

September 11, 2014

via email

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
PO Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: Toronto Hydro- Electric System Limited ("Toronto Hydro")
Custom Incentive Rate-setting ("Custom IR") Application for 2015-2019
Electricity Distribution Rate and Charges
OEB File No. EB-2014-0116**

The following are my questions and comments for the Ontario Energy Board to ask Toronto Hydro. Once adequately answered it is my hope that the Ontario Energy Board will consider the questions/comments in their response to the Toronto Hydro rate application.

EB-2014-0116 Exhibit 4A Tab 2 Schedule 3 Page 18 lines 20-23

EB-2014-0116 Exhibit 4A Tab 2 Schedule 3 Page 27 lines 14-18

EB-2014-0116, Exhibit 1B, Tab 2, Schedule 5, Appendix B page 41 section 4.1 footnote 33 etc.

Refers to Major Event Days or "MED" as defined by IEEE specification 1366.

- a) Provide the actual "Major Event Day (MED) Thresholds" from 2005 to 2013
- b) Provide the expected "Major Event Day Thresholds" from 2014 to 2018" using the 2008 to 2012 data as expected performance in the future years.
- c) What impact will the change in the threshold value from the 2013 storms have on reported performance if the future years performance is the same as 2008 to 2012 without any "storm hardening"?

EB-2014-0116 Exhibit 1A Tab 2 Schedule 1 Page 13 line 23 footnote 4

How will feeder automation prevent large scale interruptions of the feeder where a branch falls on the line and the interruption is captured by the protective device at the station, not near the location of the falling tree or branch?

EB-2014-0116 Exhibit 1C Tab 3 Schedule 1 Page 12 line 1-4

EB20140116, Exhibit 1B, Tab 2, Schedule 7, Appendix B, Pg 15 of Residential Workbook General Service Workbook

EB-2014-0116 Exhibit 1C Tab 3 Schedule 1 Page 12 line 1-4

EB-2014-0116, Exhibit 4A, Tab 2, Schedule 4, Page 3 line 21-24

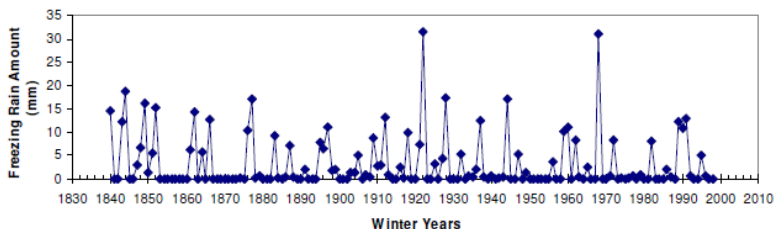
- A) What is the system design for wind and ice load (including overload factor)? EB-2014-0116 Exhibit 1C Tab 3 Schedule 1 Page 12 line 1-4
- B) By how much did Hurricane Sandy's wind exceed the design loading? EB-2014-0116 Exhibit 1C Tab 3 Schedule 1 Page 12 line 1-4
- C) By how much did the Dec 2013 Ice Storm loads exceed the design loading (Given only 17 poles were lost due to ice load according to EB-2014-0116, Exhibit 4A, Tab 2, Schedule 4, Appendix A, pg 93)? EB-2014-0116 Exhibit 1C Tab 3 Schedule 1 Page 12 line 1-4
- D) What is the expected benefit of "hardening" the system given the answers to points a, b and c?
- E) Why did the storm exceed Toronto Hydro's standard response? Why were they not prepared given staff listed in EB-2014-0116, Exhibit 4A, Tab 2, Schedule 4, Appendix A, Pg 23 and 24 section 5.2.1
- F) Why does Toronto Hydro consider this the worst storm (EB20140116, Exhibit 1B, Tab 2, Schedule 7, Appendix B, Pg 15 of Residential Workbook General Service Workbook) in their history given the information below from the 1998 Ice Storm Report "Severe Ice Storm Risks in Ontario" that ice loads beyond 15 mm occur a number of times, specifically in the early 1990's and a severe storm in the 1960's?

see http://www.iclr.org/images/2004_Nov_ICLR_Final_ICE_STORMS.pdf Page 17 for reference)

