2021 – April 2022)

#### March 22, 2021

1. Pages av-4, av-5, UHV-2, UHV-3
  - a. Added World Lighting Cable Co, Ltd. (Priority Wire & Cable, INC) (3/2021 – 3/2022)
  - b. Corrected: page UHV-3 to include Shanghai Silin Special Equipment Co., LTD. (Priority Wire & Cable, INC), which was omitted in previous versions.

#### March 8, 2021

1. Pages a-1, a-1.1, a-2, cm-1, ea-1
  - a. Renewed Technical Acceptance for PPC Insulators (3/2021 – 3/2022).
  - b. Revised PPC catalog number for ANSI Class 57-1 (15kV) from 5127 to 5125 on page ea-1.
  - c. Removed PPC polymer pin insulators on page a-2: HDPE 15F, HDPE 25-F, HDPE 35-F.
  - d. Removed footnotes on pages a-1, a-1.1, as neither applies to any manufacturer listed on both pages.

#### January 27, 2021

1. Pages w-1, aj-1, ap-2
  - a. Renewed Technical Acceptance for Powerline Hardware (1/2021 – 1/2022).

#### January 15, 2021

1. Pages av-1, av-5, av-6, UHV-3
  - a. Renewed Technical Acceptance for Coreal (1/2021 – 1/2022)

#### January 8, 2021

1. Pages b-1, c-1, d-1, f-1, i-1, l-2, n-1, o-1, q-1, s-1, u-2, v-1, v-2, x-1, aa, ab, ao-1, as-1, aw-1, ba-1, bh-1, bj-1, bo-1, br-1, bs-1, ci-1, cs-1, cz-1, da-1, eb-1, ek-1, ft-1.
  - a. Renewed Technical Acceptance for Grid Power Products (1/2021 – 1/2022)

#### December 22, 2020

1. Page k-2
  - a. Renewed Technical Acceptance for Powerline Hardware (Yikun) (12/2020 – 12/2021)

#### December 18, 2020

1. Pages c-1; d-1; n-1; o-1; u-1; x-1; z-1,6,7; aa; ab; ai-1,2,(1)
  - a. Renewed Technical Acceptance for Powerline Hardware (Hobb) (12/2020 – 12/2021).

#### December 16, 2020

1. Pages f-1, v-2, aa,ab, cu-1, gj-1
  - a. Renewed Technical Acceptance for Hubbell (12/2020 – 12/2021)

#### December 15, 2020

1. Pages al-1
  - a. Renewed Technical Acceptance for Paslode (12/2020 – 12/2021).

#### December 11, 2020

1. Page ap
  - a. Added Connector Manufacturing Co., LLC (12/2020 – 12/2021)
    - i. Catalog numbers: HLA2/0, HLA2/0T, HLA400, HLA400T, HLB2/0, HLB2/0T, HLB2/0LD, HLB2/0LDT, HLB400, HLB400T

December 8, 2020

1. Page k-2
  - a. Added TE Connectivity (12/2020 – 12/2021)
    - i. Catalog numbers: TE-DS15-CT-11, TE-DS28-CT-11, TE-DS35-CT-11, TE-DS46-CT-11, TE-DS69-CT-11
2. Page ea-4
  - a. Added TE Connectivity (12/2020 – 12/2021)
    - i. Catalog numbers: TE-LP15-FS1-01, TE-LP25-FS1-01, TE-LP35-FS1-01, TE-LP15-CS1-01, TE-LP25-CS1-01, TE-LP35-CS1-01

November 2, 2020

1. Page aj-1
  - a. Added TE Connectivity (11/2020 – 11/2021)
    - i. Catalog numbers: TGRL58

October 23, 2020

1. Page p-8
  - a. Added TE Connectivity (Raychem RPG) (11/2020 – 11/2021)
    - i. Catalog Numbers: TCU, TAH

July 17, 2020

1. Renewed Technical Acceptance for ICV (7/2020 – 7/2021)
  - a. Pages av-5, Uhv-2, Uhv-3

June 30, 2020

1. Renewed Technical Acceptance for Powerline Hardware (6/2020 – 6/2021)
  - a. Pages a-1, a1.1, k-1, k-1.1, af-1, cm-1, ea-1

June 17, 2020

1. Renewed Technical Acceptance for MacLean Power Systems (6/2020 – 6/2021)
  - a. Pages u-2; u-3; ah-1; by-1; dt-1

June 9, 2020

1. Renewed Technical Acceptance for Kopell Grounding Systems Pvt., Ltd. (6/2020 – 6/2021)
  - a. Pages ai-1; ai-3; ai(1); ai(3)

June 1, 2020

1. Added Hascelik (6/2020 – 6/2021)
  - a. Page y-1

May 19, 2020

1. Renewed Technical Acceptance for Apar Industries (5/2020 – 5/2021)
  - a. Pages a-1; a-6

May 13, 2020

1. Renewed Technical Acceptance for Newell-PSN (5/2020 – 5/2021)
  - a. Pages a-1; a-1.1; k-1; cm-1; ea-1

April 29, 2020

1. Renewed Technical Acceptance for Romagnole (4/2020 – 4/2021)
  - a. Pages b-1, c-1, d-1, f-1, i-1, n-1, o-1, q-1, x-1, aa, ab, ac-1, ai-2, ao-1, ba-1, bb-1, bs-1, cs-1, dy-1, ek-1

#### April 7, 2020

1. Renewed Technical Acceptance for Aluma-Form (4/2020 – 4/2021)
  - a. Pages c-1, f-1, i-1, o-1, aa;ab, dy-1

#### April 2, 2020

1. Renewed Technical Acceptance for Intelli and Coppersteel Bimetalicos Ltda. (4/2020 – 4/2021)
  - a. Pages ai-3, y-2

#### March 24, 2020

1. Granted Technical Acceptance to TE Connectivity (3/2020 – 3/2021)
  - a. Pages ai-1, ai-3

#### March 19, 2020

1. Renewed PPC Insulators (Mar 2020 – Mar 2021)
  - a. Pages a-1, a-1.1, a-2, cm-1, ea-1
  - b. Correction on page ea-1: Revised “5127” to “5125” in the ANSI 57-1 column.

#### March 16, 2020

1. Renewed Technical Acceptance for Powerline Hardware (Hobb International) (Mar 2020 – Mar 2021)
  - a. Pages w-1, ap-2
2. Renewed Technical Acceptance for Priority Wire & Cable (Mar 2020 – Mar 2021)
  - a. Shanghai SiLin
    - i. Pages y-1, y-2, av-1, av-4, av-5, av-6, av(5), U hv-2
  - b. Handsun
    - i. Pages ai-1, ai-3

#### March 10, 2020

1. Renewed Technical Acceptance for Fujian and Suzhou (Mar 2020 – Mar 2021)
  - a. Pages a-1, a-1.1, k-1, k-1.1, cm-1, ea-1

#### February 10, 2020

1. Updated all references of “U-1” to “7 CFR 1728.204”.
  - a. Page U hv-1.

#### January 9, 2020

1. Correction to Page aj-1
  - a. Powerline Hardware clamp P 58 is also suitable for copper covered ground rods.

#### January 8, 2020

1. Page aj-1 Ground Rod Clamp
  - a. Added Powerline Hardware (1/2020 – 1/2021)
    - i. Cat#: P 58

#### January 7, 2020

1. Added Centennial Infrastructure Products (1/2020 – 1/2021)
  - a. Page c-1 Machine Bolts
  - b. Page n-1 Double Arming Bolts

#### November 21, 2019

1. Renewed Technical Acceptance for Grid Power Products 11/2019 – 11/2020.

- a. Pages b-1, c-1, d-1, f-1, i-1, l-1, n-1, o-1, q-1, s-1, u-2, v-1, v-2, x-1, aa, ab, ao-1, as-1, aw-1, ba-1, bh-1, bj-1, bo-1, br-1, bs-1, ci-1, cs-1, cz-1, da-1, eb-1, ek-1, ft-1,

November 14, 2019

1. Renewed Technical Acceptance for Coreal 11/2019 – 11/2020.
  - a. Pages av-1, av-5, av-6, Uhv-3

October 15, 2019

1. Renewed Technical Acceptance for Powerline Hardware (Yikun) 10/2019 – 10/2020.
  - a. Page k-2 – Insulators, distribution deadend, polymer
2. Renewed Technical Acceptance for Powerline Hardware (Hobb) 10/2019 – 10/2020.
  - a. Pages c-1, d-1, n-1, o-1, u-1, x-1, z-1, z-6, z-7, aa, ab, ai-1, ai-2, ai(1)

September 25, 2019

1. Renewed Technical Acceptance for Peak Demand Inc. 9/2019 – 9/2020.
  - a. a-1 Insulators, pin type, porcelain
  - b. a-2 Insulators, pint type, polymer
  - c. k-2 – Insulator, polymer distribution deadend
  - d. sd-1 Current Transformers Outdoor Type

August 28, 2019

1. Revised and Renewed Tavrida listing to upgraded max. rating of 800A. 8/2019 – 8/2020.
  - a. be-1 – Recloser, vacuum interruption with solid dielectric
  - b. el-1 – Sectionlizer

August 26, 2019

1. Renewed Technical Acceptance for Powerline Hardware 8/2019 – 8/2020.
  - a. k-2 Insulator, polymer distribution deadend
  - b. z-1 Anchors, expanding plate
  - c. z-6 Anchors, power-installed screw

August 16, 2019

1. Removed Smart Grid Solutions (*these items have been moved to the [domestic List of Materials](#)*)
  - a. go-1 Fault Indicators, overhead
  - b. Ugo-1 Fault Indicators, underground

June 21, 2019

1. Renewed Technical Listing for Smart Grid Solutions 6/2019 – 6/2020
  - a. Pages go, Ugo

June 7, 2019

1. Renewed Technical Listing for MacLean Power Systems 6/2019 – 6/2020
  - a. Pages u-2, u-3, ah-1, bv-1, dt-1

May 24, 2019

1. Renewed Technical Listing for Interamericana de Cables Venezuela S.A. (ICV, S.A.)5/2019 – 5/2020.
  - a. Pages av-5, Uhv-2, Uhv-3

April 16, 2019

1. Renewed Technical Listing for Powerline Hardware 4/2019 – 4/2020.
  - a. Pages a-1, a-1.1, k-1, k-1.1, af-1, cm-1, ea-1

#### April 1, 2019

1. Revised listing for Tavrida from 630A to 800A max rating.
  - a. Pages be-1 and el-1.

#### February 7, 2019

1. Renewed Technical Acceptance for Kopell Grounding Systems 2/2019 – 2/2020.
  - a. Pages ai-1, ai-3, ai(1), ai(3)

#### February 6, 2019

1. Added Grid Power Products 2/2019 – 2020.
  - a. Pages l-2, u-2, cz-1

#### January 31, 2019

1. Renewed Technical Acceptance for PPC Insulators 2/2019 – 2/2020.
  - a. Pages a-1, a-1.1, a-2, cm-1, ea-1

#### January 30, 2019

1. Renewed Technical Acceptance for Newell-PSN and Mustang Electric 2/2019 – 2/2020.
  - a. Pages a-1, a1.1, k-1, k-1.1, cm-1, ea-1

#### December 14, 2018

1. Renewed Technical Acceptance for Priority Wire & Cable 12/2018 – 12/2019
  - a. y-1 - Galvanized Steel Strand
  - b. ai-1 - Rods, Ground, 13-mil
  - c. ai-3 - Rods, ground, sectional, 13-mil
  - d. av-1 - Conductor, ACSR
  - e. av-4 - Conductor, Service, (Single conductor)
  - f. av-5 - Conductor, Service Cable, (Triplex and Quadruplex)
  - g. av-6 - Conductor, Aluminum Alloy (AAAC)
  - h. av(5) - Conductor, Twisted Pair (T-2 & VR type)
  - i. UHV-2 Cable, Underground, 600V

#### December 7, 2018

1. Renewed Technical Acceptance for Powerline Hardware 12/2018 – 12/2019
  - a. w-1 Insulator, guy strain, fiberglass
  - b. ap-2 Hotline Clamps

#### November 30, 2018

1. UGK-1 Terminations, Indoor
  - a. Added TE Connectivity
    - i. Catalog numbers: CSTI-xxxJ Series (15, 25, 35 kV), CSTI-xxxG (with grounding kit) Series (15, 25, 35 kV) (11/2018 – 11/2019)
2. UGK-2 Terminations, Outdoor
  - a. Added TE Connectivity-Energy
    - i. Catalog numbers: CSTO-xxxJ Series (15, 25, 35 kV), CSTO-xxxG (with grounding kit) Series (15, 25, 35 kV) (11/2018 – 11/2019)

#### November 29, 2018

1. k-2 – Insulator, polymer distribution deadend
  - a. Added Peak Demand
    - i. Catalog numbers: CDI-DS-15, CDI-DS-28, CDI-DS-35

November 27, 2018

1. Corrections made to Newell-PSN, LLC (Mustang Electric)
  - a. a-1, a-1.1 – Insulator, pin type
  - b. k-1, k-1.1 – Insulator, suspension
  - c. cm-1 – Insulator, Spool
  - d. ea-1 - Insulator and stud, post type, vertical

October 26, 2018

1. b, c, d, f, I, n, o, q, s, v, x, aa, ab, as, ao, aw, ba, bh, bj, bo, br, bs, ci, cs, da, eb, ek, ft
  - a. Renewed Technical Acceptance for Grid Power Products 10/2018 – 10/2019

October 12, 2018

1. av-1, av-5, av-6, UHV-3
  - a. Renewed Technical Acceptance for Coreal 10/2018 – 10/2019
2. f-1
  - a. Added Aluma-Form 10/2018 – 10/2019
    - i. AF203, AF647

October 5, 2018

1. u-2, u-3, bv-1, dt-1
  - a. Renewed Technical Acceptance for Mosdorfer 10/2018 – 10/2019

September 25, 2018

2. av-4, av-5
  - a. Added Priority Wire & Cable 9/2018 – 9/2019

September 21, 2018

1. k-1, k-1.1
  - a. Renewed Technical Acceptance for Lapp Insulators LLC 9/2018 – 9/2019
2. c-1; d-1; n-1; o-1; u-1; x-1; aa,ab; ai-1, ai-2, ai(1)
  - a. Renewed Technical Acceptance for Powerline Hardware 9/2018 – 9/2019

September 7, 2018

1. a-1, a-1.1, k-1, k-1.1, cm-1, ea-1
  - a. Renewed Technical Acceptance for Fujian Hoshing Prosper Electrical Porcelain, Co., Ltd. 9/2018 – 9/2019
2. k-1, k-1.1, ea-1
  - a. Renewed Technical Acceptance for Suzhou Porcelain Insulator Works 9/2018 – 9/2019.

September 6, 2018

1. a-1, a-1.1, k-1, k-1.1, cm-1, ea-1
  - a. Renewed Technical Acceptance for Action Manufacturing 9/2018 – 9/2019.

August 14, 2018

1. a-2
  - a. Added Gamma Corona
    - i. Catalog numbers PPT series 8/2018 – 8/2019.

August 3, 2018

1. be-1, el-1
  - a. Renewed Technical Acceptance for Tavrida 8/2018 – 8/2019.

August 1, 2018

1. z-1, z-6, z-7, af-1
  - a. Renewed Technical Acceptance for Powerline Hardware.

July 31, 2018

1. Pages a-1, a-1.1, cm-1, ea-1
  - a. Revised “Mustang Electric” to “Newell-PSN, LLC”.
    - i. Newell has purchased Mustang Electric.

July 20, 2018

1. Uhv-1
  - a. Revised listing format to make Insulation options clearer.

July 3, 2018

1. Pages Uhv-2
  - a. Renewed Technical Acceptance for Changfeng Wire & Cable 7/2018 – 7/2019

June 28, 2018

2. Pages c-1, f-1, v-2, aa/ab, cu-1, eb-1, gj-1
  - a. Renewed Technical Acceptance for Hubbell Power Systems 6/2018 – 6/2019

June 27, 2018

3. Pages a-1, a-1.1, cm-1, ea-1
  - a. Renewed Technical Acceptance for Mustang Electric Power Products, Inc. 6/2018 – 6/2019

June 5, 2018

4. Pages av-5, Uhv(2), Uhv(3)
  - a. Renewed Technical Acceptance for Interamericana de Cables Venezuela, S.A. (ICV) 6/2018 – 6/2019.

May 25, 2018

1. Pages ah-1 Insulator Ties; bv-1 Armor Rods
  - a. Renewed Technical Acceptance for MacLean Power Systems 5/2018 – 5/2019

May 4, 2018

1. Pages c-1, i-1, n-1, o-1, aa-1.
  - a. Renewed Technical Acceptance for Aluma-Form 5/2018 – 5/2019.
2. Page av-1 Conductor, ACSR
  - a. Renewed Technical Acceptance for Jiangsu Zhongtian Technology Co., Ltd (ZTT) 5/2018 – 5/2019

April 27, 2018

1. Pages a-1, a-1.1; k-1, k-1.1; cm-1; ea-1; af-1
  - a. Renewed Technical Acceptance for Powerline Hardware 4/2018 – 4/2019

April 13, 2018

1. Multiple pole line hardware pages.
  - a. Renewed acceptance for Romagnole 4/2018 – 4/2019.

March 19, 2018

1. Page U hv-2 Cable, Underground, 600V Cable
  - a. Added Electrocables 3/2018 – 3/2019
2. Page U hv-3 Cable, Underground, 600 Volt Multi-Conductor Cable
  - a. Added Electrocables 3/2018 – 3/2019

### March 8, 2018

1. Page bx-2 Automatic Splices
  - a. Added Powerline Hardware (Hobb) 3/2018 – 3/2019
    - i. Catalog numbers: PLH-42, PLH-1020, PLH-266336, PLH-397477

### February 16, 2018

1. Page ae-1 Surge (lightning) Arrester, Distribution Class
  - a. Siemens
    - i. Added catalog number 3EK8 (3-36, 3-27 ratings) 2/2018 – 2/2019
    - ii. Renewed Technical Acceptance for catalog number 3EK7. 2/2018 – 2/2019

### January 26, 2018

1. Page ai-1 Rods, Ground, 13-mil
  - a. Renewed Technical Acceptance for Kopell Grounding Systems Pvt., Ltd. 1/2018 – 1/2019.
2. Page ai-3 Rods, ground, sectional, 13-mil
  - a. Renewed Technical Acceptance for Kopell Grounding Systems Pvt., Ltd. 1/2018 – 1/2019.
3. Page ai(1) Rods, Ground, 10-mil
  - a. Renewed Technical Acceptance for Kopell Grounding Systems Pvt., Ltd. 1/2018 – 1/2019.
4. Page ai(3) Rods, ground, sectional, 10-mil
  - a. Renewed Technical Acceptance for Kopell Grounding Systems Pvt., Ltd. 1/2018 – 1/2019.

