newfoundland labrador hydro
a nalcor energy company

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November 19, 2013

Board of Commissioners of Public Utilities
Prince Charles Building
120 Torbay Road, P.O. Box 21040
St. John's, NL
A1A 5B2

ATTENTION: Ms. Cheryl Blundon
Director of Corporate Services & Board Secretary

Dear Ms. Blundon:

Re: An Application by Newfoundland and Labrador Hydro (Hydro) pursuant to Subsection 41(3) of the Act for approval of the purchase of equipotential bonding and grounding equipment

Please find enclosed the original and eight copies of the above-noted Application, plus supporting affidavit, project proposal, and draft order.

This project involves the purchase of equipment bonding and grounding equipment as part of Hydro's development and implementation of an equipotential bonding and grounding program. The equipment to be purchased includes pole bands, conductor brushes, temporary grounds, grip-alls and portable grounding mats.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

Geoffrey P. Young
Legal Counsel

GPY/tp

cc: Gerard Hayes – Newfoundland Power
Paul Coxworthy – Stewart McKelvey Stirling Scales
Thomas Johnson – Consumer Advocate
Thomas O'Reilly, QC – Cox & Palmer

IN THE MATTER OF the *Electrical Power Control Act,* R.S.N.L. 1994, Chapter E-5.1 (the *EPCA*) and the *Public Utilities Act*, R.S.N.L. 1990, Chapter P-47 (the *Act*), and regulations thereunder;

AND IN THE MATTER OF an Application by Newfoundland and Labrador Hydro (Hydro) pursuant to Subsection 41(3) of the *Act*, for approval of the purchase of equipotential bonding and grounding equipment.

TO: The Board of Commissioners of Public Utilities (the Board)

THE APPLICATION OF NEWFOUNDLAND AND LABRADOR HYDRO (Hydro) STATES THAT:

1. Hydro is a corporation continued and existing under the *Hydro Corporation Act, 2007*, is a public utility within the meaning of the Act and is subject to the provisions of the *Electrical Power Control Act, 1994*.

2. Hydro does not currently have an equipotential bonding and grounding program in place. The "Standard on Electric Utility Workplace Electrical Safety for Generation, Transmission, and Distribution", published in 2010, requires an equipotential bonding and grounding program be in place for electric utility systems above 1000V a.c. L-L. This National Standard of Canada, as accredited by the Standards Council of Canada, a federal Crown corporation that oversees Canada's National Standards System, applies to the construction, operation,

maintenance and replacement of electric utility systems that are used to generate, transform, transmit, distribute and deliver electrical power or energy to consumer services or their equivalent. CAN/ULC-S801-10 gives electric utilities a foundation for safe working environments for their employees across Canada. All of Hydro's transmission and distribution lines are above 1000V a.c. L-L and therefore an equipotential bonding and grounding program is required.

3. The development and implementation an equipotential bonding and grounding program requires the purchase of equipotential grounding and bonding equipment, including pole bands, conductor brushes, temporary grounds, grip-alls and portable grounding mats. Details regarding Hydro's proposal to purchase this equipment are contained in the attached project proposal document.

4. Purchase of this equipment is required to permit Hydro to implement an equipotential bonding and grounding program to safeguard workers from exposure to voltages that may occur through either inadvertent energization or induction.

5. The estimated cost of this project for 2013 is $158,300.

6. The Applicant submits that the proposed capital works and expenditures are necessary to ensure that this generation facility can continue to provide service

which is reasonable safe and adequate and just and reasonable as required by Section 37 of the *Act*.

7. Therefore, Hydro makes Application that the Board make an Order approving, pursuant to Subsection 41(3) of the *Act*, the capital expenditure of $158,300 for the purchase of equipotential bonding and grounding equipment as set out in this Application and in the attached project description and justification document.

DATED at St. John's, in the Province of Newfoundland and Labrador, this 19th day of November, 2013.

