



Tuesday, July 19, 2005

Ontario Energy Board  
P.O. Box 2319  
2300 Yonge Street  
26<sup>th</sup> Floor  
Toronto, Ontario  
M4P 1E4  
Attn: John Zych, Board Secretary

Re: Draft Guide to Total Resource Cost Analysis

Dear Mr. Zych:

Pursuant to the OEB's call for stakeholder comments on the subject draft document, EnerSpectrum Group would like to offer the following with reference to section 1.2.2:

*1.2.2 Losses on the Distribution System*

*The Avoided Cost Study includes, in the energy avoided costs, a gross up for marginal losses on the transmission system. The Avoided Cost Study does not include a gross up for losses on the distribution system. While the Board recognizes that losses vary from distributor to distributor, for the purposes of cost effectiveness assessments distributors should use the industry average losses on the distribution system of 4%.*

It is EnerSpectrum's contention that distribution line losses can be substantially greater than the industry average of 4% depending on the specific distribution system configuration to which load undergoing TRC analyses is connected. System losses and the contribution to those losses by the load being analyzed also change with load fluctuations throughout the day/week/month/year. Because line losses vary as the square of the current, this is therefore not a scalar relationship. To apply an industry implied scalar percentage loss factor in the avoided cost calculation would result in considerable inaccuracies in the analyses, undervaluing otherwise good CDM technologies, programs and portfolios.

We have illustrated the non-linear line loss relationship at our **Oral Presentation, Stakeholder Consultations, RP-2003-0144 Minister's Directive on DSM and DR, October 2003**. In addition, we have performed system modeling and analyses of LDC distribution networks, where significant load changes due to natural load patterns or customer load reductions would result in loss impacts significantly greater than 4%. The Board has also recognized the differences in loss factors among LDC's.

Notwithstanding the Board's recent conclusions in the RP-2004-0188 2006 ELECTRICITY DISTRIBUTION RATE HANDBOOK REPORT OF THE BOARD 2005 MAY 11 rendering no new incentives for loss reductions, all LDC's have access to system modeling and analyses tools and/or service providers who could render these analyses for inclusion as part of TRC. Done properly, these analyses would constitute a cost effective approach to ensuring all benefits are identified accurately as part of avoided costs. To accurately assess and prioritize loss reduction initiatives for 2006 rate submissions, as directed by the Board, full system analyses would be

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required in any event. These analyses should form part of the submissions involving TRC analyses, especially for those LDC's with high loss factors currently. It is our opinion that the demand for accuracy here is no different from that required in identifying avoided capacity costs (Section 1.2.1) or applying LDC specific discount factors for NPV analyses. All three are particular to each LDC.

EnerSpectrum Group therefore recommends revising 1.2.2 as follows:

*The Avoided Cost Study includes, in the energy avoided costs, a gross up for marginal losses on the transmission system. Avoided energy costs do not include a gross up for losses on the distribution system. Due to the nature of losses particular to each LDC's system configuration and load pattern, the Avoided Cost Study should therefore include the impact of losses on the distribution system. The Board recognizes that losses vary from distributor to distributor, and, for the purposes of cost effectiveness assessments distributors should use the results of a system analyses to assess the impact of anticipated energy and demand savings on system losses.*

EnerSpectrum Group has been an active participant and stakeholder in the CDM development process from its inception. It is our intent to offer these comments with the objective of providing greater rigour and credibility to the TRC process. We would therefore be pleased to discuss these issues further at your convenience.

Sincerely,

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