Ontario Energy Board | Commission de l'énergie de l'Ontario

BY EMAIL

May 17, 2024

Nancy Marconi
Registrar
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto ON M4P 1E4
Registrar@oeb.ca

Dear Ms. Marconi:

Re: **Ontario Energy Board (OEB) Staff**
Interrogatory Responses for Pacific Economic Group research LLC's (PEG's) Framework Report
Toronto Hydro-Electric System Limited (Toronto Hydro) 2025-2029 Custom Rate Application for Electricity Distribution Rates and Charges
Ontario Energy Board File Number: EB-2023-0195

On May 2, 2024, OEB staff filed PEG's report relating to Toronto Hydro's framework proposal and the evidence provided by Scott Madden Management Consultants, titled *CIR 2.0 for Toronto Hydro-Electric System Limited*. On May 9, 2024, OEB staff received interrogatories relating to this report.

Responses to these interrogatories are included with this letter. Given the nature of the questions, OEB staff prepared the responses to M1-EP-1 and M1-TH-1. All other interrogatory responses were prepared by PEG.

Below in Schedule A, please find OEB staff's responses to interrogatories M1-EP-1 and M1-TH-1. Separately, please also find attached PEG's responses to all other interrogatories for the PEG Framework Report.

Any questions relating to this letter should be directed to Thomas Eminowicz at Thomas.Eminowicz@oeb.ca.

Yours truly,

Thomas Eminowicz

Digitally signed by Thomas Eminowicz
Date: 2024.05.17 13:26:52 -04'00'

Thomas Eminowicz
Senior Advisor

c: All intervenors, Toronto Hydro, Charles Keizer, Arlen Sternberg

Schedule A

Toronto Hydro-Electric System Limited

EB-2023-0195

OEB Staff Responses to M1-EP-1 and M1-TH-1

M1-EP-1

Preamble:

"OEB Staff retained PEG to provide an independent expert appraisal and commentary on THESL's CIR proposal and ScottMadden's evidence. The goal is to help the Board choose the right CIR plan for Toronto Hydro and not to change the general approach to CIR in Ontario."

Questions:

a) Did OEB Staff review and approve the PEG Framework Report prior to filing?

Response to Question a)

As noted in the preamble, PEG was retained as an independent expert. OEB staff did review and provide comments for PEG's consideration in the draft phase of preparing the report but did not "approve" the report.

b) Does OEB Staff agree with the findings of the report? If the answer is no, please list areas of disagreement.

Response to Question b)

OEB staff is of the view that this question is not relevant to the issues in this proceeding. OEB staff further notes that its submissions on the issues in this proceeding will be filed at a later date, after the completion of the evidentiary record.

M1-TH-001

Reference:

PEG Framework Report, p. 5 “OEB Staff retained PEG to provide an independent expert appraisal and commentary on THESL’s CIR proposal and ScottMadden’s evidence.”

Question:

Please provide the engagement letter and all related materials including any RFP and proposal response, and all written instructions provided to PEG, related to the preparation of PEG’s report.

Response:

On November 16, 2023, OEB staff initiated a competitive procurement process to retain an independent expert to support staff in this proceeding. At the time of initiation, OEB staff anticipated that Toronto Hydro would provide benchmarking research and a custom incentive rate formula. The section of the Request for Services (RFS) document that includes the project information and requirements is provided as Attachment A. The invitation was sent to five consulting companies. In response to the RFS, three proposals were submitted. Included as Attachment B is the introduction and proposal from PEG’s response. The Services and Deliverables section of the Statement of Work between the OEB and PEG is provided as Attachment C.

Attachment A: Project information and requirements from the Request for Services

Attachment B: The introduction and proposal sections of PEG’s response

Attachment C: Services and Deliverables

Attachment A: Section 2 of the Request for Services

SECTION 2 - THE DELIVERABLES

2.1 Project Background

Toronto Hydro-Electric System Limited (Toronto Hydro) is expected to file its 2025-29 custom incentive rate application in mid-November. This proceeding will include evaluating issues related to productivity and cost benchmarking, as in previous applications, such as EB-2018-0165. Additionally, Toronto Hydro will be proposing a new iteration of its custom incentive rate framework formula.

