

Elson Advocacy

March 22, 2024

BY RESS

Nancy Marconi

Registrar

Ontario Energy Board

2300 Yonge Street, Suite 2700, P.O. Box 2319

Toronto, Ontario M4P 1E4

Dear Ms. Marconi:

Re: EB-2023-0343 – Enbridge Gas – East Gwillimbury Gas Expansion Project

I am writing on behalf of Environmental Defence pursuant to *Procedural Order #1* to respond to Enbridge's letter of March 15, 2024, which objected to the evidence proposed by Environmental Defence in this proceeding.

Enbridge's primary contention is that the evidence should not be allowed because similar evidence was disallowed in recent gas expansion cases. However, Environmental Defence has submitted a Notice of Motion in that regard, which provides the following grounds:

Environmental Defence and a local resident, Elizabeth Carswell, sought to introduce evidence to support their contention that the revenue forecast underpinning the project economics is unrealistic because (a) fewer customers will connect than forecast and (b) those customers that do connect will likely leave the methane gas system before the end of the 40-year revenue horizon in the mid 2060s. The proposed evidence included:

- i. A survey gauging the likelihood that customers will connect to the proposed new pipeline to be commissioned by Environmental Defence and designed and carried out by a public opinion research firm;
- ii. A survey of residents already completed by Ms. Carswell; and
- iii. Evidence regarding factors that will impact customer decisions to connect to the methane gas system and remain connected for 40 years, including the relative cost-effectiveness and benefits of heating with heat pumps versus methane gas.

It was procedurally unfair for the OEB panel to reject this evidence. The result is that only Enbridge is allowed to submit survey evidence relevant to the revenue and customer attachment forecasts. Furthermore, only Enbridge is allowed to file evidence on other factors that will impact customer decisions to connect to the methane gas system and remain connected for 40 years, including the relative cost-effectiveness and benefits of heating with heat pumps versus methane gas. This result is unfair and undermines the right of intervenors to make their cases and be heard.

The Decisions also contain a number of errors. For example:

- a. The Decisions state that the proposed evidence seeks to challenge the Natural Gas Expansion Program and the need for the project. However, Environmental Defence has clearly stated throughout that the evidence is submitted to show that the revenue and customer connection forecasts are unrealistic, resulting in undue financial risks for existing customers.
- b. The Decisions state that allowing intervenor survey evidence may require a “lengthy and difficult” adjudication of the validity of the various surveys. It is unfair to address that concern by allowing Enbridge’s survey evidence and disallowing the intervenor surveys, without actually considering whether the intervenor surveys may be more valid.
- c. The Decisions rely heavily on the December 13, 2023 Review Decision regarding the methane gas system expansions to Selwyn and Hidden Valley. However, that Review Decision did not address survey evidence. Furthermore, the Selwyn and Hidden Valley projects were far smaller than the ones at issue here, which was an important factor in the December 13, 2023 Review Decision. Furthermore, the Review Decision is not binding because *stare decisis* does not apply to administrative tribunal decisions.

In response to Enbridge’s reliance on its submissions on this evidence in the previous gas expansion cases, Environmental Defence refers the OEB to its responding submissions in those cases: <https://www.rds.oeb.ca/CMWebDrawer/Record/831022/File/document>.

In addition, Enbridge now challenges Dr. McDiarmid’s credentials. However, Dr. McDiarmid has been qualified by the OEB as an expert in modelling residential heating options in two previous OEB proceedings.¹

Finally, Enbridge incorrectly describes the proposed evidence as being “designed to promote non-natural gas alternative.” This appears to be an intentional mischaracterization of the proposed evidence as Environmental Defence has clearly stated that the evidence is meant to support its contention that the revenue forecast underpinning the project economics is unrealistic

¹ EB-2022-0157, Transcript Vol. 1, November 13, 2023, p. 49. See also the attached *curriculum vitae*.

because (a) fewer customers will connect than forecast and (b) those customers that do connect will likely leave the methane gas system before the end of the 40-year revenue horizon in the mid 2060s. This is a key issue relating to the core of the OEB's customer-protection mandate.

Yours truly,

A handwritten signature in blue ink, appearing to read 'K. Elson', with a stylized, cursive script.

Kent Elson

cc: Parties in the above proceeding

Heather McDiarmid, MCC, PhD

heatheratp2@gmail.com

Experience

Independent Consultant, McDiarmid Climate Consulting

Sept 2018 to present

- Clients have included the Environmental Defense, Ontario Clean Air Alliance, ClimateActionWR, Reep Green Solutions, GreenUP Peterborough, Waterloo Region Community Energy, Conestoga College.
- Prepared evidence for Ontario Energy Board hearings as an expert in residential heating options modelling.
- Developed curriculum materials for an internationally-recognized climate literacy certification program.
- Analyzed the financial and climate mitigation impacts of electrifying Ontario homes using heat pumps for space and water heating.
- Explored a housing archetype-based approach to decarbonizing residential homes in Waterloo Region.
- Conducted a residential retrofit financing program feasibility study to meet FCM requirements.
- Prepared a research-based study of the potential for active transportation hubs and programs to encourage transportation mode shifts in the tri-cities.
- Unearthed and detailed residential carbon mitigation programs and strategies from across North America to inform Toronto's climate action plan.
- Prepared a climate impact analysis and developed an evaluation framework for a non-profit.
- Performed primary and secondary market research on the feasibility of retrofit management.