### November 21, 2017

5. Page a-1 Insulator, pin type
  - a. Renewed Technical Acceptance for Newell-PSN, LLC Nov 2017 – Nov 2018
6. Page a-1.1 Insulator, pin type
  - a. Renewed Technical Acceptance for Newell-PSN, LLC Nov 2017 – Nov 2018
7. Page k-1 Insulators, suspension
  - a. Renewed Technical Acceptance for Newell-PSN, LLC Nov 2017 – Nov 2018
8. Page k-1.1 Insulators, suspension
  - a. Renewed Technical Acceptance for Newell-PSN, LLC Nov 2017 – Nov 2018

### November 1, 2017

1. Page av-1 – Conductor, ACSR
  - a. Renewed Technical Acceptance for Coreal 11/2017 – 11/2018
2. Page av-5 - Conductor, Service Cable, (Triplex and Quadruplex)
  - a. Renewed Technical Acceptance for Coreal 11/2017 – 11/2018
3. Page av-6 – Conductor, Aluminum Alloy (AAAC)
  - a. Renewed Technical Acceptance for Coreal 11/2017 – 11/2018
4. Page by-1 - Deadend, automatic and formed Type, ACSR
  - a. Renewed Technical Acceptance for MacLean Power Systems 11/2017 – 11/2018
5. Page dt-1 - Deadend, service
  - a. Renewed Technical Acceptance for MacLean Power Systems 11/2017 – 11/2018
6. Page U hv - Cable, Underground, 600 Volt Multi-Conductor Cable
  - a. Renewed Technical Acceptance for Coreal 11/2017 – 11/2018

### October 30, 2017

1. Page a-1 Insulators, pin type, porcelain
  - a. Added Peak Demand 10/2017 – 10/2018
    - i. Catalog numbers: PPT-55-2, PPT-55-3, PPT-55-4, PPT-55-5, PPT-55-6
2. Page a-2 Insulators, pint type, polymer
  - a. Added Peak Demand 10/2017 – 10/2018

- i. Catalog numbers: HPT-55-2, HPT-55-3, HPT-55-4, HPT-55-5, HPT-55-6

October 24, 2017

1. Renewed Technical Acceptance 10/2017 – 10/2018 for: Powerline Hardware on the following pages:
  - a. Page d-1 Washers, Flat, Flat Rolled Steel
  - b. Page u-1 Deadend for galvanized steel or aluminum-clad steel guy strand
  - c. Page w-1 Insulators, guy strain, (Fiber Reinforced Plastic)
  - d. Page ap-2 Clamp, hot line, ACSR with armor rods

September 15, 2017

1. Renewed Technical Acceptance 9/2017 – 9/2018 for: NGK-Locke, Inc. on the following pages:
  - a. k-1 Insulators, suspension
  - b. k-1.1 Insulators, suspension

September 7, 2017

1. Page sd-1 Current Transformers Outdoor Type
  - a. Added Peak Demand Inc.
    - i. Catalog numbers: COS-6, COM-6, COV-6, COL-6

September 5, 2017

2. Renewed Technical Acceptance 9/2017 – 9/2018 for: Powerline Hardware on the following pages:
  - a. c-1 – Bolt, machine
  - b. n-1 - Bolt, double arming
  - c. o-1 - Bolt, eye, oval
  - d. x-1 – Rod, anchor
  - e. aa – Nut, eye
  - f. ab – Nut, thimble eye
  - g. ai-1 - Rods, Ground, Copper-covered steel rods
  - h. ai-2 - Rods, Ground, hot-dip galvanized
  - i. ai(1) - Rods, Ground, 10-mil

July 31, 2017

3. Removed “(Fujian)” from Action Manufacturing listings.

July 27, 2017

1. Added Action Manufacturing (Fujian) from 7/2017 – 7/2018
  - a. Page a-1 – Insulator, pin type
    - i. Catalog numbers AMI-552GR, AMI-553GR, AMI-554GR
  - b. Page a-1.1 – Insulator, pin type
    - i. Catalog numbers AMI-561GR, AMI-563GR
  - c. Page k-1– Insulators, suspension
    - i. Catalog numbers AMI-529G, AMI-521G
  - d. Page k-1.1 – Insulators, suspension
    - i. Catalog numbers AMI-523G, AMI-524G
  - e. Page cm-1 – Insulator, Spool
    - i. Catalog numbers AMI-532G, AMI-531G
  - f. Page ea-1 - Insulator and stud, post type, vertical
    - i. Catalog numbers AMI-571G, AMI-571G, AMI-571G, AMI-572G, AMI-573G

July 21, 2017

1. Page k-2 Insulators, distribution deadend

- a. Renewed Technical Acceptance 7/2017 – 7/2018 for: Powerline Hardware (Yikun)
- b. Renewed Technical Acceptance 7/2017 – 7/2018 for: UAI (Zhejiang Gaoneng Electric Installation Co., Ltd.)

July 18, 2017

2. Renewed Technical Acceptance 7/2017 – 7/2018 for: MacLean Power Systems
  - a. Page a-1 Insulators, pin type
  - b. Page k-1 Insulators, suspension
  - c. Page cm-1 Insulators, spool
  - d. Page ea-1 Insulators, post type

June 27, 2017

3. Renewed Technical Acceptance 6/2017 – 6/2018 for: Paslode
  - a. Page al-1 Staples, ground wire
4. Renewed Technical Acceptance 6/2017 – 6/2018 for: Mosdorfer NA, Inc.
  - a. Page u-2 Deadend for galvanized steel guy strand
  - b. Page u-3 Deadend for aluminum clad steel guy strand
  - c. Page bv-1 Rods, armor
  - d. Page dt-1 Deadend, service

June 20, 2017

1. Page a-1.1 Insulators, pin type
  - a. Correction: PPC acceptance period May 2017 – May 2018

June 16, 2017

1. Page y-1 Galvanized Steel Strand
  - a. Renewed Technical Acceptance 6/2017 – 6/2018
    - i. Handsun Industry General Co. (Priority Wire & Cable, INC)
2. Page y-2 Steel Strand, aluminum clad
  - a. Renewed Technical Acceptance 6/2017 – 6/2018
    - i. Handsun Industry General Co. (Priority Wire & Cable, INC)
3. Page ai-1 Rods, Ground, 13-mil
  - a. Renewed Technical Acceptance 6/2017 – 6/2018
    - i. Handsun Industry General Co. (Priority Wire & Cable, INC)
4. Page ai-3 Rods, ground, sectional, 13-mil
  - a. Renewed Technical Acceptance 6/2017 – 6/2018
    - i. Handsun Industry General Co. (Priority Wire & Cable, INC)
5. Page av-1 Conductor, ACSR
  - a. Renewed Technical Acceptance 6/2017 – 6/2018
    - i. Handsun Industry General Co. (Priority Wire & Cable, INC)
6. Page av-4 Conductor, Service (Single conductor)
  - a. Renewed Technical Acceptance 6/2017 – 6/2018
    - i. Handsun Industry General Co. (Priority Wire & Cable, INC)
7. Page av-5 Conductor, Service Cable (Triplex and Quadruplex)
  - a. Renewed Technical Acceptance 6/2017 – 6/2018
    - i. Handsun Industry General Co. (Priority Wire & Cable, INC)
8. Page av-6 Conductor, Aluminum Alloy
  - a. Renewed Technical Acceptance 6/2017 – 6/2018
    - i. Handsun Industry General Co. (Priority Wire & Cable, INC)
9. Page av(5) Conductor, Twisted Pair (T-2 & VR type)
  - a. Renewed Technical Acceptance 6/2017 – 6/2018

- i. Handsun Industry General Co. (Priority Wire & Cable, INC)
- 10. Page Uhv-2 Cable, Underground, 600 Volt Cable
  - a. Renewed Technical Acceptance 6/2017 – 6/2018
    - i. Handsun Industry General Co. (Priority Wire & Cable, INC)

June 14, 2017

- 1. Added Grid Power Products to the following:
  - a. Page b-1 Pin, pole top, steel
    - i. U740Z, U720Z
  - b. Page c-1 Bolt, machine
  - c. Page d-1 Washers, Flat
    - i. U1076, U1079, U1080, U1081, U1086, U1088
  - d. Page f-1 Pin, Crossarm
    - i. U222Z, U3322Z
  - e. Page i-1 Bolt, carriage
  - f. Page n-1 Bolt, double arming
  - g. Page o-1 Bolt, eye, oval
  - h. Page q-1 Bolt, double upset
    - i. U2396
  - i. Page v-1 Guy Attachment
    - i. U25164, U6500, GA-64
  - j. Page v-2 Pole Plates
    - i. PEP88
  - k. Page x-1 Rod, anchor
  - l. Page aa,ab Nut, eye & Nut, thimble eye
    - i. U1092, U1093, U1126, U6510
  - m. Page ao-1 Bolt, strand eye, straight (thimble eye)
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    - i. PB58, PB58H
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    - i. U8583, U8584
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    - i. UYBC30

June 13, 2017

- 2. Page z-1 Anchors, expanding and plate
  - a. Added Powerline Hardware (Hobb)
    - i. Catalog numbers: P8135, P8135, P8135, P8135
- 3. Page z-7 Anchors, no wrench screw

- a. Added Powerline Hardware (Hobb)
  - i. Catalog numbers: P6524, P6526, P6528, P6550

May 30, 2017

- 1. Page av-5 Conductor, Service Cable (Triplex and Quadruplex)
  - a. Renewed Interamericana de Cables Venezuela S.A. (ICV, S.A.)
- 2. Page U hv (2) U hv - Cable, Underground, 600 Volt Cable (Alternative Cable Constructions)
  - a. Renewed Interamericana de Cables Venezuela S.A. (ICV, S.A.)
- 3. Page U hv-3 Cable, Underground, 600 Volt Multi-Conductor Cable
  - a. Renewed Interamericana de Cables Venezuela S.A. (ICV, S.A.)

May 25, 2017

- 1. Page a-1 Insulators, pin type, porcelain
  - a. Renewed PPC Insulators
- 2. Page a(2) Insulators, pin type, polymer
  - a. Added PPC Insulators
    - i. HDPE 15-C, HDPE 15-F, HDPE 25-F, HDPE 35-F
- 3. Page ea-1 Insulator and Stud, post type, vertical
  - a. Added PPC Insulators
    - i. Distribution: 5115, 5120, 5127
    - ii. Distribution or Transmission: 5127, 5135, 5145

April 14, 2017

- 1. Page af-1 Cutouts
  - a. Renewed listing for Powerline Hardware
    - i. Modified voltage ratings from 15, 27 and 36kV to 15, 25, 27 and 36kV for PLH porcelain series.
    - ii. Modified voltage ratings from 15, 27 and 36kV to 15, 24 and 33-36kV for SIL polymer series.
- 2. Page a-1 Pin Insulators
  - a. Added Mustang Electric Power Products, Inc.
    - i. Catalog numbers PIP553 and PIP554.
- 3. Page cm-1 Spool Insulators
  - a. Added Mustang Electric Power Products, Inc.
    - i. Catalog numbers SIP531 and SIP531.

TECHNICAL  
LIST OF MATERIALS  
Acceptable for Use on Systems  
of USDA Rural Development  
Electrification Borrowers

United States Department of Agriculture  
Rural Development Utilities Programs  
Electric Programs

Current as of May 5, 2025

DISCLAIMER

*Every effort has been made to ensure the accuracy of this document.  
However, in case of discrepancies, records of Technical Standards  
Committee "A" are the authoritative source.*

## PREFACE

This list supersedes all preceding issues including revisions. Revised sheets reflecting changes in the list will be issued quarterly and should be inserted in order to keep your copy up to date.

The items shown in this publication include material and equipment for transmission and distribution facilities. Items not listed include office equipment, tools and work equipment, items of electric general plant and consumer owned wiring facilities. The listings apply only to new items of material and equipment and not to used items.

In addition to items accepted on a general basis, this list also includes items accepted on a conditional basis. As one of the conditions in the acceptance of an item on a conditional basis, contractors are required to obtain the borrower's concurrence prior to its use.

The inclusion of an item in this list does not indicate that item's manufacturer or its principals have not been debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded pursuant to Executive Order 12549, Debarment or Suspension, or any rules or regulations issued thereunder, including 7 CFR Part 3017 ("Debarment Regulations"). Therefore, borrowers must comply with the requirements imposed by the Debarment Regulations before entering into any "covered transaction", as defined by 7 CFR Part 3017, involving any item on this list.

The acceptance of an additional item or the deletion of an existing item is a function of the Technical Standards Committees. Any manufacturer desiring to have a new item placed on the list, or any user believing an existing item should be removed from the list, is invited to submit the matter to the Committees. Any communication calling attention to an error or omission in the list, such as a wrong catalog number, an obsolete item, etc., will be appreciated. All communications should be addressed to Technical Standards Committee "A" (Electric), USDA Rural Development Utilities Programs, Stop 1569, Washington, D. C. 20250-1569.

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| Cutout extension bracket.....                                | fn |
| Cutouts and fuses.....                                       | af |

-D-

|  |    |
|--|----|
| Deadend clamp .....                    | l  |
| Deadend clamp with socket eye .....    | ej |
| Deadend for guy strand .....           | u  |
| Deadend for steel strand .....         | l  |
| Deadend, automatic & formed type ..... | by |
| compression .....                      | cp |
| secondary .....                        | cq |
| service .....                          | dt |
| Disconnect switch, hook operated ..... | sb |
| Double arming bolt .....               | n  |
| Double arming eye bolt .....           | dy |
| Double arming plate .....              | ct |
| Double upset bolt .....                | q  |

-E-

|                                   |    |
|-----------------------------------|----|
| Elliptical eye screw .....        | dq |
| End link (chain link) .....       | br |
| Extension link .....              | du |
| Extension link (fiberglass) ..... | eu |
| Eye bolt, double arming .....     | dy |
| oval .....                        | o  |
| Eye nut .....                     | aa |
| Eye screw, elliptical .....       | dq |

-F-

|   |    |
|---|----|
| Fiber reinforced plastic 24rossarm braces ..... | cu |
| Fuses and cutouts .....                         | af |
| Fuses, current limiting, backup .....           | ag |
| power, substation .....                         | af |

-G-

|   |    |
|---|----|
| Gain, pole .....                                    | bi |
| Grid gain .....                                     | bi |
| Ground rod clamp .....                              | aj |
| Ground rods .....                                   | ai |
| Ground wire clamp .....                             | dp |
| Ground wire clip .....                              | al |
| Ground wire staple .....                            | al |
| Ground wire support, overhead .....                 | ed |
| Ground wire, pole .....                             | cj |
| Ground, pole .....                                  | dh |
| Grounding conductor, substation, coated steel ..... | sr |
| Grounding connector, transformer .....              | bu |
| Guy attachment (Distribution) .....                 | v  |
| Guy attachment (Transmission) .....                 | fv |
| Guy clamp .....                                     | u  |
| Guy clip .....                                      | dz |
| Guy deadend .....                                   | u  |
| Guy hook .....                                      | bj |
| Guy marker .....                                    | at |
| Guy plate .....                                     | bk |

|  |    |
|--|----|
| Guy strain insulator .....                                   | w  |
| Guy wire .....   | y  |
| Guy wire clip.....   | dz |
| Guying plate .....   | fv |
| -H-  |    |
| H frame 25rossarm assembly (small angle – 161 & 230 kV)..... | gw |
| H frame 25rossarm assembly (tangent – 161 & 230 kV).....     | gy |
| Hangers, capacitor .....                                     | fd |
| Hook, ball .....   | eh |
| guy.....   | bj |
| Hook operated disconnect switch .....                        | sb |
| Hot line clamp .....   | ap |
| Hot line connector .....                                     | fi |
| -I-  |    |
| Insulated bracket.....                                       | da |
| Insulator and stud, post type.....                           | ea |
| Insulator, guy strain.....                                   | w  |
| pin type.....  | a  |
| polymer distribution deadend.....                            | k  |
| spool.....   | cm |
| suspension .....   | k  |
| -K-  |    |
| Keys, pole.....  | z  |
| -L-  |    |
| Laminated upswept arms .....                                 | fq |
| Lag screw .....  | j  |
| Link, chain (end link) .....                                 | br |
| extension.....   | du |
| extension (fiberglass).....                                  | eu |
| Locknuts .....   | ek |
| Loop deadend clamp.....                                      | bn |
| -M-  |    |
| Machine bolt.....  | c  |
| Marker, guy .....  | at |
| Meter sockets.....   | gb |
| Meters, wathour .....  | ga |
| -N-  |    |
| Narrow profile brackets and arm assemblies.....              | eq |
| Neutral bracket, offset.....                                 | ec |
| Numbers, pole and letters .....                              | az |
| Nut, eye.....  | aa |
| thimble eye.....   | ab |

-O-

|                                   |    |
|-----------------------------------|----|
| Offset neutral bracket.....       | ec |
| Oil circuit recloser bracket..... | fk |
| Oil circuit reclosers.....        | be |
| Oval eye ball.....                | fp |
| Oval eye bolt.....                | o  |
| Oval tube splice.....             | cx |
| Overhead ground wire support..... | ed |

-P-

|                                   |    |
|-----------------------------------|----|
| Pin type insulator.....           | a  |
| Pin, 26rossarm.....               | f  |
| pole top, steel.....              | b  |
| Pipe spacer.....                  | dl |
| Plastic wire guard.....           | er |
| Plate, 26rossarm reinforcing..... | eg |
| double arming.....                | ct |
| guy.....                          | bk |
| pole bearing.....                 | fs |
| pole eye.....                     | v  |
| Pole bearing plate.....           | fs |
| Pole eye plate.....               | v  |
| Pole gain.....                    | bi |
| Pole ground.....                  | dh |
| Pole ground wire.....             | cj |
| Pole keys.....                    | z  |
| Pole numbers and letters.....     | az |
| Pole top pin bracket.....         | cs |
| Pole top pin, steel.....          | b  |
| Post insulator bracket.....       | eb |
| Post type insulator and stud..... | ea |
| Power fuses, substation.....      | af |
| Primary metering rack.....        | fl |

-R-

|                                   |    |
|-----------------------------------|----|
| Rack, primary metering.....       | fl |
| Reclosers, automatic circuit..... | be |
| Regulator by-pass switch.....     | sk |
| Regulators, voltage.....          | sc |
| Rod, anchor.....                  | x  |
| Rods, armor.....                  | bv |
| ground.....                       | ai |

-S-

|                                |    |
|--------------------------------|----|
| Saddle 26rossarm.....          | fg |
| Screw, elliptical eye.....     | dq |
| lag.....                       | j  |
| Secondary swinging clevis..... | s  |
| Sectional ground rods.....     | ai |
| Sectionalizer.....             | el |
| Service deadend.....           | dt |
| Service deadend clevis.....    | bh |
| Service swinging clevis.....   | as |

|  |    |
|--|----|
| Shackle, anchor .....                                | bo |
| Shoulder eye bolt .....                              | o  |
| Shunt capacitors .....                               | fc |
| Sidearm diagonal 27rossarm brace .....               | ac |
| Sidearm vertical 27rossarm brace .....               | bb |
| Single upset bolt.....                               | bs |
| Sockets, meter .....                                 | gb |
| Spacer, pipe .....                                   | dl |
| Special 27rossarm braces.....                        | em |
| Splice cover, plastic .....                          | es |
| Splice for steel strand.....                         | cz |
| Splice, automatic .....                              | bx |
| compression .....                                    | cy |
| formed type .....                                    | ex |
| oval tube.....                                       | cx |
| Spool Insulator .....                                | cm |
| Spring washer .....                                  | aw |
| Staple, ground wire .....                            | al |
| Steel strand .....                                   | y  |
| Structure assembly (small angle – 161 & 230 kV)..... | gw |
| Structure assembly (tangent – 161 & 230 kV) .....    | gy |
| Substation grounding conductor, coated steel.....    | sr |
| Support, overhead ground wire.....                   | ed |
| Surge arresters .....                                | ae |
| Suspension clamp.....                                | m  |
| Suspension clamp with socket eye .....               | ei |
| Suspension insulator .....                           | k  |
| Swinging angle bracket .....                         | fu |
| Switch, capacitor oil .....                          | bz |
| combination power fuse and disconnect.....           | sl |
| hook operated disconnect.....                        | sb |
| pole top air break .....                             | cg |
| recloser, by-pass.....                               | sj |
| regulator by-pass .....                              | sk |

