Ontario Energy Board P.O. Box 2319 27th Floor 2300 Yonge Street Toronto ON M4P 1E4 Telephone: 416- 481-1967 Facsimile: 416- 440-7656 Toll free: 1-888-632-6273 Commission de l'énergie de l'Ontario C.P. 2319 27e étage 2300, rue Yonge Toronto ON M4P 1E4 Téléphone; 416- 481-1967 Télécopieur: 416- 440-7656 Numéro sans frais: 1-888-632-6273



VIA E-MAIL AND WEB POSTING

August 7, 2007

To: All Licensed Electricity Distributors All Other Interested Parties

Re: Consultation on Farm Stray Voltage Board File No.: EB-2007-0709

As announced by the Minister of Energy on June 22, 2007, the Board has received a Directive that requires the Board to implement such measures as the Board considers necessary to address the issue of stray voltage as it affects the farm sector. Specifically, the Directive states as follows:

The Board shall implement such measures which, in its own discretion, having regard to the objective related to quality of electricity service provided for in paragraph 1(1)1 of the Act, are necessary to ensure electricity service to farm customers, in relation to "tingle" or "stray" voltage, is of a quality that does not unduly impact the operation of the farm.

A copy of the Directive is available from the Board's website at <u>www.oeb.gov.on.ca</u>.

The Board is initiating a consultation process to solicit input from interested parties regarding stray voltage, its potential impact on the farm sector and the identification of measures that could be implemented by the Board in response to the Directive. Details of the consultation process are set out below.

The Board has asked Board staff to work with staff of the Electrical Safety Authority as the Board's consultative process develops. The Board is cognizant that a working group of the Utility Advisory Council of the Electrical Safety Authority is currently engaged in reviewing the stray voltage issue in some detail. Consultation and cooperation will be particularly important in relation to technical issues, and will ensure that each agency remains aware of the status and direction of the other's initiatives.

Background

Electricity distribution systems are routinely grounded to the earth. These groundings are intended to provide system protection by transmitting surplus current to the earth when distribution system operating conditions are exceeded. However, even during normal system operation, some current is transmitted to the earth through these groundings. This is called 'earth current', or less commonly, 'ground current'.

Earth current at voltages too low to be detected by animals or people is expected to be present in the vicinity of properly installed and functioning electricity distribution systems (including on-farm distribution systems) and near other grounded electrical equipment. When earth current is detectable beyond the area where it is normally expected, it is called 'stray voltage'.

The voltage level of earth current in a specific area depends on a number of factors including the characteristics and proximity of off-farm and on-farm electricity distribution lines, condition of on-farm electrical machinery, the type and depth of soil and underlying geologic structures, and weather conditions.

Stray voltage may have negative effects on livestock that come in contact with it. Most notably, a behavioural "avoidance" response has been identified. For example, where stray voltage is present cows entering or leaving an automated milking machine stall may experience a minor shock. This may cause animals to avoid the milking area, which in turn can have negative consequences for their health and milk production.

Approach and Timeline

Board staff has begun to collect and analyse information from a variety of sources as to the causes and consequences of stray voltage as well as on mitigation measures. Board staff will ultimately prepare a discussion paper that will summarize information on the nature and extent of farm stray voltage in Ontario; on the causes and effects of stray voltage on farms; on mitigation measures and the costs associated with them; and on the approaches to mitigation in other jurisdictions. Board staff will obtain expert assistance with specific aspects of the farm stray voltage issue, as needed.

Board staff has also begun to form a Farm Stray Voltage Consultative Group, consisting of representatives of farm customers, electricity distributors, and representatives of other stakeholders with experience in some aspect of stray voltage and its effects on farm operations. To date, the Consultative Group includes:

Ontario Federation of Agriculture Ontario Ministry of Agriculture, Food and Rural Affairs Electrical Safety Authority Hydro One Networks Inc. Waterloo North Hydro Inc. Electricity Distributors Association Ontario Ministry of Energy

The names of and contact information for each person on the Consultative Group will be posted on the Board's website. Board staff intends for members of the Consultative Group to serve as a primary point of contact for their respective constituencies in relation to this consultation process, both to receive input and to communicate the direction and status of the Consultative Group's work. Interested parties who wish to make their views known to the Consultative Group should contact the appropriate member of the Consultative Group. All interested parties will be invited to attend a meeting tentatively scheduled for November 2007, at which Board staff will present its preliminary findings. Comments provided at this meeting will be taken into account by Board staff when completing its work on the discussion paper. Meeting details will be made available at a later date.

The staff discussion paper will be issued for written comment in mid-December 2007, with comments to be received by mid-January 2008. The Board will then determine what measures should be implemented to address the stray voltage issue identified in the Directive. This may involve proposing amendments to the Board's regulatory instruments, such as the Distribution System Code.

