Ontario Energy Board

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**BY E-MAIL** 

December 17, 2014

Kirsten Walli Board Secretary Ontario Energy Board P.O. Box 2319 27<sup>th</sup> Floor 2300 Yonge Street Toronto ON M4P 1E4

Dear Ms. Walli:

Re: Toronto Hydro-Electric System Limited (Toronto Hydro)

Application for Rates - Request for Pacific Economics Group Research,

LLC (PEG) Data

**Board File Number EB-2014-0116** 

On December 8, 2014, Board staff filed with the Board a report by PEG entitled "Toronto Hydro Electric System Limited Custom IR Application and PSE Report Econometric Benchmarking of Toronto Hydro's Historical and Projected Total Cost and Reliability Levels: Assessment and Recommendations" (the PEG Report) in accordance with Issues List Decision and Procedural Order No. 3 (Procedural Order No. 3) issued on December 2, 2014.

On December 12, 2014, Toronto Hydro wrote to the Board regarding the PEG Report stating that pursuant to Procedural Order No. 3, it intended to submit written interrogatories on the PEG Report by December 22, 2014, but prior to doing so needed access to the data and other inputs (enclosed as Appendix A to its letter) used by PEG to arrive at the conclusions in its report, in order to conduct an in-depth review of PEG's analysis.

On December 16, 2014, Board staff filed the information requested by Toronto Hydro with the Board in confidence for the reasons outlined in the letter. As Toronto Hydro's consultant Power System Engineering Inc. (PSE) had signed and filed the Board's Declaration and Undertaking on confidentiality, and given the time constraints relating to the filing of interrogatories on December 22, 2014, Board staff also provided PSE

with a copy of this material on a confidential basis.

Board staff would like to provide a clarification to the information provided on December 16, 2014. PEG, in compiling this information, noticed minor errors in the MVA data used for the third econometric run. This data was corrected and the model re-ran, which slightly adjusted the difference between Toronto Hydro's actual and predicted cost but did not substantively modify PEG's conclusion (i.e. that Toronto Hydro's actual costs were found to be greater than its predicted costs in the 2010-2012 period but not to a statistically significant extent and Toronto Hydro's actual costs were found to be significantly greater than its predicted costs in the 2015-19 Custom IR years). PEG has included the output from this computer run to be as accurate as possible (and because it is consistent with the data provided). However, it does make Tables Three and Four of the PEG Report slightly different from those that appear in the version filed on December 8, 2014. The revised versions of these tables are attached.

Yours truly,

Original Signed By

Martin Davies
Project Advisor, Electricity Rates & Accounting

Attachment

cc: Parties to EB-2014-0116 proceeding

#### **Table Three**

# **Econometric Cost Benchmarking Results: Revised Data and Model**

#### VARIABLE KEY

K= Capital Price

N= Number Retail Customers

D= Peak Demand

CAP= MVA of Capacity with Primary Voltage >= 50kV

PRV= Percent Residential Deliveries in Total Deliveries

PCE= Percent Electric Customers in Gas & Electric Customers

PDE= Percent Distribution Plant in Total Electric Plant

ED= Elevation Standard Deviation

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PF= Percent Forestation

Trend= Time Trend

EXPLANATORY VARIABLE	ESTIMATED COEFFICIENT	T STATISTIC	P-VALUE
K*	0.7025	389.231	0.0000
N*	0.6545	23.080	0.0000
D*	0.2245	7.307	0.0000
KxK*	0.1129	18.247	0.0000
NxN*	0.6933	7.132	0.0000
DxD*	0.6073	5.831	0.0000
KxN*	0.0445	3.988	0.0001
KxD*	0.0512	4.585	0.0000
NxD*	-0.6434	-6.704	0.0000
CAP	-0.0019	-0.817	0.4141
PRV*	0.0335	2.328	0.0202
PCE*	0.1352	4.394	0.0000
PDE*	0.1414	7.774	0.0000
ED*	0.0159	2.142	0.0325
PF*	0.0119	2.231	0.0260
Trend	0.0011	0.823	0.4107
Constant*	13.0316	836.975	0.0000
System Rbar-Squared	0.926		
Sample Period	2002-2012		
Number of Observations	805		

<sup>\*</sup>Variable is significant at 95% confidence level

### Table Four

## **Comparison THESL Benchmarking Results**

Year	PSE Model	PSE Model: Corrected THESL Data	PSE Model: Corrected THESL & US Data	Revised Model and Data
2010-2012	-31.1%	-21.3%	-6.3%	8.0%
2013	-24.6%			17.3%
2014	-21.8%			19.4%
2015	-13.1%			28.7%
2016	-11.4%			30.2%
2017	-9.9%			31.7%
2018	-9.5%			32.1%
2019	-8.5%			33.1%