OEB staff anticipate that Toronto Hydro will be providing benchmarking research to support its capital and OM&A costs, efficiency measures, and custom incentive rate formula. A departure from the approach to rate-setting in its prior application is expected given the OEB's prior decision, which stated, “Toronto Hydro is encouraged to consider an alternative approach in the future that might be more efficient in establishing revenue requirement for the base year and following years as well as meeting OEB RRF objectives” [EB-2018-0165, Decision and Order, December 2019, p. 24, available at https://www.rds.oeb.ca/CMWebDrawer/Record/663131/File/document]. The rate formula is expected to incorporate methods to address factors such as customer growth, load growth, performance metrics, and inflation.

2.2 Purpose and Objectives

The purpose of this procurement is to retain an expert to support OEB staff in its review of the application. The expert will provide associated technical advisory services as required by reviewing and analyzing Toronto Hydro's benchmarking research and custom IR formula to identify the strengths and weaknesses of the proposal. The expert will be required to evaluate the impact of the proposed formula on rates and achievement of the desired outcomes as per the OEB's Renewed Regulatory Framework for Electricity (RRFE): https://www.oeb.ca/oeb/_Documents/Documents/Report_Renewed_Regulatory_Framework_RRFE_20121018.pdf. This may include modeling and scenario analysis to compare outcomes between established frameworks in the RRFE, Toronto Hydro's existing framework, and the proposed framework.

2.3 Scope of Work and Requirements

As required, the expert will:

Analyze the evidence of Toronto Hydro and its consultant(s) in the areas of total and unit cost benchmarking, and the proposed rate framework. The OEB’s consultant would

identify strengths and weaknesses in the filed evidence while considering OEB expectations expressed in prior decisions, the OEB's Rate Handbook, the RRFE, and other applicable sources, and generally accepted rate-making practices. This includes reviewing and providing an opinion on the above areas of the filed evidence in the context of other custom IR applications, including Toronto Hydro's two prior cases.

In the course of the proceeding, the OEB's consultant would:

(a) Assist OEB staff with the preparation of interrogatories to fully assess the above evidence, and review responses.

(b) Participate in any technical conference(s) and / or assist OEB staff in preparing for any technical conference(s), follow-up on any details following the expert's review of the interrogatory responses.

(c) If required, draft a report critiquing the evidence, and/or prepare an alternative study to rebut or augment the evidence filed. This report, if required, will be filed on the record of the proceeding.

(d) If an expert report is filed, respond to interrogatories filed with respect to the expert's report.

(e) Assist OEB staff in preparing cross-examination for the oral hearing.

(f) If an expert report is filed, the expert may be required to testify at the oral hearing to explain the analysis and findings in the expert's report.

(g) Assist OEB staff in preparing a final submission.

2.4 Term

The term of the engagement is for **one (1) year with the option to extend for one (1) additional one (1) year term.**

[End of Section 2]

Attachment B: The introduction and proposal sections of PEG's response

Company Experience and Expertise

Overview

Pacific Economics Group Research LLC ("PEG") is a consulting firm in the field of energy utility economics. We are a North American leader in the areas of incentive ratemaking [("IR") aka performance-based ratemaking ("PBR")] and statistical research on energy utility performance. Our personnel have accumulated over 60 person years of experience in these areas, which share a foundation in economic statistics. PEG's headquarters are located on Capitol Square in Madison, WI. The University of Wisconsin-Madison ("UW") has trained most of our staff and is renowned for its economic statistics program.

We periodically write articles on our work in respected professional journals. Our practice is multinational and has to date involved projects in twelve countries, including dozens of projects in Canada. Work for a mix of regulators, utilities, trade associations, government agencies, and consumer and environmental groups has given us a reputation for objective empirical research and dedication to good regulation. Most of our main competitors in contrast work chiefly for utilities.

Dr. Mark Newton Lowry is President of PEG. He has been the principal investigator for many of our projects and provides most of our expert witness testimony. Vice President David Hovde manages our empirical team. Rebecca Kavan is our econometrician and helps with other empirical tasks. Matt Makos plays a prominent role in our research on the design of other IR plan provisions. Gretchen Waschbusch is our office manager. The Company also has several Senior Advisors who are not employees. One of these, Scott Brockett, worked for many years for utilities and consumer advocacy groups.

