



Date: January 28, 2025
To: All Vendors
Subject: Addendum #1

REFERENCE: B027-25 Material Package for Ocelot Substation

This Addendum forms part of the contract and clarifies, corrects or modifies original bid document.

NEW SUBMISSION DATE & TIME: February 12, 2025 by 5:00 PM

NEW OPENING DATE & TIME: February 13, 2025 at 10:30 AM

Question 1: Do we have to bid the entire package to be considered or can we bid specific items?

Answer 1: Brownsville PUB needs bids for the entire package. This bid is all or none.

Question 2: Can we have until February 21st to submit the Power Transformer quotations?

Answer 2: The Power Transformer will be supplied by Brownsville PUB.

Question 3: What is the design tension required for the statis poles?

Answer 3: The design tension of the statis poles is 2,000 lbs.

Question 4: Please provide technical specifications for the cable requested on A3 and A3A.

Answer 4: See attached technical specifications below.

The signature of the company agent, for the acknowledgement of this addendum, shall be required. **Complete information below and return via e-mail to: hlopez@brownsville-pub.com.**

I hereby acknowledge receipt of this addendum.

Company: _____

Agent Name: _____

Agent Signature: _____

Address: _____

City: _____ **State:** _____ **Zip:** _____

Phone Number: _____ **E-mail address:** _____

If you have any further questions about the Bid, call 956-983-6375.

BY: Hugo E. López
Purchasing

(E0917-00) SPECIFICATIONS FOR 15-KV 500 MCM COPPER URD POWER CABLE

1.0 SCOPE & CLASSIFICATION

1.1 Scope

This specification covers ethylene propylene rubber (EPR) insulated, 15 kV concentric neutral single conductor shielded URD power cable. Cable will be installed directly buried in earth, or underground in conduit, in wet or dry locations, in pole risers, and in open air in sunlight.

1.2 Classification

15 kV, insulation thickness 220 mils at 133% insulation level.
Conductor size: 500 MCM.

2.0 APPLICABLE SPECIFICATIONS

2.1 Unless otherwise stated in these specifications, cable shall be manufactured, tested and made ready for shipment in accordance with the latest edition of the applicable ASTM, AEIC CS, ICEA S, UL and NEMA standards.

3.0 REQUIREMENTS

3.1 The cable shall meet the requirements of ICEA S-68-516 and AEIC CS-6 latest edition except where it conflicts with the requirements of the specification, in which case this specification shall apply.

3.2 Conductor

The center conductor shall be soft drawn Class B compressed stranded copper per ASTM B8.

3.3 Conductor Shield

An extruded layer of black semi-conducting cross-linked polyethylene conductor shielding meeting the requirements of ICEA S-68-516, paragraph 2.4 shall be provided. The extruded shield shall be easily removable from the conductor. Thickness of conductor shield shall be according to AEIC CS-6, table D.1.

3.4 **Insulation**

The insulation shall be ethylene propylene rubber (EPR) meeting the requirements of ICEA S-68-516. The average thickness shall not be less than 220 mils for 133% rated cable. The minimum thickness at any point shall not be less than 90% of the specified thickness. Insulation shall be suitable for conductor temperatures not to exceed 90 C for normal operation, 130 C for emergency overload conditions, and 250 C for short-circuit conditions.

3.5 **Insulation Shield**

A layer of deformation resistant semi-conducting thermoplastic polyethylene meeting the requirements of paragraph 4.1.1 of ICEA S-68-516 shall be extruded over the insulation to serve as an electrostatic shield. The shield compound should be compatible with the insulation and legibly identified as conducting. The thickness of the shielding shall be in accordance with table 7.1-2 of ICEA S-68-516. Semi-conducting shield shall be free stripping from the insulation per paragraph D.3.1 of AEIC CS-6.

3.6 **Concentric Neutral**

The concentric neutral shall be bare annealed copper wires meeting the requirements of ASTM B-3 and spirally wound over the insulation shield. The cable shall be one-third copper neutral.
500 CU – (26-#12 CU or equivalent)

3.7 **Outer Jacket**

An extruded jacket of black linear low-density polyethylene striped jacket shall be applied so as to embed the neutral wires and yield a jacket over them. The jacket shall be tightly fitting and shall be free stripping from the insulation shield. The minimum average thickness of

the jacket shall not be less than 50 mils for cables with diameters up to 1.50" and 80 mils for cables with diameters over 1.50".

4.0 **QUALITY ASSURANCE**

4.1 **Electrical Testing**

Each length of cable shall be tested in accordance with AEIC CS-6 with the following exceptions:

4.1.1 Apparent Discharge Test shall be performed in accordance with AEIC CS-6 except with maximum discharge of 5 picocoulombs to full test voltage of 200 volts/mil.

4.1.2 A.C. Voltage Withstand Test shall be performed in accordance with AEIC CS-6 except partial discharge to be monitored during test. If partial discharge appears, cable is to be rejected.

4.1.3 D.C. Voltage Withstand Test shall be performed in accordance with AEIC CS-6 except at 500 volts/mil.

4.2 **Test Reports**

Certified test reports including X-Y corona plot shall be provided for all cable provided under this specification. Said reports shall be from tests run on the same manufacturing run as the cable delivered to BPUB.

Provide reports to address below and reference the BPUB Purchase Order Number:

BPUB Purchasing Department
1155 FM 511
Olmito, TX 78575

5.0 **IDENTIFICATION**

The following information shall be durably marked and repeated along the cable at regular intervals with unmarked surfaces not exceeding six inches.

- a. Manufacturer's name and/or trade name
- b. Conductor size, type and voltage
- c. Insulation type and thickness
- d. Rated voltage
- e. Year of manufacture
- f. Insulation shielding identified as semi-conducting
- g. Cable footage shall be marked every two (2) feet

6.0 PREPARATION FOR SHIPMENT

- 6.1 Cable shall be furnished uncut in one continuous length on substantially constructed non-returnable wooden reels. Maximum weight of a reel and cable shall not exceed 5000 lbs., diameter 72 inches and width 48 inches.
- 6.2 Watertight seals shall be applied to all cable ends to prevent the entrance of moisture during transit, out-of-door storage or installation.

7.0 DELIVERY (RESERVED)

- 7.1 Delivery of cable will only be accepted during normal working hours. The BPUB Warehouse Receiving Hours are Monday thru Friday, except holidays, from 9:00 AM to 4:00 PM. A delivery ticket/packing slip must be furnished with each delivery by the carrier. The delivery ticket must show the BPUB's Purchase Order, number of reels, beginning & ending footage for each reel, etc. being delivered to the BPUB.