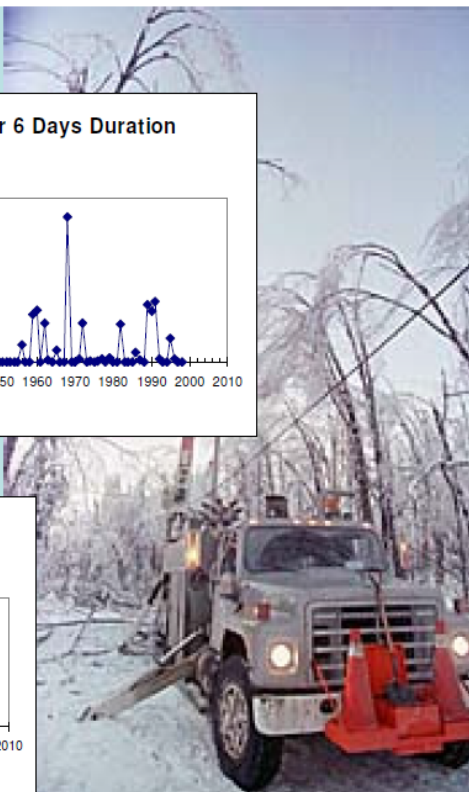
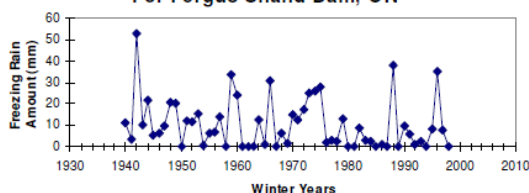
Severe Ice Storm Risks in Ontario - Heather Auld Joan Klaassen M Geast, S Cheng, E Ros, R Lee
Meteorological Service of Canada Environment Canada-Ontario Region

RETURN PERIODS

Annual Maximum Freezing Precipitation Over 6 Days Duration
For Toronto, ON



Annual Maximum Freezing Precipitation Over 6 Days Duration
For Fergus Shand Dam, ON



g) What did Toronto Hydro learn (EB-2014-0116, Exhibit 4A, Tab 2, Schedule 4, Page 3 line 21-24) from the 1998 Ice Storm? E.g. Improvements, gaps etc. What was implemented? When?

EB-2014-0116 Exhibit 1C Tab 3 Schedule 1 Page 12 line 5-7

How is increasing rates going to mitigate potential disasters such as riots, terrorist attack and pandemics?

How up to date is the vegetation clearing in Toronto? See **EB-2011-0144, Exhibit F1, Tab 2, Schedule 1, pg. 6 line 3-15 pg 7 line 1-7** compared to **EB-2014-0116, Exhibit 4A, Tab 2, Schedule 1, Page 28 line 2-11**

The interruption problems appear to have been with trees. Trees that are mature and not growing upward as in a forest, but outward across lawns and roads as in an urban environment or with contained root balls between sidewalks, curbs and driveways which fail without proper vegetation management. How is Toronto Hydro planning to manage the vegetation assets in an effective manner given that the money that was awarded in 2011 does not appear to have improved the performance of the distribution system as illustrated by this rate application (EB-2014-0116, Exhibit 4A, Tab 2, Schedule 4, Appendix A Page 4)?

EB-2014-0116, Exhibit 4A, Tab 2, Schedule 1 Page 15

Provide a list of feeders showing the names and dates when the last fuse co-ordination studies were performed and implemented to ensure the interruptions are captured at the switch directly upstream of the fault?

EB-2014-0116, Exhibit 4A, Tab 2, Schedule 4, Appendix A
Pg 93 of consultants report, page 269 of pdf file

Is Toronto Hydro in agreement with the consultant's report shown below regarding the state of the wood pole assets on the system?

Since so few poles failed due to "ice load" can it be assumed that assets were not a problem during the ice storm?

Why is Toronto Hydro looking to "Storm harden" the assets when the assets do not appear to be the problem?

EB-2014-0116, Exhibit 4A, Tab 2, Schedule 4, Pg 25
EB-2014-0116, Exhibit 4A, Tab 2, Schedule 4, Appendix A, Pg 23 and 24
EB-2014-0116, Exhibit 4A, Tab 2, Schedule 4, Page 23 line 15-17

Why is additional expense required since Toronto Hydro has had emergency planning staff in place since 2008?

Is it not reasonable to expect that this staff would have met the corporate needs before the 2013 ice storm? Why or why not?

Has senior management supported the emergency planning staff since 2008? How, in what ways?

EB-2014-0116, Exhibit 1B, Tab 2, Schedule 5, Appendix B, Pg 6-2 PDF pg 306, 6-4 PDF pg 308 Example of one charts and presented data.

Why does Toronto Hydro agree with normalizing the data in this report by area (square km) when it's assets and costs are linear (km of feeders)?