-T-

|   |    |
|---|----|
| Thimble clevises.....                         | ci |
| Thimble eye bolt, angle .....                 | ba |
| Thimble eye bolt, straight .....              | ao |
| Thimble eye nut.....                          | ab |
| Tie, insulator, formed type.....              | ah |
| Transformer bracket.....                      | dm |
| Transformer grounding connector.....          | bu |
| Transformer secondary bracket, insulated..... | fo |
| Transformers, current.....                    | sd |
| pole and power.....                           | an |
| voltage.....                                  | se |

-V-

|                                |    |
|--------------------------------|----|
| Vacuum circuit reclosers ..... | be |
| Voltage regulators .....       | sc |
| Voltage transformers.....      | se |

-W-

Washer, spring ..... aw  
Washers ..... d  
Watt-hour meters ..... ga  
Wildlife guards ..... rp  
Wire guard, plastic ..... er  
Wire, guy ..... y  
Wireholder ..... ar  
Wireholder, clevis type ..... bt  
    conduit ..... ds  
Wood 28rossarm brace ..... cu

-Y-

Y-clevis ball ..... ft

-Z-

"Z" type (wishbone) 28rossarm assembly ..... gz

INDEX – PART II  
Underground Distribution Equipment

|                                       |      |
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| Bracket, combination.....             | U hj |
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| Cable route marker .....              | U hx |
| Cable support.....                    | U hc |
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| transformer .....                     | U fz |
| Connector, secondary tap .....        | U fw |
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| Splice shield .....                   | U jb |
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| Transformer connector block .....     | U fz |
| Transformer pad.....                  | U ja |
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| Transformers.....                     | U an |
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**Technical List**  
**a-1**  
**December 5, 2024**

**a – Insulator, pin type**

|   | <b>ANSI Class:</b>                                      | <b><u>55-2</u></b> | <b><u>55-3</u></b> | <b><u>55-4</u></b> | <b><u>55-5</u></b> | <b><u>55-6</u></b> |
|---|---|--------------------|--------------------|--------------------|--------------------|--------------------|
| <b><u>Technical Acceptance Period</u></b> | <b><u>Manufacturer</u></b>                              |                    |                    |                    |                    |                    |
| Sept 2018 – Sept 2019                     | Action Manufacturing                                    | AMI-552GR          | AMI-553GR          | AMI-554GR          | AMI-555GR          | -                  |
| Oct 2013 – Oct 2014                       | Ceramica Santa Terezinha S.A. (CST)                     | -                  | CST-1180           | CST-1181           |                    |                    |
| Jul 2017 – Jul 2018                       | MacLean Power Systems                                   | -                  | DP55-3             | DP55-4             |                    |                    |
| Dec 2023 – Dec 2024                       | Newell-PSN, LLC   | 2355520            | 2355530            | 2355540            |                    |                    |
| Dec 2023 – Dec 2024                       | Newell-PSN, LLC (Mustang Electric Power Products, Inc.) | -                  | PIP553             | PIP554             | -                  | -                  |
| Mar 2020 – Mar 2021                       | Fujian Hoshing Prosper Electrical Porcelain, Co., Ltd.  | -                  | FHP5553G           | FHP5554G           |                    |                    |
| Sept 2019 – Sept 2020                     | Peak Demand Inc.  | PPT-55-2           | PPT-55-3           | PPT-55-4           | PPT-55-5           | PPT-55-6           |
| Aug 2024 – Aug 2025                       | Powerline Hardware                                      | P55-2GR            | P55-3GR            | P55-4GR            |                    |                    |
| Jul 2024 – Jul 2025                       | PPC Insulators  | 253-S              | 261-S              | 366-S              | 380-S              | 386-ST             |
| Dec 2024 – Dec 2025                       | Vanguard Electric, LLC                                  | 55-2 SG1           | 55-3 SG1           | 55-4 SG1           | 55-5 SG1           | 55-6 SG1           |

**Technical List**  
**a-1.1**  
**December 5, 2024**

**a – Insulator, pin type**

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>  | <u>ANSI Class:</u> | <u>56-1</u> | <u>56-3</u> | <u>56-4</u> |
|------------------------------------|--|--------------------|-------------|-------------|-------------|
| Sept 2018 – Sept 2019              | Action Manufacturing                                       |                    | AMI-561GR   | AMI-563GR   | -           |
| Oct 2013 – Oct 2014                | Ceramica Santa Terezinha S.A.<br>(CST)                     |                    | CST-23103   | CST-23105   | -           |
| Jul 2017 – Jul 2018                | MacLean Power Systems                                      |                    | DP56-1      | -           | -           |
| Dec 2023 – Dec 2024                | Newell-PSN, LLC  |                    | 2365610     | 2365630     | -           |
| Dec 2023 – Dec 2024                | Newell-PSN, LLC (Mustang<br>Electric Power Products, Inc.) |                    | PIP561      | -           | -           |
| Mar 2020 – Mar 2021                | Fujian Hoshing Prosper Electrical<br>Porcelain, Co., Ltd.  |                    | FHP6561G    | -           | -           |
| Aug 2024 – Aug 2025                | Powerline Hardware   |                    | P56-1GR     | P56-3GR     | P56-4GR     |
| Jul 2024 – Jul 2025                | PPC Insulators   |                    | 1027 ST     | 2045-S      | -           |
| Dec 2024 – Dec 2025                | Vanguard Electric, LLC                                     |                    | 5601SG1     | 5603SG1     | 5604SG1     |

a – Insulators, pin type (polymer)

|                                    | ANSI Class:            | <u>55-2</u> | <u>55-3</u> | <u>55-4</u> | <u>55-5</u>                              | <u>55-6</u>        | <u>55-7</u> |
|------------------------------------|------------------------|-------------|-------------|-------------|--|--------------------|-------------|
| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>    |             |             |             |  |                    |             |
| 8/2018 – 8/2019                    | Gamma Corona           | -           | PPT15CA     | PPT15FA     | PPT25FA<br>PPT25FB<br>PPT25JA<br>PPT25JB | PPT35FA<br>PPT35JA | PPT35JB     |
| 9/2019 – 9/2020                    | Peak Demand Inc.       | HPT-55-2    | HPT-55-3    | HPT-55-4    | HPT-55-5                                 | HPT-55-6           | -           |
| 12/2024 – 12/2025                  | Vanguard Electric, LLC | -           | P55-3 SG4   | P55-4 SG4   | -  | -                  | -           |

**b – Pin, pole top, steel**

DISTRIBUTION

| <u>Technical Acceptance Period</u> |                           |                          | <u>12.5/7.2 or<br/>13.2/7.62 kV</u> | <u>24.9/14.4 kV</u> |
|------------------------------------|---------------------------|--------------------------|-------------------------------------|---------------------|
|                                    |                           | Pin length, inches:      | 20                                  | 20                  |
|                                    |                           | Thread diameter, inches: | 1                                   | 1-3/8               |
|                                    |                           | Hole spacing, inches:    | 8                                   | 8                   |
|                                    |                           | RUS Specification:       | D-3                                 | DT-3                |
| 12/2024 – 12/2025                  | GPP Solutions             |                          | U740, U740Z                         | U720, U720Z         |
| 2/2014 – 2/2015                    | Milano                    |                          | 607                                 | 608                 |
| 12/2024 – 12/2025                  | Romagnole                 |                          | R-740                               | R-720               |
| 2/2025 – 2/2026                    | Line Hardware             |                          | PTP-202                             | PTP-202A            |
| 4/2025 – 4/2026                    | Powerline Hardware (Hobb) |                          | P720, P720Z                         | P740, P740Z         |

Pins listed below have 4-1/2" offset which eliminates the use of Item cs

|                 |                           |   |                 |
|-----------------|---------------------------|---|-----------------|
| 4/2025 – 4/2026 | Powerline Hardware (Hobb) | - | P25179, P25179Z |
|-----------------|---------------------------|---|-----------------|

TRANSMISSION

NOTE:

1. Flared type pins may be mounted with either side against the pole.

Technical List  
b-2  
April 25, 2025

b – Pin, pole-top  
(Non-lead threads)

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>  |
|------------------------------------|--|
| 4/2025 – 4/2026                    | <u>Powerline Hardware (Hobb)</u><br>P720Z – 1-3/8" threads<br>P740Z – 1" threads<br>P25179Z – 1-3/8" threads |

b – Pin, Fiber-reinforced plastic pole top

| <u>Manufacturer</u> | <u>Conditions</u> |
|---------------------|-------------------|
|---------------------|-------------------|

**Technical List**  
**c-1**  
**January 23, 2025**

**c – Bolt, machine**

Applicable Specification: ANSI C135.1, “Standards for Galvanized Steel Bolts and Nuts” except that the lengths are in the ranges given below.

|                   |   |
|-------------------|---|
| Applicable Sizes: | 1/2-inch diameter, 6 through 10-inch length |
|                   | 5/8-inch diameter, 6 through 24-inch length |
|                   | 3/4-inch diameter, 6 through 26-inch length |
|                   | 7/8-inch diameter, 6 through 28-inch length |

The following manufacturers have shown compliance with the applicable specifications for machine bolts:

**Technical Acceptance Period**

**Manufacturer**

---

|                   |                                    |
|-------------------|------------------------------------|
| 4/2024 – 4/2025   | Aluma-Form                         |
| 3/2023 – 3/2024   | Centennial Infrastructure Products |
| 9/2015 – 9/2016   | Cooper Power Systems               |
| 12/2024 – 12/2025 | GPP Solutions                      |
| 1/2025 – 1/2026   | Line Hardware, Inc.                |
| 2/2014 – 2/2015   | Milano                             |
| 4/2020 – 4/2021   | Romagnole                          |
| 9/2024 – 9/2025   | Powerline Hardware (Hobb)          |
| 10-2023 – 10/2024 | Hubbell Power Systems              |

\* “Static proof” design available.

**d – Washers, Flat**

Flat Rolled Steel

|  |                              | Size, inches:    | 2-1/4 x 2-1/4 | 3 x 3 | 4 x 4 | 4 x 4 | 1-3/8<br>round | 1-3/4<br>round |
|--|------------------------------|------------------|---------------|-------|-------|-------|----------------|----------------|
|  |                              | Thickness, in.:  | 3/16          | 1/4   | 3/16  | 1/2   | 12 gauge       | 10 gauge       |
|  |                              | Hole Diam., in.: | 13/16         | 13/16 | 13/16 | 13/16 | 9/16           | 11/16          |
| <u>Technical<br/>Acceptance Period</u> | <u>Manufacturer</u>          |                  |               |       |       |       |                |                |
| 3/2015 – 3/2016                        | Cooper                       | DF2W5            | DF2W7         | -     | DF1W2 | -     | -              | -              |
| 12/2024 – 12/2025                      | GPP Solutions                | U1076            | U1079         | U1080 | U1081 | U1086 | U1088          | U1088          |
| 12/2024 – 12/2025                      | Romagnole                    | -                | R-1079        | -     | -     | -     | R-1088         | R-1088         |
| 9/2024 – 9/2025                        | Powerline Hardware<br>(Hobb) | P1076            | P1079         | -     | -     | P1086 | -              | -              |

Flat Cast

|  |                     | Size, inches:    | 3 x 3 |  |  |  |  |  |
|--|---------------------|------------------|-------|--|--|--|--|--|
|  |                     | Thickness, in.:  | 1/4   |  |  |  |  |  |
|  |                     | Hole Diam., in.: | 13/16 |  |  |  |  |  |
| <u>Technical<br/>Acceptance Period</u> | <u>Manufacturer</u> |                  |       |  |  |  |  |  |

Spurred

|  |                     | Size, inches:    | 3"     |  |  |  |  |  |
|--|---------------------|------------------|--------|--|--|--|--|--|
|  |                     | Thickness, in.:  | 3/16"  |  |  |  |  |  |
|  |                     | Hole Diam., in.: | 13/16" |  |  |  |  |  |
| <u>Technical<br/>Acceptance Period</u> | <u>Manufacturer</u> |                  |        |  |  |  |  |  |

(A) Aluminum Alloy

(M) Malleable Iron

(N) Nodular Iron

**d – Washers, Curved**

Curved Cast

|                 |                     |                    |                  |               |               |
|-----------------|---------------------|--------------------|------------------|---------------|---------------|
|                 | Size, inches:       | 2-1/4 x 2-1/4      | 3 x 3            | 3 x 4         | 4 x 4         |
|                 | Thickness, in.:     | 1/4                | 5/16             | 7/16          | 1/2           |
|                 | Hole Diam., in.:    | 11/16              | 11/16            | 15/16         | 13/16         |
| 1/2025 – 1/2026 | Line Hardware, Inc. |                    | CSW<br>Series    | CSW<br>Series | CSW<br>Series |
|                 | (A) Aluminum Alloy  | (M) Malleable Iron | (N) Nodular Iron |               |               |

Curved Rolled Steel

|                  |           |
|------------------|-----------|
| Size, inches:    | 4 x 4 (1) |
| Thickness, in.:  | 1/4       |
| Hole Diam., in.: | 15/16     |

**Technical Acceptance  
Period**

|                 |                           |       |
|-----------------|---------------------------|-------|
| 2/2014 – 2/2015 | Milano                    | 952   |
| 9/2024 – 9/2025 | Powerline Hardware (Hobb) | P6829 |

1. To be used only on transmission systems.

**f – Pin, Crossarm**  
 (With square washer, nut and MF locknut)

DISTRIBUTION

|                         |       |       |       |       |
|-------------------------|-------|-------|-------|-------|
| Thread (inches diam.)   | 1     | 1-3/8 | 1     | 1-3/8 |
| Length above base (in.) | 5     | 7     | 5     | 7     |
| Length below base (in.) | 5-3/4 | 7     | 1-1/2 | 1-3/4 |
| Shank (inches diam.)    | 5/8   | 5/8   | 5/8   | 3/4   |

**Technical**  
**Acceptance Period**

|                   |                           | <u>Long Shank</u> |             | <u>Short Shank</u> |      |
|-------------------|---------------------------|-------------------|-------------|--------------------|------|
| 2/2014 – 2/2015   | Milano                    | 626               | 621         | 972                | 4045 |
| 12/2024 – 12/2025 | GPP Solutions             | -                 | U647        | U222Z              | -    |
| 4/2024 -4/2025    | Aluma-Form                | AF203             | AF647       | -                  | -    |
| 2/2025 – 2/2026   | Line Hardware             | LVP-585A          | HVP-587     | -                  | -    |
| 4/2025 – 4/2026   | Powerline Hardware (Hobb) | P203, P203Z       | P647, P647Z | P221, P221Z        | -    |

Clamp Type Pin

**Technical**  
**Acceptance Period**

|                         |       |       |
|-------------------------|-------|-------|
| Thread (inches diam.)   | 1     | 1-3/8 |
| Length above base (in.) | 5-3/4 | 7     |

|                   |                             |                  |                  |
|-------------------|-----------------------------|------------------|------------------|
| 12/2024 – 12/2025 | GPP Solutions               | U3322Z           | U3324Z           |
| 12/2024 – 12/2025 | Romagnole                   | R-14322          | R-14322-1        |
| 10/2023 – 10/2024 | Hubbell Power Systems, Inc. | 14322P           | 14321P           |
| 4/2025 – 4/2026   | Powerline Hardware (Hobb)   | P3322,<br>P3322Z | P3324,<br>P3324Z |

Washer Plate for Clamp Type Pin

These plates are equipped with lugs to prevent slippage of pin along Crossarm. They may be used to replace the bottom plate on pins already installed.

**Technical**  
**Acceptance Period**

**Technical List**

**f-3**

**February 15, 2023**

f – Pin, crossarm  
(Non-lead threads)  
(With square washer, nut and MF locknut)

Technical Acceptance Period

Manufacturer

4/2025 – 4/2026

Powerline Hardware (Hobb)

P203Z – 1" threads

P221Z – 1" threads

P647Z – 1-3/8" threads

P3322Z – 1" threads

P3324Z – 1-3/8" threads

**h – Brace, Crossarm, steel**

Wherever item “h” is shown on a construction drawing, use a brace from page cu.

**i – Bolt, carriage**

Applicable Specification: ANSI C135.1, “Standard for Galvanized Steel Bolts and Nuts.”

Applicable Sizes: 3/8 inch diameter, 3 through 6 inch length  
1/2 inch diameter, 3 through 6 inch length

The following manufacturers have shown compliance with the applicable specifications for carriage bolts.

**Technical Acceptance Period**

**Manufacturer**

---

4/2024 – 4/2025  
9/2015 – 9/2016  
12/2024 – 12/2025  
2/2014 – 2/2015  
12/2024 – 12/2025

Aluma-Form  
Cooper Power Systems  
GPP Solutions  
Milano  
Romagnole

**j – Screw, lag**

Applicable Specifications: ANSI C135.3 “Standard for Zinc Coated Ferrous Lag Screws”

Applicable Sizes: ½ inch diameter, 4 inch length  
½ inch diameter, 5 inch length  
5/8 inch diameter, 4 inch length  
5/8 inch diameter, 5 inch length

The following manufacturers have shown compliance with the applicable specifications for lag screws:

**Technical Acceptance Period**

Sept 2015 – **Sept 2016**

**Manufacturer**

Cooper Power Systems

**Technical List**  
**k-1**  
**August 28, 2024**

**k – Insulators, suspension**

|  | ANSI Class Type    | 52-9A Clevis | 52-1 Clevis | 52-4 Clevis  | 52-3 Ball & Socket |
|--|--------------------|--------------|-------------|--------------|--------------------|
|  |                    |              |             |              |                    |
|  | Disc Diameter      | 4-1/4"       | 6"          | 9" or 9-1/2" | 9" or 9-1/2"       |
|  | M & E Rating, lbs. | 10,000       | 10,000      | 15,000       | 15,000             |
|  | Leakage            | 6-3/4"       | 7"          | 11-1/2"      | 11-1/2"            |
|  | Flashover, kV: Dry | 60           | 60          | 80           | 80                 |
|  | Flashover, kV: Wet | 30           | 30          | 50           | 50                 |
|  | NOTES              | (3) (4)      | (3) (4)     | (5)          | (2)                |

| Technical Acceptance Period | Manufacturer   | Catalog Number |            |             |                    |
|-----------------------------|--|----------------|------------|-------------|--------------------|
| Sept 2018 – Sept 2019       | Action Manufacturing                                   | AMI-529G       | AMI-521G   |             |                    |
| Oct 2013 – Oct 2014         | Ceramica Santa Terezinha S.A. (CST)                    | CST-24304      | CST-24303  | -           | -                  |
| Sept 2018 – Sept 2019       | Lapp Insulator Co, LLC (Dalian Insulator Co., LTD)     | -              | -          | 008100-70-D | 008200-70-D        |
| Sept 2017 – Sept 2018       | NGK-Lock, Inc.   | -              | -          | -           | 20S840*<br>20S195* |
| Dec 2023 – Dec 2024         | Newell-PSN, LLC  | 2325290        | 2325210    | -           | -                  |
| Mar 2020 – Mar 2021         | Fujian Hoshing Prosper Electrical Porcelain, Co., Ltd. | FHP2529A0G     | FHP252100G | -           | -                  |
| Jul 2017 – Jul 2018         | MacLean Power Systems                                  | DP52-9A        | -          | -           | -                  |
| Aug 2024 – Aug 2025         | Powerline Hardware                                     | -              | P52-1G     | P52-4G      | P52-3G             |
| Mar 2020 – Mar 2021         | Suzhou Porcelain Insulator Works                       | 24209          | 24201A     | -           | -                  |

**Notes:**

\* zinc sleeve

- (1) Use two for 24.9/14.4 kV deadends.
- (2) To be used only on transmission lines.
- (3) To be used only on distribution lines.
- (4) Use two insulators for 12.5/7.2 kV deadends and three for 24.9/14.4 kV deadends.
- (5) Use two insulators for 24.9/14.4 kV deadends.