PEG's Proposal

Project Background

Toronto Hydro has been a leading proponent and practitioner of Custom IR in Ontario. The Company is currently in the fourth year of its second Custom IR plan. This plan features a price cap index with a formula that includes I-X terms. However, a C factor term in the formula effectively replaces indexed capital revenue escalation with escalation based on a capital cost forecast.

In its decision approving this plan, the OEB noted the following concerns.

> The RRF objectives of customer-focused outcomes and continuous improvement were not particularly well serviced under Toronto Hydro's 2015-2019 Custom IR framework. Toronto Hydro made significant investments in its system resulting in increases to rates and declining cost performance. The OEB will be making several changes to Toronto Hydro's Custom IR proposal to increase compliance with the objectives set out in the RRF….
>
> Toronto Hydro indicated that its Custom IR approach places risk more squarely on the utility, provides greater protection for customers, decouples rates from costs and includes a comprehensive outcomes framework linked to customer needs / preferences. The OEB does not agree that the proposed Custom IR framework provides the benefits to ratepayers suggested by Toronto Hydro compared to a standard IRM application…
>
> The OEB notes that the Custom IR approach taken has required extensive evidence and time to consider the details provided. Toronto Hydro is encouraged to consider an alternative approach in the future that might be more efficient in establishing the revenue requirement for the base year and following years as well as meeting OEB RRF objectives, and improving the balance of risk between customers and the utility.
>
> Toronto Hydro should not assume that future panels will continue to accept Toronto Hydro's current proposed Custom IR framework.[1]

In November, the Company filed a third Custom IR proposal that would cover the five years from 2025 to 2029. This proposal has the following features.

- A cost of service rebasing year for 2025
- For 2026 to 2029, base revenues would grow based on a I – X + RGF + Y + Z formula where

  I is a variant of the common OEB inflation factor in which the Ontario average weekly earnings from Statistics Canada would be replaced with the Conference Board of Canada's Toronto Hourly Salary and Wages index;

  X would be the sum of a 0% productivity factor, a 0.15% efficiency-factor, and a 0.6% performance factor; and

[1] Ontario Energy Board, "Decision and Order EB-2018-0165 Toronto Hydro-Electric System Limited Application for electricity distribution rates beginning January 1, 2020 until December 31, 2024," December 19, 2019, pp. 23-24

RGF is a "revenue growth factor" designed to account for the purported inability of the revenue cap index to address the entirety of Toronto Hydro's investment program and projected OM&A expenditures. Toronto Hydro's forecasts were adjusted to remove a 2% forecasted annual inflation factor in each year from 2026-2029 to allow for annual updates of the inflation factor that would not result in double counting[2];

- Costs eligible for Y factor treatment would include those for variances between accrual and actual cash payments for pension and other post employment benefit costs, payments in lieu of taxes and taxes, renewable energy enabling improvement investments, locates costs; costs of partnering with the Independent Electricity System Operator for conservation and demand management programs, and wireless attachments costs and revenues.

- A demand-related variance account would address all variances between forecasted and actual capital and OM&A expenditures for the following programs: Customer Connections, Customer Operations, Stations Expansion, Load Demand, Non-Wires Solutions, Generation Protection Monitoring, and Control and Externally-Initiated Plant Relocations and Expansions. This account would have a subaccount that would address the revenue impacts resulting from weather-normalized variances in billing determinants. The latter provision is tantamount to revenue decoupling.

- The Company could recoup the 0.6% performance factor via good performance in a multi-indicator PIM which would be reviewed at Toronto Hydro's next rebasing. Each performance indicator is weighted and has its own target based on specific 2029 performance levels or a five-year average. The performance indicators include variations of System Average Interruption Duration Index, System Average Interruption Frequency Index ("SAIFI"), "system security enhancements," the percentage of new connections and service upgrades completed on time, customer satisfaction, the percentage of customer escalations resolved within 10 business days, the total recordable injury frequency, the tons of CO2 equivalent emissions produced by Toronto Hydro's fleet and facilities, ISO Compliance and Certification, efficiency achievements, grid automation readiness, and flexible system capacity procured through demand response offerings. Toronto Hydro has also proposed that the targets

[2] Toronto Hydro appears to have assumed 2% annual inflation for the 2026-2029 period. While the derivation of this 2% inflation estimate is unclear, PEG notes that at several other points in its application, Toronto Hydro referred to 2% inflation as being from the Conference Board of Canada, Major City Insights – Toronto as released September 13, 2023.

could be updated to reflect the OEB's final decision on the Company's proposed investments.