Cost Awards

Cost awards will be available to eligible parties under section 30 of the *Ontario Energy Board Act, 1998* for their participation in this consultation. Costs awarded will be recovered from all licensed electricity distributors based on their respective distribution revenues.

Licensed electricity distributors that do not have any farm customers and that therefore believe that they should not be funding cost awards in relation to this consultation should file with the Board a letter to that effect by **August 24, 2007**.

Appendix A contains important information regarding cost awards for this consultation, including in relation to eligibility requests and objections. In order to facilitate a timely decision on cost eligibility, the deadlines for filing cost eligibility requests and objections will be strictly enforced.

Invitation to Participate and Filing Instructions

The Board encourages participation in this consultation process by all interested parties. Those interested in participating, including the members of the Consultative Group identified above, should indicate their intent by letter addressed to the Board Secretary by **August 24, 2007**. If you already have a user ID, submit your letter request through the OEB portal at <u>www.err.oeb.gov.on.ca</u>. If you do not have a user ID, a request maybe made to the Board Secretary at <u>boardsec@oeb.gov.on.ca</u>.

That letter should include a statement as to whether the participant wishes to request cost eligibility. All requests for cost eligibility should be accompanied by the information specified in Appendix A under the heading "Cost Award Eligibility".

All filings to the Board in relation to this consultation must quote file number **EB-2007-0709** and include your name, postal address and telephone number and, if available, email address and fax number. Two paper copies of each filing must be provided. The Board asks that participants make every effort to provide electronic copies of their filings in searchable/unrestricted Adobe Acrobat (PDF) format. Those who do not have internet access must submit a CD or diskette in PDF format. For those who do not have computer access, two paper copies are required. Additionally parties are requested to follow the document naming conventions and document submission standards outlined in the RESS Document Guidelines found at <u>www.oeb.gov.on.ca</u>, e-filing services.

Filings must be received by 4:45 pm on the required date.

All materials related to this consultation will be posted on the "Key Initiatives & Consultations" portion of the Board's web site at www.oeb.gov.on.ca. The material will also be available for public inspection at the Board's office during normal business hours.

Questions relating to this consultation can be directed to:

Stephen Cain Policy Advisor, Regulatory Policy Development

Phone:416-544-5162E-mail:stephen.cain@oeb.gov.on.ca.

The Board's toll-free number is 1-888-632-6273, and the Market Operations Hotline is 416-440-7604.

Yours truly,

Original signed by

Peter H. O'Dell Assistant Board Secretary

Appendix A

To Letter Dated August 7, 2007

Cost Awards

Cost Award Eligibility

The Board will determine eligibility for costs in accordance with its *Practice Direction on Cost Awards*. Any person requesting cost eligibility must file with the Board a written submission to that effect by **August 24, 2007**, identifying the nature of the person's interest in this process and the grounds on which the person believes that it is eligible for an award of costs (including addressing the Board's cost eligibility criteria as set out in section 3 of the Board's *Practice Direction on Cost Awards*). An explanation of any other funding to which the person has access must also be provided, as should the name and credentials of any lawyer, analyst or consultant that the person intends to retain, if known. All requests for cost eligibility will be posted on the Board's website.

Licensed electricity distributors will be provided with an opportunity to object to any of the requests for cost award eligibility. If an electricity distributor has any objections to any of the requests for cost eligibility, such objections must be filed with the Board by **September 7, 2007**. Any objections will be posted on the Board's website. The Board will then make a final determination on the cost eligibility of the requesting parties.

Groups representing the same interests or class of persons are expected to make every effort to communicate and co-ordinate their participation in this process. Costs may be pooled when groups with common viewpoints collaborate and pool their resources.

Eligible Activities

Cost awards will be available for the following activities:

- Preparing for and attending Consultative Group meetings
- Preparing for and attending the meeting of interested parties convened to review and discuss Board staff's preliminary findings and proposals
- Preparing written comments on the Board staff discussion paper

The maximum number of hours for which cost awards will be available for each of the eligible activities will be specified at a later date.

Cost Awards

When determining the amount of the cost awards, the Board will apply the principles set out in section 5 of its *Practice Direction on Cost Awards*. The maximum hourly rates set out in the Board's Cost Awards Tariff will also be applied.

The Board will use the process set out in section 12 of its *Practice Direction on Cost Awards* to implement the payment of the cost awards. Therefore, the Board will act as a clearing house for all payments of cost awards in this process.

For more information on this process, please see the Board's Practice Direction on Cost

Awards and the October 27, 2005 letter regarding the rationale for the Board acting as a clearing house for the cost award payments. These documents can be found on the Board's website at www.oeb.gov.on.ca on the "Rules, Codes, Guidelines and Forms webpage.