Sustainability Living Lab Coordinator, University of Waterloo

Oct 2021 to July 2022

- Facilitated opportunities for students to apply their skills and knowledge to campus sustainability challenges
- Documented campus work related to the UN Sustainable Development Goals
- Developed resources to support integration of sustainability content in courses and programs

Research Associate and Lecturer, University of Waterloo

Jun 2020 to present

- Taught a blended (in person and online) graduate course in Climate Change Mitigation in Fall 2021.
- Worked with local non-profit organizations to provide experiential learning opportunities.
- Invited as a guest lecturer on Climate Change Communications and on Climate Change and Housing.
- Analyzed a database of over 44,000 home energy audit results to explore the emissions impacts of different retrofit and electrification approaches for the residential sector.
- Presented research findings at the International Green Energy Conference, Jul 15-18, 2021.

Heather McDiarmid, MCC, PhD

heatheratp2@gmail.com

Research Assistant and Writer, University of Waterloo and David Miller

Mar 2019 to Apr 2020

- Investigated municipal programs from around the world that have been successful in cutting carbon emissions, highlighting the most relevant and universally applicable details for a book.
- Advised on structuring the book and collaborated in choosing programs to profile.
- Wrote early drafts of many chapters.
- David Miller, Director of International Diplomacy at C40 Cities, is the author of the book titled Solved: how the world's great cities are fixing the climate crisis.

Researcher, Clean Air Partnership

Apr to Aug 2019

- Prepared a [toolkit](#) on municipal financing options for residential retrofit programs.
- Completed a 16-week research project in 10 weeks.
- Prepared and presented webinars to municipal representatives.

Academic Instructor, Wilfrid Laurier University and University of Guelph

2002 to 2011

- Shared a passion for biochemistry with 6-200 students at the 2nd, 3rd and 4th year levels.
- Researched and developed new course content.
- Explored innovative ways of engaging students.

Education

- Master of Climate Change, University of Waterloo
- PhD in Biochemistry, University of Guelph

Leadership in Sustainability

- **Project Lead**, Homeowner's guide to heat pumps for WR
- **Committee Member and Co-Chair**, ClimateAction WR Residential Sector
- **Committee Member**, UW CAP Climate and Energy Working Group

Jan to Jun 2021

*Dec 2018 - present
2019*

Heather McDiarmid, MCC, PhD

heatheratp2@gmail.com

Writing and Publications

- An analysis of the financial and climate benefits of using ground-source heat pumps to electrify Ontario's gas-heated homes, prepared for Ontario Clean Air Alliance
- Carbon Literacy Training, an 8-hour micro-credential prepared for Conestoga College
- [An analysis of the financial and climate benefits of electrifying Ontario's gas-heated homes by installing air-source heat pumps](#), prepared for Ontario Clean Air Alliance
- [Accelerating the 1.5°C energy transition for Canadian residential buildings through selective direct electrification with heat pumps](#). Peer-reviewed article published in Canadian Geographer, July 4, 2022.
- [Analysis of Enbridge Gas' proposed low carbon transition program for cost-effectiveness and climate alignment](#), prepared for Environmental Defense for use in OEB hearings
- [An analysis of the potential for air source heat pumps to reduce energy costs and greenhouse gas pollution](#), prepared for Ontario Clean Air Alliance
- Deep energy efficiency retrofits vs direct electrification for urgent emissions reduction: a case study using 33,780 residential energy profiles in Waterloo, Canada. Presented to the 13th International Green Energy Conference Jul 2021.
- [Active Transportation Hubs in Waterloo Region: a research pilot project](#) prepared for ClimateActionWR
- [Aerial thermal imaging and building energy efficiency upgrades in WR: a sustainable buildings pilot, prepared for ClimateActionWR](#)
- [Analysis of the Residential Electrification Potential for the Waterloo Region](#)
- [Residential heat pump water heaters as a climate action for the Waterloo Region](#)
- Deep Energy Residential Retrofit: financing feasibility study for Waterloo Region, prepared for WR Community Energy
- [Accelerating Home Energy Efficiency Retrofits through LIC Programs: a toolkit for municipalities](#), prepared for Clean Air Partnership
- [Climate Change and the Tree Canopy of Waterloo Region](#)
- [Climate Change and Housing Affordability in Canada](#)