Geoffrey P. Young
Counsel for the Applicant
Newfoundland and Labrador Hydro
500 Columbus Drive P.O. Box 12400
St. John's, Newfoundland and Labrador
A1B 4K7
Telephone: (709) 737-1277
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IN THE MATTER OF the *Electrical Power Control Act,* R.S.N.L. 1994, Chapter E-5.1 (the EPCA) and the *Public Utilities Act*, R.S.N.L. 1990, Chapter P-47 (the Act), and regulations thereunder;

AND IN THE MATTER OF an Application by Newfoundland and Labrador Hydro pursuant to Subsection 41(3) of the *Act*, for approval of the purchase of equipotential bonding and grounding equipment.

AFFIDAVIT

I, Robert J. Henderson, Professional Engineer, of St. John's in the Province of Newfoundland and Labrador, make oath and say as follows:

1. I am Vice-President of Newfoundland and Labrador Hydro, the Applicant named in the attached Application.

2. I have read and understand the foregoing Application.

3. I have personal knowledge of the facts contained therein, except where otherwise indicated, and they are true to the best of my knowledge, information and belief.

SWORN at St. John's in the)
Province of Newfoundland and)
Labrador)
this 19th day of November 2013,)
before me:)

Barrister – Newfoundland and Labrador

Robert J. Henderson

Project Title: Purchase Equipotential Bonding and Grounding Equipment (2013)

Location: TRO

Category: Transmission and Rural Operations - Tools & Equipment - Transmission

Definition: Other

Classification: Normal

Project Description:

This project involves the purchase of equipotential bonding and grounding equipment as part of Hydro's development and implementation of an equipotential bonding and grounding (EBG) program. Equipment to be purchased includes pole bands, conductor brushes, temporary grounds, grip-alls and portable grounding mats. This equipment will be purchased for various line depots and line vehicles across all TRO regions.

Originally, this project was considered a 2013 capital project under the Remove Safety Hazards Project. However, during an internal review, it was determined that the EBG program does not fall within the true spirit and intent of the Remove Safety Hazards Project, thus requiring this supplemental capital budget application. There will be no net increase to Hydro's 2013 capital budget as the Remove Safety Hazards Project budget will be decreased by the amount that is now allocated to the EBG program.

Project Cost: *($ x1,000)*	**2013**	**2014**	**Beyond**	**Total**
Material Supply	158.3	0.0	0.0	158.3
Labour	0.0	0.0	0.0	0.0
Consultant	0.0	0.0	0.0	0.0
Contract Work	0.0	0.0	0.0	0.0
Other Direct Costs	0.0	0.0	0.0	0.0
Interest and Escalation	0.0	0.0	0.0	0.0
Contingency	0.0	0.0	0.0	0.0
TOTAL	**158.3**	**0.0**	**0.0**	**158.3**

Operating Experience:

Hydro does not currently have an EBG program in place and has not required or used this type of equipment on a widespread basis in the past.

Project Justification:

The "Standard on Electric Utility Workplace Electrical Safety for Generation, Transmission, and Distribution", published in 2010, requires that "an equipotential bonding and grounding (EBG) program shall be in place for electric utility systems above 1000V a.c. L-L in order to safeguard workers from exposure to voltages that may occur through either inadvertent energization or induction." (CAN/ULC S801-10 Clause 10.4.1.1). This National Standard of Canada, as accredited by the Standards Council of Canada, a federal Crown corporation that oversees Canada's National Standards System, applies to the construction, operation, maintenance and replacement of electric utility systems that are used to generate, transform, transmit, distribute and deliver electrical power or energy to consumer services or their equivalent. CAN/ULC-S801-10 gives electric utilities a foundation for safe working environments for their employees across Canada. All of Hydro's transmission and distribution lines are above 1000V a.c. L-L and therefore an EBG program is required. This equipment is necessary for the implementation of an EBG program and since Hydro does not currently have an EBG program in place it does not have this equipment in sufficient quantities. It is critical for the safety of Hydro's line workers that Hydro continues to meet all safety standards.

Future Plans:

The quantity of equipment included in this purchase will be the minimum required to complete training and begin implementation of an EBG program. However, a subsequent purchase of approximately $50,000 in 2014 is required in order to provide all locations with complete sets of equipment and to optimize labor efficiency. Subsequent to the initial purchase of sufficient equipotential bonding and grounding equipment, Hydro will maintain the equipment in acceptable condition through timely replacement. Hydro will also periodically reevaluate its equipment needs with respect to the program and acquire additional equipment as necessary.

