

November 17, 2016

**BY COURIER (2 COPIES) AND RESS**

**Ms. Kirsten Walli**

Board Secretary

Ontario Energy Board

2300 Yonge Street, Suite 2700, P.O. Box 2319

Toronto, Ontario M4P 1E4

Dear Ms. Walli:

**Re: EB-2016-0160 – Hydro One Networks Inc. Transmission (“Hydro One”) – Cost of Service Beginning January 1, 2017 and 2018**

I am writing to request that the Board direct Hydro One to comply with the Board’s order of November 1, 2016. That order required Hydro One “to provide the estimates of transmission losses and their cost using the approaches described in ED’s footnote 9 on page 3 of ED’s October 25, 2016 reply submission or to explain why these estimates either cannot be provided or are otherwise inappropriate.” Hydro One has not done this.

Hydro One did not provide the loss and cost estimates or explain why the estimation approaches suggested by Environmental Defence might be inappropriate. Instead, Hydro One explained why it believes it should not be required to monitor or manage transmission losses. This is not an adequate response to the Board’s order.

Furthermore, Hydro One’s recent evidence filing is unbalanced and deeply flawed. This is particularly problematic seeing as it was submitted after interrogatories, after the technical conference and after the filing of Environmental Defence’s evidence. This evidence was not responsive to the Board’s order and was flawed in the following ways:

- Hydro One discussed whether large-scale capital projects to reduce losses could be cost-effective. However, it ignored the various operational measures to reduce losses, which are less expensive (e.g. increasing line voltage above nominal values). It also ignored transmission losses as a factor to consider in equipment replacement (e.g. transformers). It also ignored transmission losses as a factor that might help justify a project when reliability and other benefits are also factored in.
- Hydro One discussed the economics of upsizing lines during annual line replacement. It described potential savings of \$1 million compared to potential costs of \$180 million. But the \$1 million savings are *annual* and the \$180 million figure is the total project cost, not the *incremental* cost of upsizing the line that already requires replacement. Over a 60-80 year lifespan, the loss reduction savings could be \$60-80 million and the *incremental* cost of upsizing the lines would be a

mere fraction of total \$180 million cost. Hydro One's \$1 million to \$180 million comparison is incorrect and highly misleading.

- Hydro One completely rules out assessment of alternative conductor materials on the basis that "ASCR is a standard that Hydro One uses for most of its line conductors." Although ASCR may be economically optimal *now* and for *most* uses, its price fluctuates with the price of aluminum and steel, certain situations may warrant different material, and new materials may be developed in the future. Hydro One cannot definitely say that ASCR will always be the best option going forward or that loss reductions will always be an irrelevant factor in comparing alternative materials.
- Hydro One incorrectly states that it cannot affect the level of current flow. It can do so, for example, by increasing the operating voltage of certain lines above nominal levels.<sup>1</sup>
- Hydro One concludes by arguing that transmission losses are irrelevant to its performance. This argument needs to be addressed in submissions on the evidence. Hydro One's argument is not a valid justification for not complying with the Board's order. Furthermore, there are many reasons to believe that the performance of the transmission system would improve if Hydro One considered the value of loss reductions in its operational and investment decision making.

Hydro One has used the Board's November 1, 2016 order to submit fresh evidence that Environmental Defence has not had the opportunity to fully test or respond to seeing as this fresh evidence was filed after interrogatories, after the technical conference, and after the filing of Environmental Defence's evidence. Environmental Defence is considering the most efficient way to respond, including through questioning at the oral hearing. However, it may seek leave to file brief evidence in response should that be necessary and the most efficient way of proceeding.

Most importantly for the present purposes, Hydro One has not abided by the Board's order of November 1, 2016. Environmental Defence therefore requests that the Board direct Hydro One to do so before the commencement of the hearing.

Yours truly,



Kent Elson

cc: The parties in EB-2016-0160

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<sup>1</sup> Evidence of Travis Lusney, November 9, 2016, pp. 4-5.