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IEEE Guide for Installation of Cable Using the Guided Boring Method

Sponsor

Insulated Conductors Committee
of the
IEEE Power Engineering Society

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IEEE-SA Standards Board

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Abstract: The method and equipment involved in proper and economical installation of insulated conductors and/or conduits using the guided boring method are covered. The method addresses installations of insulated cable, cable preinstalled in conduit (CIC), and conduit alone.

Keywords: boring, cable, cable preinstalled in conduit (CIC), conduit, guided boring, insulated cable

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Introduction

(This introduction is not a part of IEEE Std 1333-1994, IEEE Guide for Installation of Cable Using the Guided Boring Method.)

This guide was prepared by Working Group 11-28 of the Structures Subcommittee (No. 11) of the Insulated Conductors Committee of the IEEE Power Engineering Society. Members of this working group represent a cross-section of the affected parties including cable users, consulting engineers, and manufacturers. The purpose is to provide users of underground cable with guidelines and considerations pertaining to the installation of cable using the guided boring method.

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WITHDRAWN

Contents

CLAUSE	PAGE
1. Overview.....	1
2. References.....	1
3. General description	2
3.1 Cable	2
3.2 Cable preinstalled in conduit (CIC)	2
3.3 Plastic conduit.....	3
3.4 Metal conduit	3
4. Equipment description	4
4.1 Boring unit (drill frame).....	4
4.2 Field power unit (supply unit).....	4
4.3 Drill (boring) head and locator	4
4.4 Required safety equipment	5
4.5 Supplemental equipment.....	6
5. Preliminary inspection	7
5.1 Observation of field maps and circuit diagrams	7
5.2 Field survey.....	7
5.3 Surface marking of substructures.....	8
5.4 Material and equipment preparation	8
5.5 Job conditions	9
6. Precautions.....	11
6.1 General safety precautions.....	11
6.2 Guarding and protecting work area.....	11
6.3 Testing enclosure atmosphere.....	12
6.4 Shoring.....	12
7. Drilling the run.....	13
7.1 Planning	13
7.2 Start of bore.....	13
7.3 Obstructions	13
7.4 Depth and spacing requirements.....	13
7.5 Pits	13
7.6 Drilling fluid control	13
8. Cable preparation	14
8.1 Reel and reel trailers	14
8.2 Cable	14
8.3 Attaching cable to drill string	14
8.4 Reamers.....	15

WITHDRAWN

CLAUSE	PAGE
9. Installation.....	16
9.1 Cable/conduit pulling.....	16
9.2 Completing the installation.....	17
10. Post-installation activities	18
10.1 Cleanup	18
10.2 Record as-built conditions	18

WITHDRAWN

IEEE Guide for Installation of Cable Using the Guided Boring Method

1. Overview

This guide considers the method and equipment involved in proper and economical installation of insulated conductors and/or conduits using the guided boring method. This method may be used to install insulated cable, cable preinstalled in conduit (CIC), or conduit alone.

2. References

This guide shall be used in conjunction with the following references.

AEIC CS 5-94, Specifications for Cross-Linked Polyethylene Insulated Shielded Power Cables Rated 5 Through 46 kV, 10th ed.¹

AEIC CS 6-87, Specifications for Ethylene Propylene Rubber Insulated Shielded Power Cables Rated 5 through 69 kV, 5th ed.

AEIC G5-90, Underground Extruded Power Cable Pulling Guide, 1st ed.

NEMA WC 7-1991 (ICEA S-66-524), Cross Linked Polyethylene Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy.²

NEMA WC 8-1991 (ICEA S-68-516), Ethylene-Propylene Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy.

U.S. Code of Federal Regulations, Title 29 (29CFR), Occupational Safety and Health Administration (OSHA), Part 1910.269, Subpart R (Special industries—Electric power generation, transmission, and distribution), January 31, 1994.³

U.S. Code of Federal Regulations, Title 29 (29CFR), Occupational Safety and Health Administration (OSHA), Part 1926, Subparts P (trenches/excavations) and S (enclosed areas), July 1, 1994.

¹AEIC publications are available from the Association of Edison Illuminating Companies, 600 N. 18th Street, P. O. Box 2641, Birmingham, AL 35291-0992, USA.

²NEMA publications are available from the National Electrical Manufacturers Association, 2101 L Street NW, Washington, DC 20037, USA.

³OSHA publications are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, USA.