This Legal Acknowledgement Form shall be governed by the laws of the Province of British Columbia and the applicable federal laws of Canada. In the event of conflicts or inconsistencies, if any, between or among this Legal Acknowledgement Form and the terms and conditions of the Standard, the provisions set out in this Legal Acknowledgement Form take precedence.

Disclaimer

The Standard, and all information and referenced standards therein, is provided as a public service by the British Columbia Hydro and Power Authority ("BC Hydro"). Material contained within it carries no guarantee of any kind, express or implied.

Neither BC Hydro nor the Standard designer, recommender, or acceptor, are accountable for the manner in which the Standard is used, or in the way its content is applied. Persons using the Standard, including retained engineers and contractors, are responsible and assume full responsibility and liability for its application, including but not limited to ensuring that the application of its content is appropriate, and that its application does not compromise operability, safety, reliability or maintainability.

The Standards have been prepared for or by BC Hydro to meet specific purposes of BC Hydro. No person shall use or rely upon the Standard, in whole or in part, in any manner, except:

a) for the purpose of providing services to BC Hydro;
b) for the purpose of connecting equipment to BC Hydro equipment;
c) with the prior written consent of BC Hydro, or
d) as required by law.

Limitation of Liability

BC Hydro, its servants or agents, shall not be liable to any person for injury, loss or damage arising out of the use of or reliance upon this Standard, in whole or in part, except for those situations where the person uses the Standards to provide services to BC Hydro to the extent damages are not due to the fault of the person using the Standard, including but not limited to that person's misapplication of the Standard, negligence, or misconduct.

Any person using these Standards hereby agrees to release and indemnify BC Hydro, its servants or agents, from any injury, loss, damage or claim arising or alleged to be arising from use of or reliance upon the Standards, in whole or in part, except for those situations where the person directly uses the Standards to provide services to BC Hydro to the extent damages are not due to the fault of the person using the Standard, including but not limited to that person's misapplication of the Standard, negligence, or misconduct.

Copyright

BC Hydro notes that the Standard may be revised from time to time and recommends that any person using the Standard in accordance with this Legal Acknowledgement Form confirm it is using the most recent version. BC Hydro is not liable for reliance on past versions of the Standard that may be stored electronically.

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:

a) Ensure uniform safety requirements comply with BC statutes and regulations.
b) Provide uniform system reliability.
c) Provide uniform operating practices.
d) Permit economic bulk purchasing of materials.
e) Achieve optimum life cycle cost of plant construction.
f) 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.

Information Bulletin:

Transfer Switches for Secondary Customer Services Emergency Standby Generators — Reaffirmed

1.0 Items Covered

ES53	Section S	SERVICES
SECONDARY GUIDE		REQUIREMENTS FOR SECONDARY VOLTAGE REVENUE METERING (750 V and Less)

2.0 Overview

This bulletin was originally issued in 2006, explaining the major changes to BC Hydro Distribution requirements for connecting the customer-owned emergency standby generator to the customer's secondary service box.

Prior to 2006 revisions, BC Hydro maintained the "List of Transfer Switches Acceptable to BC Hydro" and issued the list to electrical inspectors in various jurisdictions for verification. This list contained CSA certified utility supply transfer switches for open transition known as "break-before-make" switches. In addition, BC Hydro representatives referred to the same list during the acceptance and inspection of customer secondary services.

Since 2006, BC Hydro has phased out the "List of Transfer Switches Acceptable to BC Hydro" and BC Hydro representatives no longer inspect the installation of such switches. Transfer Switches manufactured in compliance with CSA C22.2 No. 178-1 and C22.2 N0 178.2 are deemed to comply with all requirements of BC Hydro. However, verification of compliance to the CSA 22.2 standards and installation of the customer-owned equipment in British Columbia is the jurisdiction of BC Safety Authority (BCSA). Accordingly, BC Hydro has transferred all verifications of compliance of customer-owned break-before-make transfer switches to the BCSA and the electrical authority having jurisdiction.

Notwithstanding the above, BC Hydro will not accept any custom-built mechanical or electrical interlock schemes as means of transfer between the customer secondary service box utility supply and a customer standby generator. BC Hydro will only accept CSA certified transfer switches specifically built for this function per applicable CSA 22.2 standards.

3.0 Action

The BC Hydro designer shall accept the customer-owned emergency standby generation, connected to a customer's secondary service box, subject to the receipt and acceptance of the following information:

- Rating, make and model of the emergency standby generator and a copy of the certificate of CSA approval;
- Rating, make and model of the break-before-make transfer switch and a copy of the certificate of CSA approval;
- Details of generator connection, parallel operation with BC Hydro grid and relaying protection for any make-before-break type of automatic transfer switches (per CEC Section 84 or bump-less transfer) for review and approval by BC Hydro Distribution Generator Interconnection Group
- Copy of certificate of Final Inspection by the BCSA electrical inspector or municipal electrical inspector after completion of installation to certify that all electrical equipment was installed in accordance with the applicable BCEC rules and local bylaws.

Upon review and acceptance of the above information, BC Hydro designer will issue an order to connect.

4.0 Distribution Standards Contact

Name: Mark Kelvin	email: mark.kelvin@bchydro.com
Phone #: 604-529-5679	Cell #: 604-220-3905

5.0 Approval

Recommended		Reviewed		Approved	
M. KELVIN		C. PICASSI		F. DENNERT	
Date:	2016-06-06	Date:	2016-06-06	Date:	2016-06-07