









May 15, 2013

Ms. Kirsten Walli Board Secretary Ontario Energy Board 2300 Yonge St., Suite 2700 Toronto, ON, M4P 1E4

via RESS and email

Dear Ms. Walli:

#### RE: Question and Answer Session on May 16, 2013 Concerning Defining & Measuring Performance Board File No.: EB-2010-0379

On May 3, 2013 the Ontario Energy Board (the "Board" or the "OEB") posted a Report prepared by Board staff's expert consultant, Dr. Lawrence Kaufmann and his team at Pacific Economics Group Research, LLC ("PEG"), that makes specific recommendations for the inflation, productivity and stretch factor parameters for incentive rate setting, and for the benchmarking of electricity distributor total costs. The Board's May 3<sup>rd</sup> letter outlined a consultation process throughout May 2013 which includes a question and answer session to be held on May 16, 2013, intended to give participants an opportunity to ask Dr. Kaufmann clarifying questions to better understand the PEG Report.

This is the submission of questions for the May 16<sup>th</sup>, 2013 session from the Coalition of Large Distributors (the "CLD"). The CLD consists of Enersource Hydro Mississauga Inc., Horizon Utilities Corporation, Hydro Ottawa Limited, PowerStream Inc., Toronto Hydro-Electric System Limited, and Veridian Connections Inc. The questions are provided as Appendix 1. The questions outlined in Appendix 1 are organized based on the following topics addressed in the PEG report: Econometric Benchmarking, Peer Group Benchmarking, Total Factor Productivity ("TFP") Backcast and TFP Trend.

The CLD members are also recipients of an email sent May 14, 2013 from the OEB that includes website links to documents, one of which is a 46 slide presentation by Dr. Kaufmann. The CLD is concerned that it could take several hours to make this presentation which summarizes the PEG Report. The CLD recommends limiting this presentation to 45 minutes in order to ensure that there will be enough time for Dr. Kaufmann to answer the questions of participants, as most will have already read the Report.









The CLD appreciates the opportunity to provide further comment on the PEG report. Please contact the undersigned if you have any further questions on this submission.

Yours truly,

## (Original signed on behalf of the CLD by)

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#### Appendix 1 – CLD Questions on the PEG Report

#### **Econometric Benchmarking Model Questions**

- 1. Why is the average KM of line used rather than the annual KM of line, similar to what was used in the 3GIR model? (Reference Table 10 and Table 12)
- 2. Did PEG attempt to construct a non-contiguous variable? If so, was it tested in the models? If not, why was it not considered?
- 3. What econometric model (Full or Restricted) is being used in the Cohort rankings in Table 26.
- 4. Is the labour component of the OM&A input price levelized (i.e. varies by distributor based on regional wage levels) in the econometric model?
  - a. Is it correct that the capital input price is not levelized by distributor (i.e. each distributor has exactly the same capital input price as every other distributor in each year) in the econometric model?
  - b. If so, does that mean the model is assuming that all distributors pay the same price for labor and materials when constructing their assets?
  - c. In PEG's U.S. benchmarking work, aren't capital input prices typically levelized by utility? Why is it appropriate here to not levelize the capital input prices?
- 5. Are the charged embedded costs of Hydro One being added to distributors' total costs? (Reference Table 7)
  - a. Are the embedded assets (e.g. KM of line owned) of Hydro One being added back into the explanatory variables?
  - b. It's my understanding that charges based on kW served, are these kW's added back to the distributors?
  - c. Did PEG try a KW embedded versus KW total variable to adjust for this issue?
- 6. What is the approximate average size, in number of customers, for the Ontario sample?
  - a. Do you believe the accuracy of the model is reduced for specific utilities the further a utility is from the sample means?
  - b. Do you consider some utilities in the sample to be outlier utilities?
  - c. Are you concerned with the accuracy of results for certain large distributors who can be 10 to 20 times larger than the sample average?
- Can you explain why the model appears to be biased against large distributors? For example, for utilities with customers greater than 100,000 the average benchmarking score is 13 percent over cost.
  - a. Did you conduct any diagnostic tests on this apparent bias?
- 8. Is your econometric model robust enough to stand on its own without the peer group approach? Is peer grouping redundant?
- 9. In the econometric model, are cost and the capital input price being divided by the OM&A input price?