**Technical List**  
**k-1.1**  
**August 28, 2024**

**k – Insulators, suspension**

|  | ANSIClass Type    | 52-3 Ball & Socket | 52-4 Clevis | 52-5 Ball & Socket | 52-6 Clevis |
|--|-------------------|--------------------|-------------|--------------------|-------------|
|  | Disc Diameter     | 10"                | 10"         | 10"                | 10"         |
|  | M & E Rating,lbs. | 15,000             | 15,000      | 25,000             | 25,000      |
|  | Leakage           | 11-1/2"            | 11-1/2"     | 11"                | 11"         |
|  | Flashover;kV: Dry | 80                 | 80          | 80                 | 80          |
|  | Flashover,kV:Wet  | 50                 | 50          | 50                 | 50          |
|  | NOTES             | (2)                | (1)         | (2)                | -           |

| Technical Acceptance Period | Manufacturer   | Catalog Number |                |                    |             |
|-----------------------------|--|----------------|----------------|--------------------|-------------|
| Sept 2018 – Sept 2019       | Action Manufacturing                                       | AMI-523G       | AMI-524G       | -                  | -           |
| Aug 2011 – Aug 2012         | Ceramica Santa Terezinha S.A. (CST)                        | CST-8.02.19.01 | CST-8.02.19.04 | CST-8.02.28.04     | -           |
| Sept 2018 – Sept 2019       | Lapp Insulator Co, LLC (Dalian Insulator Co., LTD)         | -              | -              | 005960A-70-D       | -           |
| Sept 2018 – Sept 2019       | Lapp Insulator Co, LLC (NGK Insulators Tangshan Co., Ltd.) | -              | -              | -                  | 002300-70-K |
| Dec 2023 – Dec 2024         | Newell-PSN, LLC  | 2325230        | 2325240        | 2325250            | 2325260     |
| Sept 2017 – Sept 2018       | NGK-Locke, Inc.  | -              | 20S580         | 30S255*<br>30S295* | 30S257      |
| Mar 2020 – Mar 2021         | Fujian Hoshing Prosper Electrical Porcelain, Co., Ltd.     | FHP2523G       | FHP2524G       | -                  | -           |
| Aug 2024 – Aug 2025         | Powerline Hardware   | P52-3G         | P52-4G         | -                  | -           |
| Mar 2020 – Mar 2021         | Suzhou Porcelain Insulator Works                           | 24203A         | 24204A         | 24205A             | 24206A      |

**Notes:**

- \* zinc sleeve
- (1) Use two for 24.9/14.4 kV deadends.
- (2) To be used only on transmission lines.
- (3) To be used only on distribution lines.
- (4) Use two insulators for 12.5/7.2 kV deadends and three for 24.9/14.4 kV deadends.
- (5) Use two insulators for 24.9/14.4 kV deadends.

**k – Insulator, polymer distribution deadend**

| Technical Acceptance Period | Manufacturer   | Catalog Numbers   |
|-----------------------------|--|---|
| 8/2024 – 8/2025             | Powerline Hardware (Yikun)                             | P8215-S<br>P8225-S<br>P8235-S   |
| 11/2015 – 11/2016           | Salisbury  | 9501U-SI (silicone – 15 kV)<br>9502U-SI (silicone – ANSI DS-28)<br>9502L-EP (silicone – 25 kV)<br>9503U-SI (silicone – 35 kV) |
| 7/2017 – 7/2018             | UAI (Zhejiang Gaoneng Electric Installation Co., Ltd.) | FXB-15/45(70)CT<br>FXB-25/45(70)CT<br>FXB-36/45(70)CT   |
| 9/2019 – 9/2020             | Peak Demand Inc.                                       | CDI-DS-15<br>CDI-DS-28<br>CDI-DS-35   |
| 12/2020 – 12/2021           | TE Connectivity (Raychem)                              | TE-DS15-CT-11<br>TE-DS28-CT-11<br>TE-DS35-CT-11<br>TE-DS46-CT-11<br>TE-DS69-CT-11   |
| 4/2025 – 4/2026             | Jiangsu Shemar Electric Co. Ltd.                       | S70104-CT (DS-15 for 15 kV)<br>S70107CT (DS-28 for 28kV)<br>S70109CT (DS-35 for 35kV)<br>S90111CT (DS-46 for 46kV)            |

NOTE: When insulators from this page are used, adjust construction drawing material list quantities as necessary. Recommended maximum working load is 5,000 lbs.

**Technical List**  
**I-1**  
**December 9, 2024**

I – Clamp, deadend

DISTRIBUTION

| <u>Technical Acceptance Period</u> |               | <u>Copper 2 through 6</u><br><u>CWC 4A through 8A</u> | <u>ACSR (Aluminum Clamps)</u> |            |            |                |
|------------------------------------|---------------|---|-------------------------------|------------|------------|----------------|
|                                    |               |   | <u>4/0 &amp; 3/0</u>          | <u>2/0</u> | <u>1/0</u> | <u>2&amp;4</u> |
| 12/2024 – 12/2025                  | GPP Solutions | -   | AQC57N                        | AQC52N     | AQC52N     | AQC52N         |

I – Deadend for steel strand (overhead ground wire)

TRANSMISSION

For high strength, extra high strength steel strand and aluminum clad steel strand

| <u>Technical Acceptance Period</u>   | <u>Manufacturer</u> | <u>High Strength Steel</u> |              | <u>Aluminum-clad steel</u> |                    |                    | <u>Extra High Strength</u> |             |              |
|--|---------------------|----------------------------|--------------|----------------------------|--------------------|--------------------|----------------------------|-------------|--------------|
|  |                     | <u>3/8"</u>                | <u>7/16"</u> | <u>7 No. 9 AWG</u>         | <u>7 No. 8 AWG</u> | <u>7 No. 7 AWG</u> | <u>5/16"</u>               | <u>3/8"</u> | <u>7/16"</u> |
|  |                     |                            |              | <u>Compression Type</u>    |                    |                    |                            |             |              |
|  |                     |                            |              | <u>Formed Type*</u>        |                    |                    |                            |             |              |
| * Class B galvanizing. When overhead ground wire has Class C galvanizing, formed deadend should also have Class C galvanizing. |                     |                            |              |                            |                    |                    |                            |             |              |
|  |                     |                            |              | <u>Automatic Type</u>      |                    |                    |                            |             |              |
| 12/2024 – 12/2025  | GPP Solutions       | AGDE38U                    | AGDE716U     | -                          | -                  | -                  | AGDE516U                   | AGDE38U     | AGDE716U     |
|  |                     |                            |              | <u>Clamp Type</u>          |                    |                    |                            |             |              |

**n – Bolt, double arming**

Applicable Specification: ANSI C135.1, “Standard for Galvanized Steel Bolts and Nuts.”

Applicable Sizes: 5/8-inch diameter, 12 inch through 24-inch length  
3/4-inch diameter, 20 inch through 24-inch length

The following manufacturers have shown compliance with the applicable specifications for double arming bolts:

**Technical Acceptance Period**

**Manufacturer**

---

|                   |                                    |
|-------------------|------------------------------------|
| 4/2024 – 4/2025   | Aluma- Form                        |
| 3/2023 – 3/2024   | Centennial Infrastructure Products |
| 9/2015 – 9/2016   | Cooper Power Systems               |
| 12/2024 – 12/2025 | GPP Solutions                      |
| 2/2014 – 2/2015   | Milano                             |
| 12/2024 – 12/2025 | Romagnole                          |
| 9/2024 – 9/2025   | Powerline Hardware (Hobb)          |

**o – Bolt, eye, oval**

Applicable Specification: ANSI C135.4, “Standards for Galvanized Ferrous Eye Bolts and Nuts for Overhead Line Construction.”

Applicable Sizes: 5/8-inch diameter, 6 through 20-inch length  
3/4-inch diameter, 8 through 20-inch length

**Technical Acceptance Period**

**Manufacturer**

---

|                   |  |
|-------------------|--|
| 4/2024 – 4/2025   | Aluma-Form                                     |
| 9/2024 – 9/2025   | Powerline Hardware (Hobb)                      |
| 12/2024 – 12/2025 | GPP Solutions                                  |
| 11/2013 – 11/2014 | Hubbell Power Systems (3/4-inch diameter ONLY) |
| 1/2025 – 1/2026   | Line Hardware, Inc.                            |
| 12/2024 – 12/2025 | Romagnole                                      |
| 2/2014 – 2/2015   | Milano   |
| 8/2014 – 8/2015   | Cooper Power Systems                           |

**Shoulder Eye Bolt  
for Transmission Structures**

Applicable Sizes: 3/4-inch diameter, 8-inch through 20-inch length

**Technical Acceptance Period**

**Manufacturer**

---

**Catalog Number**

p – Connectors, Compression  
Applicable Specification: ANSI C119.4

DISTRIBUTION

| Technical<br>Acceptance Period | Manufacturer                     | Aluminum to<br>aluminum | Aluminum to<br>copper | Copper to<br>copper | Tap Connections<br>(Al to Al,Al to Cu) |
|--------------------------------|----------------------------------|-------------------------|-----------------------|---------------------|--|
| 6/2022 – 6/2023                | TE Connectivity<br>(Raychem RPG) | TCU<br>TAH              |                       | TCC                 | TCU<br>TAH                             |

NOTE: These connectors are acceptable when installed using tools and dies in accordance with the connector manufacturer's recommendations.

p – Connectors, Compression  
Applicable Specification: ANSI C119.4

SERVICE

| Technical<br>Acceptance Period | Manufacturer                     | Aluminum-to-Aluminum<br>Aluminum-to-Copper | Copper-to-Copper |
|--------------------------------|----------------------------------|--|------------------|
| 6/2022 – 6/2023                | TE Connectivity<br>Raychem (RPG) | -  | TCC              |

These connectors are furnished in a variety of sizes to fit all combinations of aluminum and copper service wire.

NOTE: These connectors are acceptable when installed using tools and dies in accordance with the connector manufacturer's recommendations.

p – Connectors

(wedge type)

| <u>Technical<br/>Acceptance Period</u> | <u>Manufacturer</u> | <u>Aluminum-to-<br/>aluminum</u> | <u>Aluminum-to-<br/>copper</u> | <u>Copper-to-copper</u> | <u>Tap Connections<br/>(Al to Al ,Al to Cu)</u> |
|--|---------------------|----------------------------------|--------------------------------|-------------------------|---|
| 6/2022 – 6/2023                        | TE Connectivity     | BAT                              | BAT                            | -                       | BAT   |

Technical List  
 q-1  
 December 9, 2024

**q – Bolt, double upset**

Applicable Specification: “RUS Specifications for Single and Double Upset Spool Bolts,” D-5

| <u>Technical Acceptance</u><br><u>Period</u> | Diameter, inches: | 5/8             | 5/8      | 5/8      | 5/8      |
|--|-------------------|-----------------|----------|----------|----------|
|  |                   | Length, inches: | <u>7</u> | <u>8</u> | <u>9</u> |
| 12/2024 – 12/2025                            | GPP Solutions     | -               | -        | -        | U2396    |
| 12/2024 – 12/2025                            | Romagnole         | -               | R-2394   | R-2395   | R-2396   |

s – Clevis, secondary swinging

Applicable Specifications: “RUS Specifications for Secondary Swinging Clevises,” D-6

| Technical Acceptance<br>Period | Manufacturer         | Clevis only*   | Clevis with 1-3/4”<br>groove spool | Clevis with 3”<br>groove spool |
|--------------------------------|----------------------|----------------|------------------------------------|--------------------------------|
| 12/2024 – 12/2025              | GPP Solutions        | U0322          | -                                  | -                              |
| 2/2014 – 2/2015                | Milano               | 253            | -                                  | -                              |
| 9/2014 – 9/2015                | Cooper Power Systems | DC4S1          | -                                  | -                              |
| 6/2024 – 6/2025                | Powerline Hardware   | P0322<br>P1626 |                                    |                                |

\*Catalog Number does not include spool. See page cm for spool type insulators.

Technical List  
u-1  
September 11, 2024

**u – Deadend for galvanized steel or  
aluminum-clad steel guy strand**

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>      | <u>3-Bolt Guy Clamp</u>   |                            |
|------------------------------------|--------------------------|---------------------------|----------------------------|
|                                    |                          | <u>Light (1/2" bolts)</u> | <u>Heavy (5/8" bolts)*</u> |
| 9/2024 – 9/2025                    | Powerline Hardware(Hobb) | P930                      | P931                       |

\*For use on transmission.

**u – Deadend for galvanized steel guy strand**

| <b>Technical Acceptance Period</b> | <b>Strand Size</b>                                       | <b>1/4"</b>          | <b>9/32"</b>       | <b>5/16"</b>         | <b>3/8"</b>          | <b>7/16"</b>         |
|------------------------------------|--|----------------------|--------------------|----------------------|----------------------|----------------------|
|                                    |  |                      | <u>Automatic</u>   |                      |                      |                      |
| 12/2024 – 12/2025                  | <b><u>GPP Solutions</u></b>                              | AGDE-14              | AGDE-516           | AGDE-516             | AGDE-38              | AGDE-716             |
|                                    |  |                      | <u>Formed Type</u> |                      |                      |                      |
| 12/2024 – 12/2025                  | <b><u>Mosdorfer NA, Inc.</u></b><br>For standard guy*    | GDE0259              | GDE0310            | GDE0327              | GDE0360              | GDE0460              |
| 12/2024 – 12/2025                  | <b><u>MacLean Power Systems</u></b><br>for standard guy* | DE-S1104<br>DE-S9104 | -<br>-             | DE-S1106<br>DE-S9106 | DE-S1107<br>DE-S9107 | DE-S1108<br>DE-S9108 |

\* Class B galvanizing. When guy wire has Class C galvanizing, formed deadend should also have Class C galvanizing.

**Technical List**  
**u-3**  
**December 20, 2024**

**u – Deadend for aluminum clad steel guy strand**

| <u>Technical Acceptance Period</u>                          | Strand Size:                              | 3#10<br>(4M) | 7#12<br>(6M) | 7#11<br>(8M) | 7#10<br>(10M) | 7X.110”<br>(11.5M) | 7#9<br>(12.5M) | 7X.121”<br>(14M) | 7#8<br>(16M) | 7X.148”<br>(20M) |
|---|---|--------------|--------------|--------------|---------------|--------------------|----------------|------------------|--------------|------------------|
| <u>Formed Type</u><br><u>Aluminum-Clad Steel Guy Strand</u> |   |              |              |              |               |                    |                |                  |              |                  |
| 4/2012 – 4/2013   | <u>Hubbell (IBRAP)</u>                    | -            | AWDE4110     | AWDE4113     | AWDE4116      | -                  | AWDE4119       | AWDE4120         | AWDE4122     | AWDE4126         |
| 12/2024 – 12/2025   | <u>MacLean Power Systems</u>              | -            | DE-AC4110    | -            | DE-AC4116     | -                  | DE-AC4119      | -                | DE-AC4122    | DE-AC4126        |
| 12/2024 – 12/2025   | <u>Mosdorfer NA, Inc.</u>                 | AWDE0230     | AWDE0247     | AWDE0280     | AWDE0313      | AWDE0336           | AWDE0355       | AWDE0364         | AWDE0394     | AWDE0474         |
| 10/2011 – 10/2012   | <u>Utility Standard (HD Supply, Inc.)</u> | -            | -            | -            | USARWDE4116   | -                  | -              | -                | -            | -                |

Automatic  
Aluminum-Clad Steel Guy Strand

**v – Guy Attachment**

for 5/8" bolt

|                                      | Type:                                 | Formed Strap            | Angle Bolt Eye          | Guy Hook                | Guy Hook*               |
|--------------------------------------|---------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Technical Acceptance<br>Period       | Maximum Working<br>Load Rating:       | 23,130 N<br>(5200 lbs.) | 23,130 N<br>(5200 lbs.) | 23,130 N<br>(5200 lbs.) | 37,800 N<br>(8500 lbs.) |
| 3/2015 – 3/2016<br>12/2024 – 12/2025 | Cooper Power Systems<br>GPP Solutions | -<br>U25164             | -<br>U6500              | GA-64                   | DG21H2<br>-             |

\*This hook may be used in place of the wrapped guy arrangement in assemblies E3-2 and E3-3.

**v – Pole Eye Plates**

| Technical Acceptance Period | Maximum Working Load Rating: | Type: Pole Eye Plate<br>37,800 N.<br>(8500 lbs.) |
|-----------------------------|------------------------------|--|
|                             | <u>(5/8" Bolt)</u>           |  |
| 3/2015 – 3/2016             | Cooper Power Systems         |  |
|                             | <u>(3/4" Bolt)</u>           |  |
| 3/2015 – 3/2016             | Cooper Power Systems         |  |
| 12/2024 – 12/2025           | GPP Solutions                | PEP88  |
| 10/2023 – 10/2024           | Hubbell (Chance)             | GEP6   |

**v – Pole Bands**

| <u>Technical Acceptance<br/>Period</u> | <u>Type:</u>                            | <u>Pole Bands</u>  |
|--|---|--------------------|
|  | <u>Maximum Working<br/>Load Rating:</u> | <u>10,000 lbs.</u> |
| 3/2015 – 3/2016                        | Cooper                                  | DG40B1, DG40B2     |

**Technical List**  
**w-1**  
**December 9, 2024**

**w – Insulators, guy strain**  
(Fiber Reinforced Plastic)

| Technical Acceptance<br>Period | Manufacturer       | Ultimate Strength (lbs.) |                     |                     |
|--------------------------------|--------------------|--------------------------|---------------------|---------------------|
|                                |                    | <u>11,000</u>            | <u>15,000</u>       | <u>21,000</u>       |
| 6/2024 – 6/2025                | Powerline Hardware | -                        | PCC, PCTE<br>Series | PCC, PCTE<br>Series |
| 12/2024 – 12/2025              | GPP Solutions      | -                        | GL15 Series         | -                   |

**Technical List**

**x-1**

**December 9, 2024**

**x – Rod, anchor**

Applicable Specification: ANSI C135.2, “Standards for Galvanized Ferrous Strand Eye Anchor Rods”

Applicable Sizes:           Single guy: 5/8 inch diam. 6, 7 and 8 feet long  
  3/4 inch diam. 8, 9 and 10 feet long  
  1 inch diam. 9 and 10 feet long

Double guy: 5/8 inch diam. 7 and 8 feet long  
                  3/4 inch diam. 8, 9 and 10 feet long  
                  1 inch diam. 9 and 10 feet long

Single Guy: Drive: 5/8 inch diam. 7 and 8 feet long  
                  3/4 inch diam. 8, 9 and 10 feet long  
                  1 inch diam. 9 and 10 feet long

Double Guy: Drive: 5/8 inch diam. 7 and 8 feet long  
                  3/4 inch diam. 8, 9 and 10 feet long  
                  1 inch diam. 9 and 10 feet long

The following manufacturers have shown compliance with the applicable specifications. Some manufacturers cannot supply all sizes listed above. Check with manufacturer or distributor for availability.