- A rate rider would be established for an innovation fund which would support the design and execution of innovative pilot projects during the Custom IR plan term.

- The existing lost revenue adjustment, earnings sharing, off-ramp, and Z factor mechanisms would continue.

The submission is supported by evidence from several consultants.

- ScottMadden prepared a survey that purports to show a trend away from index-based attrition relief mechanisms and towards mechanisms based on cost forecasts.

- Steven Fenrick of Clearspring Energy Advisors has prepared an econometric benchmark study of the Company's total cost performance.

  Clearspring has also provided reliability benchmarking evidence. Econometric models were developed for SAIFI and Customer Average Interruption Duration Index ("CAIDI") using US data. These models control for various business conditions, such as forestation and undergrounding, which can affect reliability.

- UMS prepared a unit cost benchmarking study that is based on an urban peer group. This study reviewed Toronto Hydro's cost performance for select capex and maintenance programs, including replacements of wood poles, transformers, and breakers, vegetation management, pole tests and treatments, overhead line patrols, and vault inspections. The study subjects the unit cost metrics to statistical adjustments to account for differences in cost reporting, input prices, and miscellaneous external business conditions. The study shows Toronto Hydro to be a 2nd or 3rd quartile performer for each asset category and maintenance program studied relative to its peer group after normalization.

PEG notes the following about Toronto Hydro's proposal and evidence.

- External expert advice is generally useful to identify and test strengths and weaknesses of expert witness evidence and of the proposed IR plan, and to provide constructive feedback. Toronto Hydro's proposal already includes customer-friendly provisions that seem designed to deflect potential criticism by Staff's witness, which in the past was PEG. Similar, Clearspring has bent over backward to avoid potential criticism by PEG of its methods.

- The survey of multiyear rate plan precedents is controversial. It purports to show a movement away from indexed attrition relief mechanisms in IR plans but actually shows only that some approved attrition relief mechanisms are forecast-based.

- Clearspring and PEG have over the years tried to narrow the differences between their methods so as to save the Board some debates over issues that are difficult to understand. There nonetheless remain some legitimate methodological issues about Clearspring's new evidence.

    - Clearspring has introduced a new urban density variable and two new substation variables to its cost model.

    - Clearspring continues to use a rolling average peak load variable.

    - Clearspring's addition of older data to its capital cost calculations has never been carefully vetted.

    - Another issue is Clearspring's continued use of a geometric decay capital cost specification at a time when other consultants are moving to hyperbolic decay.

    - Still another issue is Clearspring's continued failure to provide itemized OM&A and capital cost benchmarking results. Clearspring should also have measured Toronto Hydro's productivity.

    - Clearspring continues to make misleading claims about its parameter estimation procedure. Alternative procedures are used in Australian regulation.

    - Clearspring has benchmarked reliability, and we believe that this should be addressed to complement the simple "low tech" approach to reliability benchmarking that LEI has recently undertaken for OEB staff. However, the reliability model was not included in the recent collaboration that led to the joint report. We have several concerns about this model.

- Staff may also want the vendor to address the UMS benchmarking evidence.

- The proposal includes a number of new IR plan design issues that PEG is well-qualified to consider.

    - The RGF would take a further step away from the streamlined I-X regulation that most Ontario utilities use and to that extent seems to be

inconsistent with the OEB's directive to the Company in its last IR proceeding.

- New labor price index for the inflation factor
- Complex targeted performance incentive mechanism
- Demand-related variance account
- Innovation fund

Study Objectives

Either prior to or at the start of the project, PEG recommends that a kickoff meeting be held. This meeting would likely include an introduction of PEG's team to the Board Staff team assigned to this project and would consider priorities and timelines for the project. This will help to ensure that everyone is working in concert.

We acknowledge that this project entails the following tasks as set forth in Staff's RFS.

1. Assist OEB staff with the preparation of interrogatories to fully assess the above evidence, and review responses.

2. Participate in any technical conference(s) and/or assist OEB staff in preparing for any technical conference(s), follow-up on any details following the expert's review of the interrogatory responses.

3. If required, draft a report critiquing the evidence, and/or prepare an alternative study to rebut or augment the evidence filed. This report, if required, will be filed on the record of the proceeding.

