Document Title:
Guy Wire 19#5 Aluminum Clad

Document Type:	Document No.:	
Equipment Specification	**4752.207**	
Department:	Version:	Effective Date:
Transmission Engineering	02	Sep 15, 2023

Author
Koral Caro Rivera
Technical Specialist 1, Transmission Line Standards

Signature and Date
Koral Caro Rivera (Sep 15, 2023 12:33 EDT)

Reviewer 1
Leonardo Montes
EIT, T&S Standards and Materials

Signature and Date
Leonardo Montes Sanchez (Sep 15, 2023 13:58 EDT)

Reviewer 2
Juan Miranda
Supervisor, Line Engineering Design

Signature and Date
Juan Carlos Miranda (Sep 15, 2023 14:05 EDT)

Approver
Oscar Venegas, P.E. (Lic. # 23125)
Principal Engineer, Engineering Services

Signature and Date
Oscar E Venegas (Sep 15, 2023 15:04 EDT)

Version History

Version	Date	Revision Comments
00	Dec 28, 2021	First issue.
01	May 27, 2022	General revision for final approval
02	Sep 15, 2023	Description revision from galvanizing to aluminum clad.

1. General

1.1. This is a general specification that covers the minimum requirements for a Guy Wire 19#5 Aluminum Clad to be used in the transmission system in Puerto Rico.

1.2. Further information will be provided by LUMA Energy at the time of order placement and will provide information on site conditions, quantity, and other requirements.

1.3. This document includes the general electrical and mechanical characteristics of the material.

2. Specific Name

2.1. Guy Wire 19#5 Aluminum Clad.

3. Basic Use

3.1. For supporting poles or structures in the transmission and distribution systems.

4. Special Requirements

4.1. Samples shall be furnished if requested by LUMA.

4.2. LUMA may require one (1) unit properly labeled for testing and analysis.

4.3. Descriptive and technical literature shall be supplied if requested by LUMA.

5. Marking and Packaging

5.1. All material and equipment shall be packaged and marked in such a way as to facilitate handling and protection from damage and that the receiving warehouse can readily identify it and send it, in one complete unit, to a field location without opening crates or boxes to sort items and/or parts.

6. Labeling

6.1. Packaging labels and tags shall be waterproof.

7. Compatible with:

7.1. For compatible manufacturer and model see Section 11 Table 1.

7.2. These models are examples of the equipment/material described in this document and do not represent a preference. LUMA will evaluate equally any model not listed here during any acquisition event.

8. Number per package:

8.1. Package quantity: approved by LUMA.

9. Acceptance Criteria

9.1. Test required: certified by external laboratories.

9.2. Latest applicable codes, standards, and other regulations: ANSI/ASTM (B415, B416).

9.3. NEMA Standard Publication No. WC 26 – Binational Wire and Cable Packaging Standard.

10. Description

10.1. Shall consist of a concentric lay stranded aluminum bare conductor in accordance with ANSI/ASTM B416 with hard-drawn aluminum-clad wires with steel core in accordance with ANSI/ASTM B415.

10.2. For strands, diameter, weight, and strength see table 1.

11. Properties: (Table 1)

Item	Warehouse Catalog #	Package	Minimum breaking strength	Strands & Wire Diameters	Overall Diameter	Weight/1000 ft	Compatible Manufacturer & Model
Cable 19 - #5	046-00227	2,500 ft (1 km) per reel	73,350 lbf (45.7 kN)	19 0.1819” each	0.910”	1,430 lbs	AFL
							AWG

12. Inspection

12.1. The acceptance of any material or equipment shall in no way relieve the vendor from his responsibility to meet all the requirements of this specification, and it shall not prevent subsequent rejection if such material is found to be defective later.

13. Drawing

— End of Specification —