**Technical Acceptance Period**

**Manufacturer**

12/2024 – 12/2025

12/2024 – 12/2025

9/2024 – 9/2025

GPP Solutions

Romagnole

Powerline Hardware (Hobb)

**y – Galvanized Steel Strand**

Usage: Guy, Distribution or Transmission Line  
Overhead Static Wire

ASTM Specification: A 475 – For Guy Strand  
A 363 – For Overhead Static Wire

Following grades/diameters of steel wire strands are preferred sizes:

For Guying

| <u>Siemens-Martin</u>    | <u>High Strength</u>   | <u>Extra High Strength Grade</u> |                     |
|--------------------------|------------------------|----------------------------------|---------------------|
| <u>Distribution Line</u> | <u>Dist. or Trans.</u> | <u>Distribution</u>              | <u>Transmission</u> |
| 1/4" dia.                | 1/4" dia.              | 1/4" dia.                        | 1/4" dia.           |
| 3/8"                     | 9/32"                  | 9/32"                            | 9/32"               |
| 7/16"                    | 5/16"                  | 5/16"                            | 5/16"               |
|                          | 3/8"                   | 3/8"                             | 3/8"                |
|                          | 7/16"                  |                                  | 7/16"               |

For Overhead Static Wire (Groundwire)

| <u>High Strength</u> | <u>Extra High Strength Grade</u> |
|----------------------|----------------------------------|
| 3/8" dia.            | 5/16" dia.                       |
| 7/16"                | 3/8"                             |
|                      | 7/16"                            |

**Technical Acceptance Period**

Manufacturer

**4/2025 – 4/2026**

Shanghai Silin Special Equipment Co.,  
Ltd. (Priority Wire & Cable, INC)

**3/2024 – 3/2025**

Hascelik

Note: The buyer should specify Class A, B, or C coating per ASTM A363 or A475.

**y – Steel Strand**

Aluminum-Clad  
Specifications: ASTM B415 and B416

For overhead groundwire

(Joint and splice requirements for wire and strand to meet ASTM A363)  
AWG Sizes: (a) 7 No. 10, (c) 7 No. 9, (d) 7 No. 8, (e) 7 No. 7 AWG

**Technical Acceptance Period**

|                          |  |                    |
|--------------------------|--|--------------------|
| <b>4/2025 – 4/2026</b>   | Shanghai Silin Special Equipment Co., Ltd.<br>(Priority Wire & Cable, INC) | (a), (c), (d), (e) |
| <b>12/2013 – 12/2014</b> | Bekaert Xinhua Metal Products Co., Ltd.                                    | (a), (c), (d), (e) |
| <b>5/2024 – 5/2025</b>   | Coppersteel Bimetalicos Ltda.  | (a), (c), (d), (e) |

For guy strand

(M is rated breaking load in thousand lbs)

M Sizes: 6M (7 No. 12), 8M (7 No. 11), 10M (7 No. 10), 11.5M (7 x 0.110"), 12.5M (7 No. 9), 14M (7 x 0.121"), 16M (7 No. 8), 18M (7 x 0.139"), 20M (7 x 0.148")

**Technical Acceptance Period**

|                          |   |  |
|--------------------------|---|--|
| <b>4/2025 – 4/2026</b>   | Shanghai Silin Special Equipment Co., Ltd. (Priority Wire & Cable, INC) | 6M, 8M, 10M, 12.5M, 14M, 16M, 20M      |
| <b>12/2013 – 12/2014</b> | Bekaert Xinhua Metal Products Co., Ltd.                                 | 6M, 8M, 10M, 12.5M, 14M, 16M, 18M, 20M |
| <b>5/2024 – 5/2025</b>   | Coppersteel Bimetalicos Ltda.   | 10M, 12.5M, 14M, 16M                   |

z - Anchors, Expanding and Plate

DISTRIBUTION

|                                    |                                       | 6,000         | 8,000         | 10,000        | 12,000        |
|------------------------------------|---------------------------------------|---------------|---------------|---------------|---------------|
|                                    | Designated Maximum holding power-lbs. | 6,000         | 8,000         | 10,000        | 12,000        |
|                                    | Min. Area (sq. in.)                   | 90            | 100           | 120           | 135           |
|                                    | Rod Dia. (inch $\frac{3}{4}$ )        | $\frac{3}{4}$ | $\frac{5}{8}$ | $\frac{3}{4}$ | $\frac{3}{4}$ |
|                                    | Rod Length (feet)                     | 7             | 7             | 8             | -             |
| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>                   | <u>Type</u>   |               |               |               |
| 8/2024 – 8/2025                    | Powerline Hardware (Hobb)             | 8-way         | P8135         | P8135         | P8135         |

NOTE: Where galvanized anchors are listed, the same anchors un-galvanized (black asphalt coated) are also acceptable.

Technical List  
z-6  
August 28, 2024

z - Anchors, Power-Installed Screw, Distribution

| Technical Acceptance Period | Manufacturer                     | Catalog Number                   | Rating (lbs.) |
|-----------------------------|----------------------------------|----------------------------------|---------------|
| 8/2024 – 8/2025             | <u>Powerline Hardware (Hobb)</u> | P6524<br>P6526<br>P6528<br>P6550 | (see catalog) |

Technical List  
z-7  
August 28, 2024

z - Anchors, No Wrench Screw

| Technical Acceptance Period | Manufacturer                     | Catalog Number                   | Rating (lbs.) |
|-----------------------------|----------------------------------|----------------------------------|---------------|
| 8/2024 – 8/2025             | <u>Powerline Hardware (Hobb)</u> | P6524<br>P6526<br>P6528<br>P6550 | (see catalog) |

Technical List  
aa,ab  
December 9, 2024

aa – Nut, eye  
ab – Nut, thimble eye

| <u>Technical</u><br><u>Acceptance Period</u> | Manufacturer              | aa                      |                         |                   | ab                         |                            |
|--|---------------------------|-------------------------|-------------------------|-------------------|----------------------------|----------------------------|
|  |                           | Oval eye<br>nut<br>5/8" | Oval eye<br>nut<br>3/4" | Thimble<br>Eyelet | Thimble eye<br>nut<br>5/8" | Thimble eye<br>nut<br>3/4" |
| 9/2014 – 9/2015                              | Cooper Power Systems      | DG2E3                   | -                       | DG6E1             | DG1E1                      | -                          |
| 12/2024 – 12/2025                            | GPP Solutions             | U1092                   | U1093                   | U1126             | U6510                      | -                          |
| 9/2024 – 9/2025                              | Powerline Hardware (Hobb) | P1092                   | P1093                   | -                 | P6510                      | P6511                      |
| 10/2023 – 10/2024                            | Hubbell (Chance)          | -                       | 6503                    | -                 | -                          | 6511                       |
| 12/2024 – 12/2025                            | Romagnole                 | R-1093                  | R-1092                  | -                 | R-12587                    | -                          |
| 4/2024 – 4/2025                              | Aluma-Form                | AF1092                  | AF1093                  | -                 | -                          | -                          |

Technical List  
ac-1  
December 4, 2024

**ac - Brace, sidearm diagonal**

| <u>Technical Acceptance<br/>Period</u> | <u>Manufacturer</u> | <u>1-1/2 inch angle<br/>3/16" x 5'</u> | <u>1-3/4 inch angle<br/>3/16" x 7'</u> |
|--|---------------------|--|--|
| 12/2024 – 12/2025                      | Romagnole           | R-6984                                 | -                                      |

Technical List  
 ae-1  
 December 7, 2023

ae - Surge (lightning) Arrester, Distribution Class

| <u>Technical Acceptance<br/>Period</u> | <u>Manufacturer</u>  | <u>Type</u> | <u>Ratings, kV</u> | <u>Housing</u> | <u>Duty</u> |
|--|----------------------|-------------|--------------------|----------------|-------------|
| <b>SiC Type</b>                        |                      |             |                    |                |             |
| <b>MOV Type</b>                        |                      |             |                    |                |             |
| 2/2018 – 2/2019                        | Siemens Energy, Inc. | 3EK7        | 9-27               | Polymer        | Normal      |
|  |                      | 3EK7        | 9-27               | Polymer        | Heavy       |
|  |                      | 3EK8        | 3-36               | Polymer        | Heavy       |
|  |                      | 3EK8        | 3-27               | Polymer        | Riser Pole  |
| 12/2023 – 12/2024                      | Balestro/H-J         | PROTÉGÉ+    | 9-27               | Polymer        | Heavy       |

**Technical List**  
**ae-2**  
**May 2016**

**ae – Surge Arrester, Substation\***

| Technical Acceptance<br>Period | Manufacturer    | MOV Type |  | Accepted<br>Ratings – kV | Housing | Manufacturer's<br>Classification |
|--------------------------------|-----------------|----------|--|--------------------------|---------|----------------------------------|
|                                |                 | Type     |  |                          |         |                                  |
| 5/2016 – 5/2017                | TE Connectivity | PBA      |  | 3-192                    | Polymer | Intermediate                     |
|                                |                 | PAA      |  | 3-108                    | Polymer | Intermediate                     |

\*For instructions concerning application at substations refer to RUS Bulletin 1724E-300, "Design Guide for Rural Substations." In the purchase of arresters, care should be taken to select the type and voltage rating in accordance with the line voltage and the type of construction (grounded or ungrounded).

- (1) Energy ratings based on single impulse ratings.
- (2) Meets Class H energy levels per IEEE Std C62.11™-2012 standard.

Technical List  
af-1  
August 28, 2024

af - Cutouts, Distribution, Open

| Technical Acceptance Period | Manufacturer   | Catalog Number | Type                   | Voltage Rating   |
|-----------------------------|--|----------------|------------------------|------------------|
| 5/13/2010 – 5/18/2011       | S & C Electric Co.   | 89021R10       | XS                     | 15kV             |
|                             |  | 89032R10       | XS                     | 27kV             |
| 11/4/2013 – 11/2014         | Hubbell Power Systems, Inc.                                |                | C-Polymer              | 27kV             |
|                             |  |                | C-Polymer (load break) | 27kV             |
| 8/2024 – 8/2025             | Powerline Hardware (Wenzhou Yikun Electric Co., Ltd.)      |                | PLH-Porcelain          | 15, 25, 27, 36kV |
|                             |  |                | SIL-Polymer            | 15, 24, 33-36kV  |
| 3/2016 – 3/2017             | Utility Solutions, Inc. (Wenzhou Yikun Electric Co., Ltd.) | USCO-001       | Porcelain              | 15kV             |
|                             |  | USCO-003       | Porcelain              | 25kV             |
|                             |  | USCO-004       | Porcelain              | 25kV             |
|                             |  | USCO-005       | Polymer                | 15kV             |
|                             |  | USCO-007       | Polymer                | 25kV             |
|                             |  | USCO-008       | Polymer                | 25kV             |

NOTE: The buyer should specify the load rating, voltage rating, interrupting rating and required accessories.

Cutouts used on underground riser poles should be loadbreak type or have hooks for portable load interrupters.

**af – Cutouts, Distribution, Open**  
with Linkbreak Attachment

| <b>Technical<br/>Acceptance Period</b> | <b>Manufacturer</b>            | <b>Type</b> | <b>Voltage<br/>Rating</b> |
|--|--------------------------------|-------------|---------------------------|
| <b>4/2012 – 4/2013</b>                 | Hubbell Power<br>Systems, Inc. | C-Polymer   | 27kV                      |

ah – Tie, insulator, formed type

| Technical Acceptance Period | Manufacturer                          | Catalog Number  | Type   |
|-----------------------------|---------------------------------------|---|--|
| 12/2024 – 12/2025           | <u>MacLean Power Systems</u>          | DT-AC<br>DWT<br>DST-A<br>ST-A<br>DBST-AC<br>QST-AC<br>SPT | Top Tie-Formed<br>“Armorlock” top tie-formed<br>Double top tie-formed<br>Side tie-formed<br>Double side tie-formed<br>“Quick” spool tie-formed<br>Spool tie-formed                           |
| 12/2024 – 12/2025           | <u>Mosdorfer (Thailand) Co., Ltd.</u> | DBST<br>DST<br>DT<br>LT<br>QSPL<br>SPL<br>ST              | Double side tie, C, F & J neck<br>Double support tie, C&F neck<br>Distribution tie, C, F & J neck<br>Long span tie, C, F & J neck<br>Quick spool tie<br>Spool tie<br>Side tie, C, F & J neck |

NOTES: All ties should be ordered for the specific conductor size and insulator type.

ai - Rods, Ground, 13-mil

Applicable Size: The standard length is 8 feet and catalog numbers listed below are for this length. Longer rods may be required for special conditions.

Copper-covered ground rods are listed with a **13-mil minimum** at any point and a 15-mil average covering of copper. All purchases should specify that a factory certification of the thickness of the copper must accompany the shipment of the rods.

Copper-covered steel rods

| <u>Technical Acceptance Period</u> |  | <u>5/8"</u>             | <u>3/4"</u>             |
|------------------------------------|--|-------------------------|-------------------------|
| 9/2024 – 9/2025                    | Powerline Hardware (Hobb)                                    | PLH 588C                | -                       |
| 2/2025 – 2/2026                    | Kopell Grounding Systems Pvt., Ltd.                          | EN 58813<br>EN 581013   | EN 34813<br>EN 341013   |
| 3/2020 – 3/2021                    | Handsun Industry General Co.<br>(Priority Wire & Cable, INC) | HS58 8-15               | HS34 8-15               |
| 3/2020 – 3/2021                    | TE Connectivity (Kopell)                                     | CGR5808U13**            | CGR3408U13**            |
| 5/2024 – 5/2025                    | INTELLI – indústria de Terminais<br>Elétricos Ltda.          | IH-858-13<br>IH-1058-13 | IH-834-13<br>IH-1034-13 |

**ai - Rods, Ground**

Applicable Size: The standard length is 8 feet and catalog numbers listed below are for this length. Longer rods may be required for special conditions.

Hot Dip Galvanized Steel

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>       | <u>5/8"</u> | <u>3/4"</u> |
|------------------------------------|---------------------------|-------------|-------------|
| 12/2024 – 12/2025                  | Romagnole                 | R-8578      | R-8618      |
| 9/2024 – 9/2025                    | Powerline Hardware (Hobb) | PLH 588G    | -           |

NOTE: The 2007 National Electrical Safety Code requires that the diameter of galvanized ground rods be not less than 0.625 inch. Suppliers should not be providing galvanized ground rods with smaller diameters.

ai - Rods, ground, sectional, 13-mil

Galvanized Steel and Copper-Covered Steel

Copper-covered ground rods are listed with a **13-mil minimum** at any point and a 15-mil average covering of copper. All purchases should specify that a factory certification of the thickness of the copper must accompany the shipment of the rods. Rods are copper-covered unless marked galvanized steel.

Sectional Ground Rods

| Technical Acceptance Period | Manufacturer  | 8' long                      | 10' long                     | Coupling                                 | Driving studs    |
|-----------------------------|---|------------------------------|------------------------------|--|------------------|
| 2/2025 – 2/2026             | Kopell Grounding Systems Pvt., Ltd.                       | EN 58813-SC<br>EN 34813-SC   | EN 581013-SC<br>EN 341013-SC | ENCO58<br>ENCO34                         | ENDS58<br>ENDS34 |
| 3/2020 – 3/2021             | Handsun Industry General Co. (Priority Wire & Cable, INC) | HSS58 8-15                   | HSS34 10-15                  | -  | -                |
| 5/2024 – 5/2025             | INTELLI – Indústria de Terminais Elétricos Ltda.          | IHP-834<br>IHP-858           | IHP-1034<br>IHP-1058         | LEH-34-R<br>LEH-58-R                     | PH-34<br>PH-58   |
| 3/2020 – 3/2021             | TE Connectivity (Kopell)                                  | CGR5808S13**<br>CGR3408S13** | CGR5810S13*<br>CGR3410S13*   |  |                  |
| 3/2022 – 3/2023             | TE Connectivity   |                              |                              | GRCU-58<br>GRCU-34<br>GRCS-58<br>GRCS-34 |                  |

NOTE: The 2007 National Electrical Safety Code requires that the diameter of galvanized ground rods be not less than 0.625 inch. Some suppliers may still be providing ground rods with smaller diameters.

**ai - Rods, Ground, 10-mil**

These copper-covered ground rods are listed with a **10-mil minimum** at any point. They must also be Underwriters Laboratory (UL) listed. All purchases should verify that rods have official UL mark.

Copper-covered steel

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>                              | <u>5/8" x 8'</u> | <u>3/4" x 8'</u> | <u>5/8" x 10'</u> | <u>3/4" x 10'</u> |
|------------------------------------|--|------------------|------------------|-------------------|-------------------|
| 2/2/25 – 2/2026                    | Kopell Grounding Systems Pvt., Ltd.              | EN 588           | EN 348           | EN 5810           | EN 3410           |
| 9/2024 – 9/2025                    | Powerline Hardware (Hobb)                        | PLH-588C 10MIL   | -                | -                 | -                 |
| 5/2024 – 5/2025                    | INTELLI – Indústria de Terminais Elétricos Ltda. | IH-858           | IH-834           | IH-1058           | IH-1034           |

**ai - Rods, ground, sectional, 10-mil**

Galvanized steel and Copper-covered steel

Copper-covered ground rods are listed with a **10-mil minimum** at any point. They must also be Underwriters Laboratory (UL) listed. All purchases should verify that rods have official UL mark. Rods are copper-covered unless marked galvanized steel.

Sectional Ground Rods

| Technical<br>Acceptance<br>Period | Manufacturer                                     | Rod       |           |            |            | Coupling           |                    | Driving studs |        |
|-----------------------------------|--|-----------|-----------|------------|------------|--------------------|--------------------|---------------|--------|
|                                   |  | 5/8" x 8' | 3/4" x 8' | 5/8" x 10' | 3/4" x 10' | 5/8"               | 3/4"               | 5/8"          | 3/4"   |
| 2/2025 – 2/2026                   | Kopell Grounding Systems Pvt., Ltd.              | ENS 588   | ENS 348   | ENS 5810   | ENS 3410   | ENCO58             | ENCO34             | ENDS58        | ENDS34 |
| 3/2022 – 3/2023                   | TE Connectivity                                  |           |           |            |            | GRCU-58<br>GRCS-58 | GRCU-34<br>GRCS-34 |               |        |
| 5/2024 – 5/2025                   | INTELLI – Indústria de Terminais Elétricos Ltda. | IHP-858   | IHP-834   | IHP-1058   | IHP-1034   | LEH-58-R           | LEH-34-R           | PH-58         | PH-34  |

NOTE: The diameter of all galvanized ground rods must meet the latest edition of the National Electrical Safety Code (NESC).

Technical List  
aj-1  
April 30, 2025

aj - Clamp, Ground Rod

| Technical Acceptance<br>Period | Manufacturer       | For 5/8" Copper-<br>Covered Rod                | For 3/4" Galv.or<br>Stainless Steel<br>Rod     | For 5/8" Galv.or<br>Stainless Steel<br>Rod     |
|--------------------------------|--------------------|--|--|--|
| 6/2024 – 6/2025                | Powerline Hardware | P58  | -  | P58  |
| 4/2025 – 4/2026                | TE Connectivity    | GRCP58-S<br>GRCP58-C<br>GRHDC58-S<br>GRHDC58-C | GRCP34-S<br>GRCP34-C<br>GRHDC34-S<br>GRHDC34-C | GRCP58-S<br>GRCP58-C<br>GRHDC58-S<br>GRHDC58-C |

Technical List  
al-1  
December 15, 2020

**al - Staples, ground wire**

Applicable Specification: ANSI C135.14, "Standards for Staples with Rolled or Slash Points"  
16 gauge Standard 1/2", 15/16" Crown Staples  
18 gauge Standard 3/8" Crown Staples

Technical Acceptance Period

Manufacturer

12/2020 – 12/2021

Paslode

2.50mm Series

3.15mm Series

4.50mm Series

5.00mm Series

Technical  
al-2  
February 4, 2025

al - Staples, ground wire, barbed

Applicable Specification: ANSI C135.14, "Standards for Staples with Rolled or Slash Points"

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>                                 | <u>Thickness (gauge)</u> |
|------------------------------------|---|--------------------------|
| 2/2025 – 2/2026                    | <u>Milwaukee</u><br>MPU112-960 (1-1/2" Galv. Steel) | 9 ga.                    |
|                                    | MPU134-960 (1-3/4" Galv. Steel)                     | 9 ga.                    |
|                                    | MPU2-960 (2" Galv. Steel)                           | 9 ga.                    |

Note: These staples utilize power tools for installation. Use of a hammer for hand driving of these staples is not recommended.

