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REVISIONS: UPDATED LEGAL ACKNOWLEDGEMENT FORM. FD MAR '16

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| DESIGNED J. AGNOLIN | RECOMMENDED  F. DENNERT | ACCEPTED  G. REIMER | ENGINEER OF RECORD  | NOTICE FROM THE EXECUTIVE VICE PRESIDENT TRANSMISSION AND DISTRIBUTION AND CUSTOMER SERVICE | |
| DISTRIBUTION STANDARDS  | | ISSUED: MAR 2016 REPLACES: MAY 2004 ORIGINALLY ISSUED: NOV 1980 | | PAGE 1 OF 2 | ES43/53/54/55/65 A1-01.01 ^R 4 |

Scope

This manual is one of a series containing standards for construction of the BC Hydro electrical distribution plant within the service area of BC Hydro. A new distribution plant shall be designed, constructed, owned, operated, maintained and repaired to these standards.

Purpose of Standards

BC Hydro objectives require standardization to:

- Ensure uniform safety requirements comply with BC statutes and regulations.
- Provide uniform system reliability.
- Provide uniform operating practices.
- Permit economic bulk purchasing of materials.
- Achieve optimum life cycle cost of plant construction.
- Effect efficient quality assurance.

Responsibility

The Distribution Standards Department prepares these standards and verifies that specified plant and procedures will perform adequately under all normally expected conditions encountered throughout the province of British Columbia. These standards are approved by Professional Engineers. It is the responsibility of BC Hydro Managers to ensure that the standards are followed unless abnormal conditions are encountered that require variations. These variations should be kept to a minimum and their performance shall be the responsibility of the Professional of Record in charge of the project, who will record and seal the variation based on satisfactory qualifications and experience to do so. As per the latest revision of the BC Hydro Distribution Owner's Engineer Guide, these variations must be accepted by BC Hydro's Owner's Engineer.

Use of Stock Materials

The electrical distribution plant covered by these standards is built using stock materials approved by a Professional Engineer as required by law. The use of non-stock materials for special and unusual situations must be approved by Distribution Standards or the BC Hydro Engineer responsible for the project.

Revisions to Manual




These standards are revised from time to time to improve the safety, performance, workability, cost effectiveness or appearance of the plant. The existing plant built to previous standards need not be updated unless so specifically advised by BC Hydro. When maintenance or other work, such as voltage conversion or conductor change is being done, updating plant to current standards is encouraged.

Mailing Addresses

The manual has been issued to a corporation or firm rather than to an individual. The corporation or firm is responsible for the safekeeping of the manual, and for keeping it current. Changes of address or in number of copies required must be reported promptly.

Suggestions for changes in the manual, or required changes of address may be made on the pre-addressed comment sheet included in the Manual and with each issue of revision.

REVISIONS: UPDATED LEGAL ACKNOWLEDGEMENT FORM. FD MAR '16

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|---------------------------------------|--|--|---|--|---------------------------|--------|
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Information Bulletin:

Revisions to Customer-Owned Primary Services, Indoor and Outdoor Type, Underground Supply

1.0 Items Covered

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|---------------|--|
| ES54 S3-01 | Primary Services, Dead-Front Outdoor Type Kiosk, Private Property Installation |
| ES54 S3-02 | Primary Services, Live-Front Outdoor Type Kiosk, Private Property Installation |
| ES54 S3-03 | Primary Services, Live-Front Indoor Type Switchgear, Private Property Installation |
| Primary Guide | Requirements for Customer-Owned Primary Services Supplied at 4 kV to 35 kV |

2.0 Overview

This bulletin contains the latest revisions to the above construction standards and the BC Hydro Distribution Standards Primary Guide for the installation of customer-owned primary services.

These revisions to the standards are made in response to customer requests, changes to the primary service equipment and the revisions made to the Primary Guide 2017, which is scheduled for issue in September 2017.

The following summary describes the latest revisions to the above standards:

- a. For outdoor type primary services, the distance between the customer kiosk and the 832 or 1232 cable pull box has been increased from 3000 mm to 6000 mm for added flexibility of the customer site layout design.
- b. For indoor type primary services located in high flood level areas, the customer may eliminate the cable pull pit below the utility compartment to avoid water accumulation inside the building. Instead, the customer may install the 832 or 1232 Box outside the building to serve as the cable pull box.
- c. All standards currently listed in Section C of the Primary Guide 2010 revision will be deleted. All information and design details concerning primary service supply cables has been transferred to the ES54 S3-01, S3-02 and S3-03 standards, which will be displayed in Appendix 2 of the Primary Guide 2017. Therefore, the above revised ES54 S3 standards contain the service supply cable connection details held in the Primary Guide 2010, PG C1 standards.

- d. BC Hydro Distribution Design is phasing out PILC type cables for new primary service connections and all PG C2 standards will be deleted from the Primary Guide 2017. All pertinent information concerning PILC type cables will be held in the ES53 standards only, Section C – PILC Cables.

3.0 Action




These newly revised standards, ES54 S3-01 R6, S3-02 R1 and S3-03 R1, shall be in effect immediately. All new customer-owned primary service installations, indoor or outdoor type for underground supply, shall follow these latest revised standards.

For approved or pending designs of new customer-owned primary service installations already in progress, contact BC Hydro Distribution Standards.

4.0 Distribution Standards Contact

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|-----------------------|---|
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5.0 Approval

| Recommended | | Reviewed | | Approved | |
|---|------------|--|------------|--|------------|
|  M. KELVIN | |  A. NORRIS | |  F. DENNERT | |
| Date: | 2017-08-18 | Date: | 2017-08-18 | Date: | 2017-08-18 |