4. If an expert report is filed, respond to interrogatories filed with respect to the expert's report.

5. Assist OEB staff in preparing cross-examination for the oral hearing.

6. If an expert report is filed, the expert may be required to testify at the oral hearing to explain the analysis and findings in the expert's report.

7. Assist OEB staff in preparing a final submission.

We believe that the following core tasks should be part of the project.

- Review and comment on Clearspring's cost benchmarking evidence and, if warranted, prepare alternative econometric benchmarking studies of Toronto Hydro's OM&A, capital, and total cost. This would be done using PEG's own data

and may consider the alternative hyperbolic decay capital cost specification, different parameter estimators, and alternative peak load and substation treatments.

- Review and comment on Clearspring's reliability benchmarking evidence and, if warranted, prepare an alternative econometric benchmarking study of Toronto Hydro's reliability.

- Review and comment on the UMS unit cost benchmarking.

- Review and comment on the ScottMadden IR precedent review and provide supplemental evidence on this matter.

- Comment on the assumed 0% base TFP trend, which is out of step with recent US research.

- Review and comment on the proposal for an alternative wage rate index and if warranted provide empirical evidence on this matter.

- Review and comment on the PIM proposal.

- Review and comment on the demand-related variance account.

- Review and comment on the RGF, considering alternative capital revenue treatment such as the K-bar approach used in Alberta. Discuss whether supplemental OM&A revenue is needed.

- Participate in a Joint Report with Clearspring. The following tasks also merit serious consideration.

- Update our US power distribution cost sample to include 2022 data. PEG most recently filed power distributor benchmarking evidence in the Alberta PBR3 proceeding. The sample period was 2006-21. A year of additional US operating data is now available.

- Calculate the OM&A, capital, and total factor productivity trends of sampled US utilities. The incremental cost of this work is modest and it will provide useful information for upcoming Ontario proceedings.

- Calculate the OM&A, capital, and total factor productivity trend of Toronto Hydro.

- Review and comment on the innovation fund proposal.

- Add Rebecca Kavan and/or Dave Hovde as a joint witness to give them experience that may prove useful to the OEB in future proceedings.

- Critique and possibly respond to any unscheduled supplemental evidence by Toronto Hydro or its consultant.

Attachment C: Services and Deliverables

The Vendor will support OEB staff in its review of Toronto Hydro-Electric System Limited's (Toronto Hydro) 2025-29 custom incentive rate application (EB-2023-0195). As required, the Vendor will provide associated technical advisory services by reviewing and analyzing Toronto Hydro's benchmarking research, including the areas of total and unit cost benchmarking, and the proposed custom IR framework. The Vendor will identify strengths and weaknesses in the filed evidence, evaluating the impact of the proposed formula on rates and achievement of the desired outcomes as per the OEB's expectations expressed in prior decisions, the OEB's Handbook for Utility Rate Applications, the Renewed Regulatory Framework for Electricity (RRFE), and other applicable sources, and generally accepted rate-making practices. This includes reviewing and providing an opinion on the above areas of the filed evidence in the context of other custom IR applications, including Toronto Hydro's two prior cases. This may include modeling and scenario analysis to compare outcomes between established frameworks in the RRFE, Toronto Hydro's existing framework, and the proposed framework.

In the course of the proceeding, the Vendor will provide the following Services and Deliverables, as needed:

(a) Assist OEB staff with the preparation of interrogatories to fully assess Toronto Hydro's evidence, and review responses.

(b) Participate in any technical conference(s) and / or assist OEB staff in preparing for any technical conference(s), follow-up on any details following the Vendor's review of the interrogatory responses.

(c) If required, draft a report critiquing Toronto Hydro's evidence, and/or prepare an alternative study to rebut or augment the Toronto Hydro evidence filed. This report, if required, will be filed on the record of the proceeding.

(d) If the Vendor's report is filed, respond to interrogatories filed with respect to the Vendor's report.

(e) Assist OEB staff in preparing cross-examination for the oral hearing.

(f) If the Vendor's report is filed, the Vendor may be required to testify at the oral hearing to explain the analysis and findings in the Vendor's report.

(g) Assist OEB staff in preparing a final submission.

As part of services provided under the Deliverables set out above, it is expected the Vendor will provide briefing notes, if requested, to assist OEB staff's strategic decisions on the positions that OEB staff may take in the proceeding.