Explain how this is reasonable for comparison purposes and for justification of costs.

EB-2014-0116, Exhibit 4A, Tab 2, Schedule 4, Appendix A pg 17 and 28

Toronto Hydro issued a press release on Dec 19th stating that it was expecting and organizing for a storm. This was also confirmed in the consultant's report that warnings were issued. What were the actual preparations that were done from on Dec 19th to 21st?

EB-2014-0116, Exhibit 8, Tab 1, Schedule 1 Page 1 line 11-12

What was the Residential Service Charge from 2005 to 2013? This was shown as a separate line item and is now buried in the bill so customers do not see it. Why should an additional “fixed rate” be imposed on the rate payers of Toronto because they have conserved energy?

EB-2014-0116, Exhibit 4A, Tab 2, Schedule 4, Page 19 line 7-14

What are the significant differences in overhead line assets (specifically in North York and Scarborough) affected by the ice storm that staff from Orangeville, Guelph and other LDC's in the province could not handle? Why could staff from other LDC's not work in areas of the city that have the same assets? Why can contractors work for Toronto Hydro and other LDC's but LDC staff cannot work in Toronto?

EB-2014-0116, Exhibit 4A, Tab 2, Schedule 4, Page 17

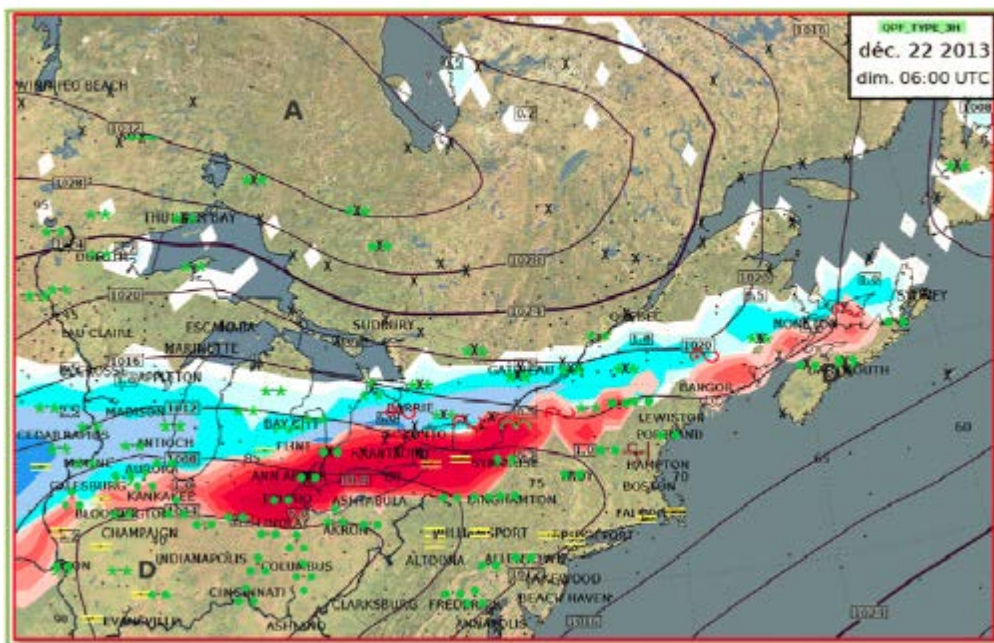
Who actually funded the work for the listed events? The rate payers or the G20 conference etc.?

EB-2014-0116, Exhibit 4A, Tab 2, Schedule 4, Page 1 line 23-24

Provide actual data and dates (ice/wind from a weather service) showing that there is an increasing **frequency** of major weather events **that exceed the design loading (including the overload factor)** of the assets of the Toronto Hydro system.

EB-2014-0116, Exhibit 4A, Tab 2, Schedule 4, Appendix A pg 16 and 18

Figure 5: Surface Map of 2013 Ice Storm at Peak Intensity



As part of the review of Toronto Hydro's restoration effort during the 2013 Ice Storm, Davies Consulting compared the Company's response to other ice and snow storm restorations, using information from its confidential and proprietary Storm Response Benchmark Database.³ Figure 7 depicts the restoration duration (on the X-axis), percent

Why did Toronto Hydro not compare it's business practices with other communities that experienced the same ice storm. For example, Ann Arbor, Hamilton, Windsor? What were the differences in design and business practices? Why did those locations not have the same catastrophic failure?

Respectively submitted by

Norman Hann

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]