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- a. If so, does this make the dependent variable in the model cost divided by the OM&A input price?
- 10. In your opinion, in the "restricted sample" why are there only nine distributors that are statistically superior at a 90% confidence level but 17 distributors that are statistically inferior at a 90% confidence level?
  - a. Does that skew the cohort groups where 16 distributors are in cohorts IV
    & V, and only 7 are in Cohorts I & II?
- 11. In the econometric models could you interpret for us what the trend variable of 0.011 or 0.014 implies?
- 12. Could you provide the rationale for why contributions in aid of construction (CIAC) are included in the benchmarking analysis but excluded in the TFP analysis?
  - a. Aren't these costs primarily out of the control of the distributors?

# Peer Group Benchmarking Questions

- 1. What is the relationship between the results found in Table 24 to those found in Table 25? For example, Distributor 49 has a value of 146.8% but on Table 25 it has a value of 109.8%.
- 2. Did you test whether the peer group results for distributors are correlated with the external business condition differences found within each peer group?
  - a. If they are correlated, does this suggest that the peer groups are not fully adjusting for the full suite of variables identified in the econometric model?

### **TFP Backcast Questions**

- 1. In your opinion, if a utility's wages increase by 10 percent, all else being equal, will they have higher cost levels?
- 2. Is it true that the cost projections found in Table 19 do not include the added cost pressures to the industry inherent in serving more lines over time?
- **3.** On page 12 you cite three sources for TFP growth. Technical change, economies of scale growth, and "X inefficiencies". Using the econometric model on Table 12, could you provide us the approximate actual value for the technical change of the industry from 2002 to 2011?
  - **a.** Excluding the other two TFP sources, what would this imply regarding the TFP trend from 2002 to 2011?
  - **b.** Could you provide us with an estimate of the "X inefficiency" changes within the industry from 2002 to 2011?
    - i. Excluding the other two sources, what would this imply regarding the TFP trend from 2002 to 2011?
  - **c.** Could you provide us with a ballpark estimate of the economies of scale changes within the industry from 2002 to 2011?
    - i. Would it be 1 minus the sum of the output elasticities multiplied by the output index growth of 1.21%? (reference Table 19)









- **ii.** Excluding the other two TFP sources, what would this imply regarding the TFP trend from 2002 to 2011?
- **4.** On page 102 in the PEG report there is a statement that says, "Cost theory requires a well-behaved cost function to be homogenous in input prices." You then have equation [A2.3]. Could you explain in layman's terms what this equation implies?
  - **a.** For example, if input prices increase by 10%, how much would cost theory say that costs should increase by?
  - b. Does this condition hold for your cost projections found on Table 19?
  - **c.** What would your ballpark cost projections be in Table 19, all else being equal, if the capital input price increased by 10 percent rather than the 1.00 percent cited on Table 15?
  - **d.** What would your ballpark cost projections be in Table 19, all else being equal, if the OM&A input price inflation had been 10 percent per year rather than the 2.30 percent cited earlier on Table 16?
  - e. How is the OM&A input price inflation incorporated into your cost projections found on Table 19?
- Did you cross-check your TFP "backcast" projection of -0.03% (Table 20) with the method used by PEG in its June 20, 2007 report for the Board regarding "Rate Adjustment Indexes for Ontario's Natural Gas Utilities". (Table 10, page 45)
  - a. Is your current methodology in the May 2013 report aligned with the methodology used by PEG in the June 20, 2007 report? If not, why did you change the methodology? Can you explain why you have used a different methodology? Should the TFP projection results produced by the 2007 PEG method be similar to the results produced by the 2013 PEG report found in Tables 20 when the 2013 model coefficients and variable growth rates are inserted into both?
  - **b.** .

# **TFP Trend Questions**

- 1. What is the primary reason or reasons for excluding Hydro One and Toronto Hydro from the industry TFP trend calculation?
- 2. In your opinion, will similar conditions (e.g. de-industrialization) leading to the recent slower TFP growth found in your analysis likely be present during the years of the 4<sup>th</sup> Generation IR plan?
- 3. Did you examine what the TFP trends would be for each distributor if you eliminated only that one distributor in the calculations?
  - a. If you did that would each TFP measure be external to the distributor being excluded?
  - b. Would each TFP trend also capture more of the Ontario industry TFP trend then what your current TFP trend measures, which excludes HONI and THESL?





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c. Take Brant County Power as an example. Assume the industry TFP trend minus their own data equaled negative 1.23% using all of your same data and calculations. Take THESL as another example, their TFP trend minus their own data is -0.95%. How, in your opinion, is it fair to Brant County Power, THESL or any other distributor whose externalized industry TFP trend is strongly negative to instead suggest that a zero productivity factor is the proper one?