**an – Transformers, distribution, Pole type**

Primary Voltage 7.62/13.2 kV

Applicable Specification: IEEE C57.12.90 “Standard Test Code for Liquid-Immersed Transformers”

| <u>Technical<br/>Acceptance Period</u> | <u>Manufacturer</u> | <u>Type</u>  | <u>Primary<br/>Bushings</u> | <u>Primary<br/>Voltage (kV)</u> | <u>Rating (kVA)</u> |
|--|---------------------|--------------|-----------------------------|---------------------------------|---------------------|
| 2/2012 – 2/2013                        | Magnetron, S.A.     | conventional | two                         | 13.2/7.6–5 - 500                |                     |

**Technical List**

**ao-1**

**December 9, 2024**

**ao - Bolt, strand eye, straight (thimble eye)**

Applicable Specification: ANSI C135.4, "Standards for Galvanized Ferrous Eye Bolts and Nuts for Overhead Line Construction."

Applicable Sizes: 5/8 inch, 6 through 12 inch length 3/4 inch, 8 through 12 inch length

The following manufacturers have shown compliance with the applicable specification:

| <b>Technical Acceptance Period</b> | <b>Manufacturer</b> |
|------------------------------------|---------------------|
| 12/2024 – 12/2025                  | GPP Solutions       |
| 12/2024 – 12/2025                  | Romagnole           |

Technical List  
ap-1  
December 11, 2020

**ap – Clamp, hot line**  
Copper and Copperweld-copper Conductor  
(Clamps with internal springs and enclosed threads)

| Technical Acceptance<br>Period | <u>Conductor</u><br>Copper:<br>Copperweld-copper: | <u>Conductor Size</u><br>6 thru 2/0<br>8A thru 2A |
|--------------------------------|---|---|
| 12/2020 – 12/2021              | <u>Manufacturer</u><br>Connector Mfg. Co.         | HLB2/0<br>HLB2/0T<br>HLB2/0LD<br>HLB2/0LDT        |

**Technical List**  
**ap-2**  
**June 5, 2024**

**ap – Clamp, hot line**  
**ACSR with armor rods**

Clamps listed below have spring action and enclosed thread chambers.

| Technical Acceptance Period | Manufacturer       | Tap Conductor      | Conductor Size |                                |  |  |  |
|-----------------------------|--------------------|--------------------|----------------|--------------------------------|--|--|--|
|                             |                    |                    | 477 & 336.4    | 4/0 & 3/0                      | 2/0  | 1/0 & 2                                    | 4  |
| 6/2024 – 6/2025             | Powerline Hardware | Aluminum           | P1530AGP       | P1520AGP                       | P1520AGP                                   | P1520AGP                                   | P1520AGP                                   |
|                             |                    | Copper             | P1530CC        | P1530AGP<br>P1520CC<br>P1530CC | P1530AGP<br>P1520CC<br>P1530CC             | P1530AGP<br>P1520CC<br>P1530CC             | P1530AGP<br>P1520CC<br>P1530CC             |
| 12/2020 – 12/2021           | Connector Mfg. Co. | Aluminum           |                | HL4/0                          | HLA2/0<br>HLA2/0T                          | HLA2/0<br>HLA2/0T                          | HLA2/0<br>HLA2/0T                          |
|                             |                    | Copper             |                | HLB400<br>HLB400T              | HLB2/0<br>HLB2/0T<br>HLB2/0LD<br>HLB2/0LDT | HLB2/0<br>HLB2/0T<br>HLB2/0LD<br>HLB2/0LDT | HLB2/0<br>HLB2/0T<br>HLB2/0LD<br>HLB2/0LDT |
| 7/2022 – 7/2023             | TE Connectivity    | Aluminum<br>Copper |                | THLA<br>THLB                   | THLA<br>THLB                               | THLA<br>THLB                               | THLA<br>THLB                               |

Technical List  
as-1  
December 9, 2024

**as – Clevis, service swinging**

Applicable Specifications "RUS Specifications for Service Swinging Clevis," D-7

| <u>Technical Acceptance<br/>Period</u> | <u>Manufacturer</u>     | <u>Clevis<br/>Only*</u> | <u>Clevis with Wet Process<br/>Spool</u> | <u>Clevis with Dry Process<br/>Spool</u> |
|--|-------------------------|-------------------------|--|--|
| 12/2024 – 12/2025                      | GPP Solutions           | U1614                   | -  | -  |
| 2/2014 – 2/2015                        | Milano                  | 257                     | -  | -  |
| 9/2014 – 9/2015                        | Cooper Power<br>Systems | DC7S2                   | -  | -  |

\*Catalog number does not include spool; for spool insulators see Item cm.

**av – Conductor, ACSR**

Applicable Specification: ASTM Specification B 232

Preferred Sizes:

| <u>Distribution</u> | <u>Transmission</u> |
|---------------------|---------------------|
| 4 – 6/1             | 1/0 – 6/1           |
| 4 – 7/1             | 2/0 – 6/1           |
| 2 – 6/1             | 3/0 – 6/1           |
| 2 – 7/1             | 4/0 – 6/1           |
| 1/0 – 6/1           | 266.8 kcmil – 26/7  |
| 2/0 – 6/1           | 336.4 kcmil – 26/7  |
| 3/0 – 6/1           | 477 kcmil – 26/7    |
| 4/0 – 6/1           | 556.5 kcmil – 26/7  |
| 266.8 kcmil 18/1    | 795 kcmil – 26/7    |
| 336.4 kcmil 18/1    | 954 kcmil – 54/7    |
| 477 kcmil 18/1      |                     |

NOTE: Larger sizes may be used where the engineer’s study shows they are required.

The following manufacturers have shown compliance with the applicable specifications:

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>   |
|------------------------------------|---|
| <b>8/2014 – 8/2015</b>             | American Furukawa, Inc.   |
| <b>5/2025 – 5/2026</b>             | Apar Industries, Ltd.   |
| <b>7/2024 – 7/2025</b>             | Coreal  |
| <b>2/2025 – 2/2026</b>             | Intelli   |
| <b>5/2018 – 5/2019</b>             | Jiangsu Zhongtian Technology Co., Ltd (ZTT)                             |
| <b>6/2023 – 6/2024</b>             | JSK Industries Pvt. Ltd.  |
| <b>1/2025 – 1/2026</b>             | KLC Cable   |
| <b>4/2025 – 4/2026</b>             | Shanghai Silin Special Equipment Co., Ltd. (Priority Wire & Cable, INC) |
| <b>4/2025 – 4/2026</b>             | Xiantong Wire and cable Co., Ltd. (Priority Wire & Cable)               |
| <b>9/2015 – 9/2016</b>             | Sterlite Technologies Limited   |
| <b>4/2016 – 4/2017</b>             | Sunni Electric Wire & Cable Co., Ltd.                                   |

NOTES:

1. Conductors with 18/1 stranding have different sag characteristics than conductors with 6/1 or 26/7 stranding. This difference in sag characteristics must be taken into consideration in the line design.
2. 266.8 kcmil 26/7, 336.4 kcmil 26/7, and 477 kcmil 26/7 may be used for distribution underbuild on transmission lines.

**Technical List**

**av-2**

**June 2013**

**av - Conductor, copper**

Applicable Specifications: ASTM Specification B1 for hard-drawn solid  
ASTM Specification B8 for hard drawn stranded and soft stranded  
ASTM Specification B3 for soft or annealed solid

Preferred Sizes: Hard-drawn solid - 4 and 6  
Soft or annealed solid - 4 and 6  
Hard-drawn stranded - 2x3, 1/0 x 7, 2/0 x 7  
Soft stranded - 4 and 6

The following manufacturers have shown compliance with the applicable specifications:

**Technical Acceptance Period** Manufacturer

Technical List  
av-4  
April 16, 2025

**av - Conductor, Service**  
(Single conductor)

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>   | <u>Aluminum</u> | <u>Copper</u> |
|------------------------------------|---|-----------------|---------------|
| <b>4/2025 – 4/2026</b>             | Shanghai Silin Special Equipment Co., Ltd. (Priority Wire & Cable, INC) | X               | -             |
| <b>4/2025 – 4/2026</b>             | Xiantong Wire and Cable Co., Ltd. (Priority Wire & Cable, INC)          | X               | -             |
| <b>4/2016 – 4/2017</b>             | Sunni Electric Wire & Cable Co., Ltd.                                   | X               | -             |

Applicable Specification: ICEA S-95-658 / NEMA WC70

Insulation: Cross-linked thermosetting polyethylene or equal.

Conductor: MHD copper or HD (Aluminum 1350) aluminum (Compact or compressed stranded conductor is acceptable.)

Marking: Manufacturer's name and type of insulation shall be clearly shown in durable markings on the surface of the insulation at intervals no greater than 24 inches.

**Technical List**  
**av-5**  
**April 16, 2025**

**av - Conductor, Service Cable**  
 (Triplex and Quadruplex)

| <b>Technical Acceptance Period</b> | <b>Manufacturer</b>   | <b>Aluminum</b> | <b>Copper</b> |
|------------------------------------|---|-----------------|---------------|
| 7/2024 – 7/2025                    | Coreal  | X               | -             |
| 4/2024 – 4/2025                    | Interamericana de Cables Venezuela S.A. (ICV, S.A.)                     | X               | -             |
| 1/2025 – 1/2026                    | KLC Cable   | X               | -             |
| 4/2025 – 4/2026                    | Shanghai Silin Special Equipment Co., Ltd. (Priority Wire & Cable, INC) | X               | -             |
| 4/2025 – 4/2026                    | Xiantong Wire and Cable Co., Ltd. (Priority Wire & Cable, INC)          | X               | -             |
| 4/2016 – 4/2017                    | Sunni Electric Wire & Cable Co., Ltd.                                   | X               | -             |
| 5/2024 – 5/2025                    | Sierra Cables PLC   | X               | -             |

Applicable Specifications: RUS Specification D-2, Specifications for 600 Volt Neutral-Supported Secondary Service Drop Cables.

**av – Conductor, Aluminum Alloy (AAAC)**

Applicable Specification: ASTM Specification B399

Preferred Sizes:

| DISTRIBUTION          |             | TRANSMISSION            |              |
|-----------------------|-------------|-------------------------|--------------|
| 6201                  | ACSR Equiv. | 6201                    | ACSR Equiv.  |
| 48,690 cmil – 7 str.* | 4           | 123,300 cmil – 7 str.** | 1/0          |
| 77,470 cmil – 7 str.* | 2           | 155,400 cmil – 7 str.** | 2/0          |
| 123,300 cmil – 7 str. | 1/0         | 195,700 cmil – 7 str.** | 3/0          |
| 155,400 cmil – 7 str. | 2/0         | 246,900 cmil – 7 str.   | 4/0          |
| 195,700 cmil – 7 str. | 3/0         | 312,800 cmil – 19 str.  | 266,800 cmil |
| 246,900 cmil – 7 str. | 4/0         | 394,500 cmil – 19 str.  | 336,400 cmil |
|                       |             | 559,500 cmil – 19 str.  | 477,000 cmil |
|                       |             | 652,400 cmil – 19 str.  | 556,500 cmil |
|                       |             | 927,200 cmil – 37 str.  | 795,000 cmil |

\*Not recommended for multiphase lines with span lengths exceeding 300 ft.

\*\*Not recommended for suspension type construction.

The following manufacturers have shown compliance with the applicable specifications:

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>   | <u>Type</u> |
|------------------------------------|---|-------------|
| <b>6/2014 – 6/2015</b>             | American Furukawa, Inc.   | 6201        |
| <b>5/2025 – 5/2026</b>             | Apar Industries, Ltd.   | 6201        |
| <b>7/2024 – 7/2025</b>             | Coreal  | 6201        |
| <b>2/2025 – 2/2026</b>             | Intelli   | 6201        |
| <b>6/2023 – 6/2024</b>             | JSK Industries Pvt. Ltd.  | 6201        |
| <b>1/2025 – 1/2026</b>             | KLC Cable   | 6201        |
| <b>4/2025 – 4/2026</b>             | Shanghai Silin Special Equipment Co., Ltd. (Priority Wire & Cable, INC) | 6201        |
| <b>9/2015 – 9/2016</b>             | Sterlite Technologies Limited   |             |
| <b>4/2016 – 4/2017</b>             | Sunni Electric Wire & Cable Co., Ltd.                                   | 6201        |

Technical List  
av(1)  
May 5, 2025

av - conductor

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>   | <u>Conditions</u>   |
|------------------------------------|---|---|
| 6/2015 – 6/2016                    | <u>American Furukawa, Inc.</u><br>ACSS/TW conductors using preferred conductor sizes. | <ol style="list-style-type: none"><li>1. To obtain experience.</li><li>2. Conductor handling and installation shall be in accordance with manufacturer's recommendations.</li><li>3. Indicate type of steel core wire and class (if applicable) of coating.</li></ol> |
| 5/2025 – 5/2026                    | <u>Apar Industries, Ltd.</u><br>ACSS/TW conductors using preferred conductor sizes.   | <ol style="list-style-type: none"><li>1. To obtain experience.</li><li>2. Conductor handling and installation shall be in accordance with manufacturer's recommendations.</li><li>3. Indicate type of steel core wire and class (if applicable) of coating.</li></ol> |

**av – Conductor, High Temperature**

Preferred Conductor Sizes  
(equivalent in diameter to the following ACSR conductors)\*

Transmission Lines

336.4 kcmil - 26/7  
477 kcmil - 26/7  
556.5 kcmil - 26/7  
795 kcmil - 26/7  
954 kcmil - 54/7  
1272 kcmil - 54/19

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u> | <u>Conditions</u>   |
|------------------------------------|---------------------|---|
| 2/2025 – 2/2026                    | Intelli             | <ol style="list-style-type: none"><li>1. To obtain experience.</li><li>2. Conductor handling and installation shall be in accordance with the manufacturer's recommendations.</li><li>3. Use high temperature accessories approved by the manufacturer and accepted by RUS.</li></ol> |

NOTES:

1. Larger sizes may be used where the engineer's study shows they are required.
2. Conductor diameter should be within 10% of ACSR equivalent diameter size.

**av – Conductor, Twisted Pair (T-2 & VR type)**

Preferred Conductor Sizes  
(equivalent in diameter to the following ACSR conductors)\*

Transmission Lines

336.4 kcmil - 26/7  
477 kcmil - 26/7  
556.5 kcmil - 26/7  
795 kcmil - 26/7  
954 kcmil - 54/7  
1272 kcmil - 54/19

**T-2 type (ACSR-II)**

Aluminum Conductor Steel Reinforced- Twisted Pair  
ACSR or AAAC (6201)

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>   | <u>Conditions</u>   |
|------------------------------------|---|---|
| 5/2021 – 5/2022                    | Shanghai Silin Special Equipment Co., Ltd. (Priority Wire & Cable, INC) | <ol style="list-style-type: none"><li>1. To obtain experience.</li><li>2. Conductor handling and installation shall be in accordance with manufacturer's recommendations.</li><li>3. Use accessories recommended by the manufacturer and accepted by RUS.</li></ol> |
| 4/2025 – 4/2026                    | Xiantong Wire and cable Co., Ltd. (Priority Wire & Cable)               | <ol style="list-style-type: none"><li>1. To obtain experience.</li><li>2. Conductor handling and installation shall be in accordance with manufacturer's recommendations.</li><li>3. Use accessories recommended by the manufacturer and accepted by RUS.</li></ol> |
| 5/2025 – 5/2026                    | Apar Industries, Ltd.   | <ol style="list-style-type: none"><li>1. To obtain experience.</li><li>2. Conductor handling and installation shall be in accordance with manufacturer's recommendations.</li><li>3. Use accessories recommended by the manufacturer and accepted by RUS.</li></ol> |

Technical List  
av(5.1)  
April 16, 2025

av – Conductor, Twisted Pair (T-2 & VR type)

**VR-2 type**

Aluminum Conductor Steel Reinforced- Twisted Pair  
ACSR or AAAC (6201)  
Vibration Damping

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>   | <u>Conditions</u>   |
|------------------------------------|---|---|
| 5/2021 – 5/2022                    | Shanghai Silin Special Equipment Co., Ltd. (Priority Wire & Cable, INC) | <ol style="list-style-type: none"><li>1. To obtain experience.</li><li>2. Conductor handling and installation shall be in accordance with manufacturer's recommendations.</li><li>3. Use accessories recommended by the manufacturer and accepted by RUS</li></ol>  |
| 4/2025 – 4/2026                    | Xiantong Wire and cable Co., Ltd. (Priority Wire & Cable)               | <ol style="list-style-type: none"><li>1. To obtain experience.</li><li>2. Conductor handling and installation shall be in accordance with manufacturer's recommendations.</li><li>3. Use accessories recommended by the manufacturer and accepted by RUS.</li></ol> |

NOTES:

1. Larger sizes may be used where the engineer's study shows they are required.
2. Conductor diameter should be within 10% of ACSR equivalent diameter size.

**aw – Washer, spring**

Clip  
1/4" x 1-3/4" x 3-1/2"

| Technical Acceptance<br>Period | Manufacturer         | Bolt Size |        |      |
|--------------------------------|----------------------|-----------|--------|------|
|                                |                      | 5/8"      | 3/4"   | 7/8" |
| 3/2015 – 3/2016                | Cooper Power Systems | DF17W3    | DF17W4 | -    |
| 12/2024 – 12/2025              | GPP Solutions        | U3540     | U3541  | -    |

**Double Coil Lock**

| Technical Acceptance<br>Period | Manufacturer  | Bolt Size |      |      |    |
|--------------------------------|---------------|-----------|------|------|----|
|                                |               | 5/8"      | 3/4" | 7/8" | 1" |
| 12/2024 – 12/2025              | GPP Solutions | U177      | -    | -    | -  |

**Technical List**  
**ax-1**  
**April 2012**

**ax - Cutout and Arrester, Combination**

| Technical<br>Acceptance<br>Period | Nominal System Voltage | For 12.5Y/7.2 kV           |            |            | For 13.2Y/7.6 kV |              | For 24.9Y/14.4 kV |              |
|-----------------------------------|------------------------|----------------------------|------------|------------|------------------|--------------|-------------------|--------------|
|                                   |                        | Cutout Max. Voltage Rating | 1Ø Trans.  | 1Ø Sect.   | 3Ø Bank          | 1Ø Trans.    | 1Ø Sect.          | 3Ø Bank      |
|                                   |                        | <u>7.8 kV</u>              |            |            | <u>15 kV</u>     | <u>15 kV</u> | <u>18 kV</u>      | <u>27 kV</u> |
|                                   | Application            |                            |            | 3Ø Bank    |                  | 3Ø Bank      |                   | 3Ø Bank      |
|                                   | Cutout Current Rating  |                            |            | 3Ø Sect.   | 1Ø Trans.        | 3Ø Sect.     | 1Ø Trans.         | 3Ø Sect.     |
|                                   |                        | <u>50*</u>                 | <u>100</u> | <u>100</u> | <u>50*</u>       | <u>100</u>   | <u>50*</u>        | <u>100</u>   |
|                                   | Manufacturer           | Catalog Numbers            |            |            |                  |              |                   |              |
|                                   | Type                   |                            |            |            |                  |              |                   |              |
|                                   | Mounting               |                            |            |            |                  |              |                   |              |

|                                  |                                      |          |   |   |   |   |   |   |                         |
|----------------------------------|--------------------------------------|----------|---|---|---|---|---|---|-------------------------|
| <b>4/2012 –</b><br><b>4/2013</b> | Hubbell<br>Power<br>Systems,<br>Inc. | Crossarm | - | - | - | - | - | - | CP7 Series<br>(Polymer) |
|----------------------------------|--------------------------------------|----------|---|---|---|---|---|---|-------------------------|

Either normal duty or heavy duty distribution class arresters listed on page ae-1 are acceptable for use with these combination units.