Retirements:

No retirements are required for this project.

Project Schedule:

Activity		Start Date	End Date
Planning	Finalize EGB Material Requirements and Obtain Quotes	Complete	Complete
Procurement	Tender Posting	November 18, 2013	November 20, 2013
Procurement	Tender Opening and Evaluation	December 4, 2013	December 6, 2013
Procurement	Tender Award	December 9, 2013	December 13, 2013
Procurement	Receive Materials	January 3, 2014	January 8, 2014
Commissioning	Internal Distribution of Material	January 15, 2014	January 20, 2014

Conclusion:

In order to comply with "Electrical Safety for Generation, Transmission, and Distribution" and ensure the safety of its workers, Hydro is required to develop and implement an equipotential bonding and grounding program. This requires the purchase of equipotential bonding and grounding equipment, including pole bands, conductor brushes, temporary grounds, grip-alls and portable grounding mats.

(DRAFT ORDER)
NEWFOUNDLAND AND LABRADOR
BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

AN ORDER OF THE BOARD

NO. P.U. __ (2013)

IN THE MATTER OF the *Electrical Power Control Act,* R.S.N.L. 1994, Chapter E-5.1 (the "*EPCA*") and the *Public Utilities Act*, R.S.N.L. 1990, Chapter P-47 (the *"Act"*), and regulations thereunder;

AND

IN THE MATTER OF an application By Newfoundland and Labrador Hydro for approval of the purchase of equipotential bonding and grounding equipment pursuant to Subsection 41(3) of the *Act.*

WHEREAS Newfoundland and Labrador Hydro ("Hydro") is a corporation continued and existing under the *Hydro Corporation Act, 2007*, is a public utility within the meaning of the *Act*, and is subject to the provisions of the *EPCA;* and

WHEREAS Subsection 41(3) of the *Act* requires that a public utility not proceed with the construction, purchase or lease of improvements or additions to its property where:

a) the cost of construction or purchase is in excess of $50,000; or
b) the cost of the lease is in excess of $5,000 in a year of the lease,

without prior approval of the Board; and

WHEREAS in Order Nos. P.U. 2(2013) and P.U. 4(2013) the Board approved Hydro's 2013 Capital Budget; and

WHERAS the Board approved supplementary 2013 capital expenditures in:

(i) Order No. P.U. 1(2013) in the amount of $284,100 for the refurbishment of the stop logs at the Burnt Dam Spillway; and
(ii) Order No. P.U. 12(2013) in the amount of $5,198,000 for the refurbishment of the marine terminal at the Holyrood Thermal Generating Station; and
(iii) Order No. P.U. 14(2013) in the amount of $12,809,700 for the refurbishment and repairs to Unit 1 at the Holyrood Thermal Generating Station; and

(iv) Order No. P.U. 15(2013) in the amount of $3,823,600 for 2013 and $15,310,400 for 2014 to install additional 230 kV transformer capacity at the Oxen Pond Terminal Station; and

(v) Order No. P.U. 20(2013) in the amount of $8,015,800 for the replacement of the alternator on the Hardwoods Gas Turbine; and

(vi) Order No. P.U. 31(2013) in the amount of $207,000 to the 2013 Allowance for Unforeseen Items; and

(vii) Order No. P.U. 33(2013)in the amount of $388,700 for the replacement of a breaker at Hinds Lake generating station; and

WHEREAS on November 19, 2013 Hydro applied to the Board for approval to purchase equipotential bonding and grounding equipment (the "Application"); and

WHEREAS the Board is satisfied that the 2013 supplemental capital expenditure for the purchase of equipotential bonding and grounding equipment is necessary to allow Hydro to implement an equipotential bonding and grounding program to provide service and facilities which are reasonably safe and adequate and just and reasonable.

IT IS THEREFORE ORDERED THAT:

1. The proposed capital expenditure of $158,300 for the purchase of equipotential bonding and grounding equipment is approved.

2. Hydro shall pay all expenses of the Board arising from this Application.

DATED at St. John's, Newfoundland and Labrador, this day of , .

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