\*These cutouts have open links and must not be used where fault currents are high or for sectionalizing.

(L) Indicates loadbreak type is available.

**Technical List**  
**ba-1**  
**December 9, 2024**

**ba - Bolt, Angle Eye**

Thimble Type

Applicable Specification: ANSI C135.4, "Standards for Galvanized Ferrous Eye Bolts and Nuts for Overhead Line Construction"

Applicable Sizes : 5/8 inch, 6 through 12 inch length  
3/4 inch, 8 through 12 inch length

The following manufacturers have shown compliance with the applicable specifications:

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u> |
|------------------------------------|---------------------|
| 12/2024 – 12/2025                  | GPP Solutions       |
| 12/2024 – 12/2025                  | Romagnole           |

Technical List  
bb-1  
December 4, 2024

**bb - Brace, sidearm vertical**

| <u>Technical Acceptance</u><br><u>Period</u> | <u>Manufacturer</u> | <u>26" brace<br/>24" bolt-hole spacing</u> | <u>50" brace<br/>24" bolt-hole spacing</u> |
|--|---------------------|--|--|
| 12/2024 – 12/2025                            | Romagnole           | -  | R-1508                                     |

Technical List  
be-1  
October 4, 2024

**be - Recloser, vacuum interruption with solid dielectric**

| Technical Acceptance Period | Manufacturer   |
|-----------------------------|--|
| 10/2024 – 10/2025           | <u>Tavrida</u><br>Three phase, TNA-Rec25 Series*, vacuum interruption, solid dielectric, dual rated 15.5kV/27kV, 800 amps maximum continuous, 16000 amps RMS symmetrical interruption for 15.5kV applications and 12500 amps RMS symmetrical interruption for 27kV applications, 27 kV maximum for 24.9/14.4 kV.<br><br>Three phase, TNA_Rec35_Smart_4(XXXX) for single phase trip applications, TNA_Rec35_Smart_5(XXXX) for gang operated applications, vacuum interruption, solid dielectric, 38kV, 1250 amps maximum continuous, 16000 amps RMS symmetrical interruption. |

NOTES:

1. Series trip reclosers with ratings greater than 100 amp for 12.5/7.2 kV application, greater than 200 amp for 24.9/14.4 kV application, and 280 amp for 34.5/19.9 kV application are acceptable only with ground trip device. Shunt trip reclosers without ground trip devices may not be used with trip settings higher than 200 amp for 12.5/7.2 kV application, greater than 400 amp for 24.9/14.4 kV application, and 560 amp for 34.5/19.9 kV application.
2. Reclosers are not acceptable with load current, bushing CT battery chargers.
3. \* These units are compatible with multiple control modules.

**Technical List**  
**bh-1**  
**December 9, 2024**

**bh - Clevis, Service Deadend**

Applicable Specification: "RUS Specification for Service Deadend Clevises" D-8

| Technical<br>Acceptance Period | Manufacturer            | Clevis Only*                    | Clevis with dry<br>process spool | Clevis with wet<br>process spool |
|--------------------------------|-------------------------|---------------------------------|----------------------------------|----------------------------------|
| 12/2024 – 12/2025              | GPP Solutions           | U0313                           | -                                | -                                |
| 2/2014 – 2/2015                | Milano                  | 252                             | -                                | -                                |
| 9/2014 – 9/2015                | Cooper Power<br>Systems | DC3F1<br>DC2C1                  | -                                | -                                |
| 6/2024 – 6/2025                | Powerline Hardware      | P093<br>P0313<br>P1300<br>P1399 |                                  |                                  |

\*Catalog number does not include spool; for spool see Page cm.

**Technical List**  
**bj-1**  
**December 9, 2024**

bj - Guy Hook

Applicable Specification: Edison Electric Institute Specification TD-11- 1951, "Specifications for Guy Hooks and Guy Strain Plates."

| <u>Technical Acceptance Perod</u> | <u>Manufacturer</u> | <u>Catalog #</u> |
|-----------------------------------|---------------------|------------------|
| 12/2024 – 12/2025                 | GPP Solutions       | DGH6X            |

Technical List  
bo-1  
December 9, 2024

bo - Shackle, anchor

Distribution

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u> | <u>20,000 lbs.</u><br><u>5/8" Pin</u> |
|------------------------------------|---------------------|---------------------------------------|
| 12/2024 – 12/2025                  | GPP Solutions       | U2742                                 |

Transmission

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u> | 30,000 lbs.<br><u>3/4" bolt</u> | 50,000 lbs.<br><u>7/8" bolt</u> |
|------------------------------------|---------------------|---------------------------------|---------------------------------|
| 12/2024 – 12/2025                  | GPP Solutions       | UAS35-BNC                       | UAS50-BNC                       |

**Technical List**  
**br-1**  
**December 9, 2024**

br – Chain Link (End Link)

| <u>Technical Acceptance<br/>Period</u> | <u>Manufacturer</u> | <u>Catalog Number</u> |
|--|---------------------|-----------------------|
| 12/2024 – 12/2025                      | GPP Solutions       | CLK-40                |

**Technical List**  
**bs-1**  
**December 9, 2024**

**bs – Bolt, single upset**

Applicable Specifications: "RUS Specifications for Single Upset Spool Bolts," D-5

**Technical Acceptance**  
**Period**

|                   | Diameter, inches:    | 5/8 | 5/8    | 5/8    | 5/8       |
|-------------------|----------------------|-----|--------|--------|-----------|
|                   | Length, inches:      | 7   | 8      | 9      | 10        |
| 8/2014 – 8/2015   | Cooper Power Systems | -   | -      | DC2E4  | DC2E5     |
| 12/2024 – 12/2025 | GPP Solutions        | -   | -      | -      | U2344-1/2 |
| 12/2024 – 12/2025 | Romagnole            | -   | R-2342 | R-2343 | R-2344    |

Technical List  
bv-1  
December 20, 2024

**bv - Rods, armor**  
(includes standard, double insulator, and tapping rods)

| <u>Technical Acceptance<br/>Period</u> | <u>MANUFACTUER</u>    | <u>CATALOG #</u>   |
|--|-----------------------|--|
|  |                       | <u>Aluminum or aluminum alloy rods for use on ACSR</u>     |
| 12/2024 – 12/2025                      | Mosdorfer NA, Inc.    | AAR 0309, AAR 0390, AAR 0437, AAR 0846                     |
| 12/2024 – 12/2025                      | MacLean Power Systems | AR-A 0.244, AR-A 0.309, AR-A 0.390, AR-A 0.437, AR-A 0.552 |

Copperweld rods for copper or CWC conductor

Alumoweld rods for aluminum clad steel (Alumoweld)  
overhead ground wire

Technical List  
 bx-2  
 December 9, 2024

bx - Splice, automatic

| Technical Acceptance Period | Manufacturer              | Catalog #     | AAC       | AAAC      | ACSR                   |
|-----------------------------|---------------------------|---------------|-----------|-----------|------------------------|
| 3/2018 – 3/2019             | Powerline Hardware (Hobb) | PLH-42        | #2 - #4   | #2 - #4   | #2 - #4                |
|                             |                           | PLH-1020      | 1/0 - 2/0 | 1/0 - 2/0 | 1/0 - 2/0              |
|                             |                           | PLH-266336    | 266-336   | 312.8     | 336 (18/1), 266 (26/7) |
|                             |                           | PLH-397477    | 397-477   | 394.5     | 397-477 (18/1)         |
| 12/2024 – 12/2025           | GPP Solutions             | ALLS-4        | #4        | #4        | #4                     |
|                             |                           | ALLS-40       |           |           |                        |
|                             |                           | ALLS- 477-556 | 559.5     | 556.5     | 477 (26/7)             |

Technical List  
by-1  
December 13, 2024

by - Deadend, automatic and formed Type

ACSR

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>                | <u>Catalog Number</u>   |
|------------------------------------|------------------------------------|---|
| 11/2011 – 11/2012                  | Utility Standard (HD Supply, Inc.) | USDG 4542   |
| 12/2024 – 12/2025                  | MacLean Power Systems              | DG-AC4541, DG-AC4542, DG-AC4544,<br>DG-AC4545, DG-AC4546, DG-AC4547,<br>DG-AC4548, DG-AC4549, DG-AC4550,<br>DG-AC4551, DG-AC4552, DG-AC4553 |
| 12/2024 – 12/2025                  | Mosdorfer (Thailand) Co., Ltd.     | ADG0203, ADG0257, ADG0325,<br>ADG0364, ADG0409, ADG0460,<br>ADG0516, ADG0577  |

Technical List  
ci-1  
December 9, 2024

ci - Clevis, thimble

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u> | <u>Rated Strength</u> |                    |                    |
|------------------------------------|---------------------|-----------------------|--------------------|--------------------|
|                                    |                     | <u>20,000 lbs.</u>    | <u>40,000 lbs.</u> | <u>50,000 lbs.</u> |
| 12/2024 – 12/2025                  | GPP Solutions       | CT88                  | TC40               | -                  |

**Technical List**  
**cm-1**  
**December 5, 2024**

**cm – Insulator, Spool**

|  | Type:  | <u>Secondary</u><br><u>(Wet Process)</u> |                              | <u>Wet</u><br><u>Process</u> | <u>Service</u><br><u>Dry Process</u> |
|--|--|--|------------------------------|------------------------------|--------------------------------------|
|  |  | Groove Diameter:<br>ANSI Class:          | <u>1-3/4"</u><br><u>53-2</u> | <u>3"</u><br><u>53-4</u>     | <u>1-3/8"</u><br><u>53-1</u>         |
| <b><u>Technical Acceptance</u></b><br><b><u>Period</u></b> |  |  |                              |                              |                                      |
| Sept 2018 – <b>Sept 2019</b>                               | Action Manufacturing                                       | AMI-532G                                 | AMI-534G                     | AMI-531G                     | -                                    |
| Oct 2013 – <b>Oct 2014</b>                                 | Ceramica Santa Terezinha S.A.<br>(CST)                     | CST-1108                                 | -                            | CST-1101                     | -                                    |
| Jul 2017 – <b>Jul 2018</b>                                 | MacLean Power Systems                                      | DP53-2                                   | -                            | DP53-1                       | -                                    |
| Dec 2023 – <b>Dec 2024</b>                                 | Newell-PSN, LLC  | 2335320                                  | -                            | 2335310                      | -                                    |
| Dec 2023 – <b>Dec 2024</b>                                 | Newell-PSN, LLC (Mustang<br>Electric Power Products, Inc.) | SIP532                                   | -                            | SIP531                       | -                                    |
| Mar 2020 – <b>Mar 2021</b>                                 | Fujian Hoshing Prosper Electrical<br>Porcelain, Co., Ltd.  | FHP3532G                                 | -                            | FHP3531G                     | -                                    |
| Aug 2024 – <b>Aug 2025</b>                                 | Powerline Hardware   | P53-2G                                   | P53-4G                       | P53-1G                       | -                                    |
| Jul 2024 – <b>Jul 2025</b>                                 | PPC Insulators   | 5101                                     | 5119                         | 5112                         | -                                    |
| Dec 2024 – <b>Dec 2025</b>                                 | Vanguard Electric, LLC                                     | 53-2 SG1                                 | 53-4 SG1                     | 53-1 SG1                     | -                                    |

Technical List  
cs-1  
December 9, 2024

**cs - Bracket, Pole Top Pin**

For Transmission and 24.9/14.4 kV Distribution

Applicable Specifications: "RUS Specifications for Pole Top Brackets for Channel Type Pins," D-14

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u> | <u>Catalog Number</u> |
|------------------------------------|---------------------|-----------------------|
| 12/2024 – 12/2025                  | Romagnole           | R-2157                |
| 12/2024 – 12/2025                  | GPP Solutions       | U2157                 |

**Technical List**  
**cu-1**  
**October 17, 2023**

**cu – Brace, crossarm, 26-inch (side-mounted)**

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>   | Douglas Fir or Southern Yellow Pine | Apitong  | Fiber Reinforced Plastic |
|------------------------------------|-----------------------|-------------------------------------|----------|--------------------------|
| 10/2023 – 10/2024                  | Hubbell Power Systems |                                     | PSCAF626 | -                        |

Note: Braces listed above have 26-inch hole spacing. They are to be used in place of the flat steel braces previously listed on page h.

**cu – Brace, crossarm, 60-inch (underarm)**

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>   | Span, inches: | 60        | 60        |
|------------------------------------|-----------------------|---------------|-----------|-----------|
|                                    |                       | Drop, inches: | 18        | 30        |
| 10/2023 – 10/2024                  | Hubbell Power Systems |               | PSCRA6018 | PSCRA6030 |
| 3/2016 – 3/2017                    | MacLean Power Systems |               | CRBR-35*  | -         |

\*Denotes Fiber Reinforced Plastic, all others are wood.

Technical List  
cx-1  
February 20, 2025

cx - Splice, oval tube

Copper

| <u>Technical Acceptance Period</u> | <u>Conductor Size:</u> | <u>0 x 7</u> | <u>2 x 3</u> | <u>4</u> | <u>6</u> |
|------------------------------------|------------------------|--------------|--------------|----------|----------|
|------------------------------------|------------------------|--------------|--------------|----------|----------|

Copperweld-Copper

| <u>Technical Acceptance Period</u> | <u>Conductor Size:</u> | <u>6A</u> | <u>8A</u> |
|------------------------------------|------------------------|-----------|-----------|
|------------------------------------|------------------------|-----------|-----------|

Aluminum Clad Steel

| <u>Technical Acceptance Period</u> | <u>Conductor Size:</u> | <u>AWGS0395</u>     | <u>AWGS0475</u>                  | <u>AWGS0550</u>       |
|------------------------------------|------------------------|---------------------|----------------------------------|-----------------------|
| 2/2025 – 2/2026                    | Mosdorfer              | 3#5, 3/8" - 7#8 16M | 7#6, #1-2/5, 1/0-3/4,<br>3/0-6/1 | 7#5, 1/0-2/5, 2/0-3/4 |

Technical List  
 cz-1  
 December 9, 2024

cz - Splice for Steel Strand (Overhead Ground Wire)

Compression

Single Sleeve Only

| <u>Technical<br/>Acceptance Period</u> | <u>Manufacturer</u> | <u>High Strength Steel</u> |              | <u>Extra High Strength</u> |             |              | <u>Aluminum Clad Steel</u> |                    |                    |
|--|---------------------|----------------------------|--------------|----------------------------|-------------|--------------|----------------------------|--------------------|--------------------|
|  |                     | <u>3/8"</u>                | <u>7/16"</u> | <u>5/16"</u>               | <u>3/8"</u> | <u>7/16"</u> | <u>7 No. 9 AWG</u>         | <u>7 No. 8 AWG</u> | <u>7 No. 7 AWG</u> |
| 12/2024 – 12/2025                      | GPP Solutions       | AGS-38                     | AGS-716      | AGS-516U                   | AGS-38U     | AGS-716U     | -                          | -                  | -                  |

**Technical List**  
**da-1**  
**December 9, 2024**

**da - Bracket, insulated**

| <u>Technical<br/>Acceptance<br/>Period</u> | <u>Manufacturer</u> | <u>Bracket without<br/>Insulator</u> | <u>Bracket with 1-3/4" Spool<br/>Insulator</u> | <u>Bracket with 3" Spool<br/>Insulator</u> |
|--|---------------------|--------------------------------------|--|--|
| 12/2024 – 12/2025                          | GPP Solutions       | U1300                                | -  | -  |

Technical List  
dt-1  
December 20, 2024

**dt - Deadend, service**

For deadending triplex type service cable, Drawing K2.2.

| Technical<br>Acceptance Period | Manufacturer          | ACSR Size | Catalog Number |             |
|--------------------------------|-----------------------|-----------|----------------|-------------|
|                                |                       |           | Wedge Type     | Formed Type |
| 11/2015 – 11/2016              | Hubbell (Fargo)       | #6 - #2   | SW7195         | -           |
|                                |                       | #4 - 1/0  | SW7187         | -           |
|                                |                       | 2/0 - 4/0 | SW7197         | -           |
| 12/2024 – 12/2025              | MacLean Power Systems | #6        | -              | HSG-4500    |
|                                |                       | #4        | -              | HSG-4501    |
|                                |                       | #4        | -              | HSG-4502    |
|                                |                       | #3        | -              | HSG-4503    |
|                                |                       | #2        | -              | HSG-4504    |
|                                |                       | #1        | -              | HSG-4505    |
|                                |                       | 1/0       | -              | HSG-4506    |
|                                |                       | 2/0       | -              | HSG-4507    |
|                                |                       | 3/0       | -              | HSG-4508    |
| 12/2024 – 12/2025              | Mosdorfer NA, Inc.    | 4         | -              | SG 0257     |
|                                |                       | 2         | -              | SG 0325     |
|                                |                       | 1/0       | -              | SG 0400     |
|                                |                       | 2/0       | -              | SG 0450     |
|                                |                       | 3/0       | -              | SG 0510     |
|                                |                       | 4/0       | -              | SG 0580     |

**du - Link, Extension**

DISTRIBUTION

Manufacturer   Catalog Number

TRANSMISSION

(25,000 lbs. min. strength)

Manufacturer                      Catalog Number  
Preformed Line Products        LCE-66-14

Guy Extension Link  
(For "H" Structure)

Manufacturer    One Guy Attachment    Two Guy Attachment

NOTE: The distribution extension links may be substituted for anchor shackle (Item bo), eye bolt (Item o) and eye nut (Item aa) for both small and large conductor drawings shown in RUS Form 803 and RUS Bulletin 50-3 at the option of the owner.

**Technical List  
du(1)**

**du - Connecting Links for Pole Bands**

Conditions - To obtain experience.in conjunction with pole bands [Item fv(1)]

For Use With Medium Duty Pole Bands

| <u>Manufacturer</u> | <u>Link to<br/>Insulators</u> | <u>Size</u> | <u>Minimum<br/>Strength Rating</u> |
|---------------------|-------------------------------|-------------|------------------------------------|
|---------------------|-------------------------------|-------------|------------------------------------|

Link to Guy

For Use With Heavy Duty Pole bands

| <u>Manufacturer</u> | <u>Link to<br/>Insulators</u> | <u>Size</u> | <u>Minimum<br/>Strength Rating</u> |
|---------------------|-------------------------------|-------------|------------------------------------|
|---------------------|-------------------------------|-------------|------------------------------------|

Link to Guy

**Technical List**  
**dy-1**  
**December 4, 2024**

**dy – Bolt, eye, double arming**

Applicable Specification: ANSI C135.4, “Standards for Galvanized Ferrous Eye Bolts and Nuts for Overhead Line Construction.”

Applicable Sizes            5/8 inch, 14 through 26 inch length  
                                     3/4 inch, 14 through 26 inch length

The following manufacturers have shown compliance with the applicable specifications:

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u> |
|------------------------------------|---------------------|
| 12/2024 – 12/2025                  | Romagnole           |
| 4/2020 – 4/2021                    | Aluma-Form          |

ea - Insulator and stud, post type, vertical

|                                    |  | <u>DISTRIBUTION (RUS Minimum Requirements)</u> |                       |                        |        |
|------------------------------------|--|--|-----------------------|------------------------|--------|
|                                    |  | 12.5/7.2                                       | 12.5/7.2              | 24.9/14.4              |        |
|                                    |  | 7-1/2  | 10                    | 15                     |        |
|                                    |  | 1875   | 1875                  | 1875                   |        |
|                                    |  | 65   | 70                    | 95                     |        |
| <u>Technical Acceptance Period</u> |  | 40   | 50                    | 65                     |        |
| Sept 2018 – Sept 2019              | <u>Action Manufacturing</u>  | AMI-571G                                       | AMI-571G              | AMI-571G               |        |
| Jul 2017 – Jul 2018                | <u>MacLean Power Systems</u>   | DP57-1   | DP57-1                | DP57C-02<br>DP57F-04   |        |
| Mar 2020 – Mar 2021                | <u>Fujian Hoshing Prosper<br/>Electrical Porcelain, Co., Ltd.</u>                  | FHP7571MG<br>FHP7571NG                         | FHP7571G<br>FHP7571QG | FHP7571GG<br>FHP7571PG |        |
| Dec 2023 – Dec 2024                | <u>Newell-PSN, LLC (Mustang<br/>Electric Products, Inc.)</u>                       | -  | -                     | LPP071C<br>LPP071F     |        |
| Aug 2024 – Aug 2025                | <u>Powerline Hardware</u>  | P57-1G   | P57-1G                | -                      |        |
| Jul 2024 – Jul 2025                | <u>PPC Insulators</u>  | 5115   | 5120                  | 5127                   |        |
|                                    |  | <u>DISTRIBUTION or TRANSMISSION</u>            |                       |                        |        |
|                                    |  | 57-1   | 57-2                  | 57-3                   | 57-4   |
|                                    |  | 15   | 22                    | 34.5                   | 46     |
| <u>Technical Acceptance Period</u> |  |  |                       |                        |        |
| Sept 2018 – Sept 2019              | <u>Action Manufacturing</u>  | -  | AMI-572G              | AMI-573G               | -      |
|                                    | <u>Ceramica Santa Terezinha<br/>S.A. (CST)</u>                                     |  |                       |                        |        |
| Oct 2013 – Oct 2014                | 7" Stud  |  | CST-10602-L           | -                      | -      |
| Oct 2013 – Oct 2014                | 1-3/4" Stud  |  | CST-10602-S           | -                      | -      |
| Oct 2013 – Oct 2014                | without stud   |  | -                     | CST-10603              | -      |
| Jul 2017 – Jul 2018                | <u>MacLean Power Systems<br/>(without stud)</u>                                    |  | DP57-2                | -                      | -      |
| Mar 2020 – Mar 2021                | <u>Fujian Hoshing Prosper<br/>Electrical Porcelain, Co., Ltd.<br/>without stud</u> | FHP7571G                                       | FHP7572G              | FHP7573G               | -      |
| Jul 2024 – Jul 2025                | <u>PPC Insulators</u>  | 5125   | 5135                  | 5145                   | -      |
| Aug 2024 – Aug 2025                | <u>Powerline Hardware</u>  |  | P57-2G                | P57-3G                 | P57-4G |
| Mar 2020 – Mar 2021                | <u>Suzhou Porcelain<br/>Insulator Works</u>  |  | 28712N                | 28779N                 | 28784N |
| Dec 2024 – Dec 2025                | <u>Vanguard Electric, LLC</u>  | 5701SSG1                                       | 5702SSG1              | 5703SSG1               | -      |

Technical List  
ea-4  
April 18, 2025

ea - Insulator, line post, composite/polymer

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>                     | <u>ANSI Class</u> |
|------------------------------------|---|-------------------|
| 12/2020 – 12/2021                  | <u>TE Connectivity (Raychem)</u>        |                   |
|                                    | TE-LP15-FS1-01                          | 51-1F             |
|                                    | TE-LP25-FS1-01                          | 51-2F             |
|                                    | TE-LP35-FS1-01                          | 51-3F             |
|                                    | TE-LP15-CS1-01                          | 51-1C             |
|                                    | TE-LP25-CS1-01                          | 51-2C             |
|                                    | TE-LP35-CS1-01                          | 51-3C             |
| 4/2025 – 4/2026                    | <u>Jiangsu Shemar Electric Co. Ltd.</u> |                   |
|                                    | SDHG100076A10 (LP-15)                   | 51-21             |
|                                    | SDFG100154A20 (LP-46)                   | 51-4F             |
|                                    | SDVG200209A20 (LP-69)                   | 51-16             |

Technical List  
ea-5  
December 5, 2024

ea - Insulator, line post, horizontal and vertical clamp-top type

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>          | <u>ANSI Class</u>       |
|------------------------------------|------------------------------|-------------------------|
| Dec 2024 – Dec 2025                | <u>Vanguard Electric LLC</u> | 57-11<br>57-12<br>57-13 |

**eb - Bracket, Pole Top**  
For Post type Insulators

DISTRIBUTION

| <u>Technical Acceptance Period</u>     | <u>Manufacturer</u>                                | <u>Catalog No.</u> |
|--|--|--------------------|
| 12/2024 – 12/2025<br>12/2020 – 12/2021 | GPP Solutions<br>Hubbell (Chance) (14.4 or 7.2 kV) | PB58<br>1B3        |

TRANSMISSION

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u> | <u>Catalog No.</u> |
|------------------------------------|---------------------|--------------------|
| 12/2024 – 12/2025                  | GPP Solutions       | PB58H              |

**Technical List**  
**ej-1**  
**December 9, 2024**

ej - Clamps, deadend with socket eye

ACSR

Technical Acceptance  
 Period

| AWG        |            | kcmil |       |     |       |     |     |
|------------|------------|-------|-------|-----|-------|-----|-----|
| 4/0 to 3/0 | 2/0 to 4/0 | 266.8 | 336.4 | 477 | 556.5 | 795 | 954 |

Iron or Steel Clamps (requires armor tape or liner)

Aluminum Alloy Clamps (do not require armor tape or liner)

12/2024 – 12/2025    GPP Solutions    SODC-47    SODC-57N    SODC-70N    SODC-70N    SODC-88N    SODC-88N    SODC-116N    SODC-116N

NOTE: When used with clevis-type insulators for large conductors on distribution lines, order clamp with clevis eye.

Technical List  
ek-1  
December 9, 2024

**ek - Locknuts**

MF Type

For Bolt Diam., in.:    3/8       1/2       5/8       3/4       7/8

**Technical Acceptance**  
Period

**Manufacturer**

|                   |                      |   |   |        |       |   |
|-------------------|----------------------|---|---|--------|-------|---|
| 9/2015 – 9/2016   | Cooper Power Systems | - | - | DF3N4  | DF3N6 | - |
| 12/2024 – 12/2025 | GPP Solutions        | - | - | U8583  | U8584 | - |
| 12/2024 – 12/2025 | Romagnole            | - | - | R-8583 | -     | - |

**fc - Capacitors, Shunt**

| Manufacturer    | Size     | 12470/7200 Volts |            |           |
|-----------------|----------|------------------|------------|-----------|
|                 |          | 1 Bushing        | 2 Bushing  | 3 Bushing |
| Shreem Electric | 50 kvar  | SE7200501B       | SE7200502B | -         |
|                 | 100 kvar | SE7201001B       | SE7201002B | -         |
|                 | 150 kvar | SE7201501B       | SE7201502B | -         |
|                 | 200 kvar | SE7202001B       | SE7201502B | -         |
|                 | 300 kvar | SE7203001B       | SE7203002B | -         |
|                 | 400 kvar | SE7204001B       | SE7204002B | -         |
|                 | 500 kvar | SE7205001B       | SE7205002B | -         |

24900/14400 Volts

| Manufacturer    | Size     | 24900/14400 Volts |            |           |
|-----------------|----------|-------------------|------------|-----------|
|                 |          | 1 Bushing         | 2 Bushing  | 3 Bushing |
| Shreem Electric | 50 kvar  | SE1440501B        | SE1440502B | -         |
|                 | 100 kvar | SE1441001B        | SE1441002B | -         |
|                 | 150 kvar | SE1441501B        | SE1441502B | -         |
|                 | 200 kvar | SE1442001B        | SE1442002B | -         |
|                 | 300 kvar | SE1443001B        | SE1443002B | -         |
|                 | 400 kvar | SE1444001B        | SE1444002B | -         |
|                 | 500 kvar | SE1445001B        | SE1445002B | -         |

Technical List  
ft-1  
December 9, 2024

ft - Y-Clevis Ball

| Technical Acceptance<br>Period | Manufacturer  | Catalog Number |
|--------------------------------|---------------|----------------|
| 12/2024 – 12/2025              | GPP Solutions | UYBC30         |

Technical List  
gj-1  
October 17, 2023

**gj - Crossarm Assemblies**

Braceless, wood

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>                           | <u>Dimensions</u>       |
|------------------------------------|---|-------------------------|
| 10/2023 – 10/2024                  | <u>Hubbell Power Systems</u><br>CHDDEA86EBREA | 4-1/4" x 5-1/2" x 8'-0" |

Technical List  
go  
August 2019

**go - Fault Indicator, overhead**

| Technical Acceptance<br>Period | Manufacturer | Type |
|--------------------------------|--------------|------|
|--------------------------------|--------------|------|

Technical List  
rp-1  
January 2016

**rp - Wildlife Guards**  
Bushings and Live Parts Covers

| <u>Technical Acceptance<br/>Period</u> | <u>Manufacturer</u> | <u>Catalog Number</u>  |
|--|---------------------|--|
| 1/2016 – 1/2017                        | <u>Salisbury</u>    | 38-25SCS, 38-50SCS, 50-50SCS,<br>58-25SCS, 58-50SCS, 34-25SCS,<br>34-50SCS, 100-25SCS, 125-25SCS |

NOTE: The material composition of these items does not contain a flame-retardant unless specified by the manufacturer.

**Technical List  
sb  
February 2011**

**sb - Switch, disconnect (single-pole, hook-operated station class)**

NEMA standard switches for station or line  
structure use where single-pole switching is permissible

| <u>Technical Acceptance<br/>Period</u> | <u>Manufacturer</u> | <u>Type</u> | <u>Voltage Ratings</u> | <u>System Voltages<br/>Line-to-Line</u> |
|--|---------------------|-------------|------------------------|---|
| 2/9/2011 – 2/9/2012                    | Turner Electric     | THS(PL)     | 15 thru 27 kV          | 12.5, 13.2, 24.9 kV                     |

(L) Means solid material load interrupters are available and accepted.

(LV) Means vacuum interrupters are available and accepted.

\* With steel base only.

(PL) Means hooks for portable load interrupters are available for voltages 34.5 kV and below. Consult switch manufacturer concerning loop switching applications at higher voltages.

**Technical List**  
**sd-1**  
**September 2019**

sd - Current Transformers  
Outdoor Type

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u> | <u>600 V</u>                     | <u>15 kV</u> | <u>25 kV</u> | <u>34.5 kV</u> | <u>69 kV</u> |
|------------------------------------|---------------------|----------------------------------|--------------|--------------|----------------|--------------|
| 9/2019 – 9/2020                    | Peak Demand Inc.    | COS-6<br>COM-6<br>COV-6<br>COL-6 |              |              |                |              |

NOTE: The transformer types listed above are accepted in all standard ratios. Insulation class, voltages, ratios and other necessary information should be specified when ordering.

Technical List  
U ae  
August 2014

**U ae - Arresters, Surge**  
(For Underground System Pole Risers)

MOV Type

| <u>Technical<br/>Acceptance<br/>Period</u> | <u>Manufacturer</u>     | <u>Type</u> | <u>Accepted<br/>Ratings -<br/>kV</u> | <u>Duty</u> | <u>Manufacturer'<br/>Classification</u> | <u>Housing</u> |
|--|-------------------------|-------------|--------------------------------------|-------------|---|----------------|
| <b>8/2014 – 8/2015</b>                     | Siemens Energy,<br>Inc. | 3EK7        | 9,10,18,27                           | Heavy       | Riser pole                              | Polymer        |

U gk - Terminations, Indoor

(When ordering specify conductor size, type, whether  
copper or aluminum and insulation diameter)

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>             | <u>Catalog No.</u>  |
|------------------------------------|---------------------------------|---|
|                                    |                                 | <u>PREMOLDED</u>  |
|                                    |                                 | <u>HEAT SHRINK</u>  |
|                                    |                                 | <u>COLD SHRINK</u>  |
| 11/2018 – 11/2019                  | <u>TE Connectivity - Energy</u> | CSTI-xxxJ Series (15, 25, 35 kV)<br>CSTI-xxxG (with grounding kit) Series (15, 25, 35 kV) |
|                                    |                                 | <u>INSULATED WRAP</u>   |

U gk - Terminations, outdoor  
 (with mounting hardware)\*

(When ordering, specify conductor size, type, whether copper or aluminum, insulation diameter, and type of mounting desired)

| Technical Acceptance Period | Manufacturer                    | Catalog Number  |
|-----------------------------|---------------------------------|---|
|                             |                                 | <u>POLYMER</u><br><u>PREMOLDED</u>  |
|                             |                                 | <u>HEAT SHRINK</u>  |
|                             |                                 | <u>COLD SHRINK</u>  |
| 11/2018 – 11/2019           | <u>TE Connectivity - Energy</u> | CSTO-xxxJ Series (15, 25, 35 kV)<br>CSTO-xxxG (with grounding kit) Series (15, 25, 35 kV) |
|                             |                                 | <u>PORCELAIN</u>  |

\*Mounting Hardware is used to attach termination to mounting bracket (U hd or U hj).  
 NOTE: Some of the above terminators may require ordering the mounting hardware separately.

**Technical List**  
**U go**  
**August 2019**

**U go - Fault Indicator, underground**  
(For Construction Unit UM 6-4)

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u> | <u>Type</u> |
|------------------------------------|---------------------|-------------|
|------------------------------------|---------------------|-------------|

Note: Fault indicators that require the drilling or cutting to the enclosure for mounting is not acceptable.

**Technical List**  
**U hc-1**  
**March 2015**

**U hc - Cable Supports**  
15 and 25 kV

| <u>Technical Acceptance<br/>Period</u> | <u>Manufacturer</u>   | <u>Catalog Number</u> | <u>Grip Dia. Range (inches)</u> |
|--|-----------------------|-----------------------|---------------------------------|
| 3/2015 – 3/2016                        | Slingco Amreica, Inc. | ZCS1893               | 0.50 - 0.63                     |
|  |                       | ZCS1894               | 0.63 - 0.75                     |
|  |                       | ZCS1895               | 0.75 - 1.00                     |
|  |                       | ZCS1896               | 1.00 - 1.25                     |
|  |                       | ZCS1897               | 1.25 - 1.50                     |
|  |                       | ZCS1898               | 1.50 - 1.75                     |
|  |                       | ZCS1899               | 1.75 - 2.00                     |

**U hv - Cable, Underground**  
15 kV, 25 kV and 35 kV Cable

(Alternative Insulation Compound)

Applicable Specification: 7 CFR 1728.204

Conductor (15 kV): Copper or Aluminum - #2 AWG through 1000 kcmil  
Conductor (25 kV): Copper or Aluminum - #1 AWG through 1000 kcmil

Insulation: Tree-retardant Crosslinked Polyethylene (XLP-TR)  
(I) indicates Pirelli IE.7100 XLP-TR  
(II) indicates AT Plastic PowerGuard 320TR  
(III) indicates Union Carbide HFDB-4202  
(IV) indicates Nova Borealis LE 4212  
(V) indicates Dow HFDB 8202  
(VI) indicates Dow Endurance™ HFDC 4202 EC

Ethylene Propylene Rubber  
(VII) indicates Electric Cable Compounds (ECC), Inc. ERI-3728-5

Neutral: Copper Concentric Neutral  
Jacket: High Molecular Weight Polyethylene

| <u>Manufacturer</u> | <u>Insulation(s)</u> | <u>Flat Strap Neutral Available</u> |
|---------------------|----------------------|-------------------------------------|
| American Furukawa   | XLP-TR (VI)          | No                                  |

U hv - Cable, Underground

600 Volt Cable

Applicable Specification: RUS Specification U-2

Conductor: Copper, #4 AWG and larger; Aluminum, #2 AWG and larger

Insulation: Cross-Linked polyethylene (XLPE)

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>  | <u>Type Conductor</u> |
|------------------------------------|--|-----------------------|
| 7/2018 – 7/2019                    | Changfeng Wire & Cable Co., Ltd.   | Aluminum              |
| 3/2018 – 3/2019                    | Electrocables  | Aluminum              |
| 1/2016 – 1/2017                    | Joy Sense  | Aluminum              |
| 4/2025 – 4/2026                    | Shanghai Silin Special Equipment Co., LTD.<br>(Priority Wire & Cable, INC) | Copper & Aluminum     |
| 4/2025 – 4/2026                    | Xiantong Wire and Cable Co., Ltd. (Priority Wire<br>& Cable, INC)          | Copper & Aluminum     |
| 4/2016 – 4/2017                    | Sunni Electric Wire & Cable Co., Ltd.                                      | Aluminum              |

NOTES: The manufacturers shown above have indicated that their 600-volt cable is suitable for use on 480 volt corner grounded delta circuits.

The above cable may be supplied with UL label for Type USE.

**U hv - Cable, Underground**

600 Volt Multi-Conductor Cable

Applicable Specification: RUS Specification U-2  
Conductor: Copper, #4 AWG and larger; Aluminum, #2 AWG and larger

Insulation: Cross-Linked polyethylene (XLPE)  
Cable Configuration: 3 Insulated Conductors Triplexed

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>   | <u>Type Conductor</u> |
|------------------------------------|---|-----------------------|
| 7/2024 – 7/2025                    | Coreal  | Aluminum              |
| 3/2018 – 3/2019                    | Electrocables   | Aluminum              |
| 4/2024 – 4/2025                    | Interamericana de Cables Venezuela S.A. (ICV, S.A.)                     | Copper or Aluminum    |
| 1/2016 – 1/2017                    | Joy Sense   | Aluminum              |
| 1/2025 – 1/2026                    | KLC Cable   | Aluminum              |
| 4/2016 – 4/2017                    | Sunni Electric Wire & Cable Co., Ltd.                                   | Aluminum              |
| 4/2025 – 4/2026                    | Shanghai Silin Special Equipment Co., Ltd. (Priority Wire & Cable, INC) | Copper or Aluminum    |
| 4/2025 – 4/2026                    | Xiantong Wire and Cable Co., Ltd. (Priority Wire & Cable, INC)          | Copper or Aluminum    |

The above cable may be supplied with UL label for Type USE.

**U hv - Cable, Underground**

600 Volt Cable

(Alternative Cable Constructions)

Applicable Specification: RUS Specification U-2 (except as indicated below)

NOTE: Manufacturers listed below are accepted for alternatives A, B, C, D and/or E for the products listed on pages U hv-2 and U hv-3.

Alternative A: 8000 series aluminum alloy in accordance with ASTM B800 or B801.

Alternative B: Stranding in accordance with ASTM B786 for aluminum 1350 conductors or ASTM B787 for copper conductors.

Alternative C: Abuse resistant (ruggedized) (single or two layer) insulation in accordance with ICEA S-81-570.

Alternative D: Self-healing

Alternative E: Stranding in accordance with ASTM B 901 for Compressed Round Stranded Aluminum Conductors Using Single Input Wire Construction

| <u>Technical Acceptance Period</u> | <u>Manufacturer</u>   | <u>Alternative</u> |
|------------------------------------|---|--------------------|
| 4/2024 – 4/2025                    | Interamericana de Cables Venezuela, S.A. (ICV)                          | (A)                |
| 4/2025 – 4/2026                    | Shanghai Silin Special Equipment Co., Ltd. (Priority Wire & Cable, INC) | (C)                |
| 4/2025 – 4/2026                    | Xiantong Wire and Cable Co., Ltd. (Priority Wire & Cable, INC)          | (C)                |

