Ontario Energy Association (OEA)

Answer to Interrogatory from
Energy Probe Research Foundation (EP)

INTERROGATORY

Reference:

Exhibit M2 (Concentric report), page 20

Preamble:

“Assuming that investors in Ontario’s utility businesses have comparable investment alternatives, the determinative factor is the use of funds.”

Question(s):

Considering that most Ontario utilities are owned by a municipality or the Province, why does Concentric believe that investors have comparable investment alternatives?

Response:

Ontario’s utilities are owned by a combination of private and public investors. As outlined in Concentric’s report, Exhibit M2, practically speaking, if the Board were to find the source of funds was determinative, the Board would be required to distinguish between the cost of equity from different investors, and the sources of potential investment are numerous. Rather, the most appropriate way to measure the cost of capital is to analyze current market data for a proxy group of companies with comparable business and financial risk as Ontario’s regulated utilities. This is consistent with the economic principle of the “opportunity cost” of capital where the investor (including municipal governments) invest capital where the returns are comparable to those in alternative investments. In order to attract funds from other municipal functions (schools, water, safety), the returns must be sufficient for these governments to divert funds to utility service.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Energy Probe Research Foundation (EP)

INTERROGATORY

Reference:

Exhibit M2 (Concentric report), page 23

Preamble:

"At the same time, Enbridge Gas must continue to invest in its system to provide safe and reliable natural gas service while also navigating through increasing complexities for gas distributors brought on by the Energy Transition. Consequently, the Energy Transition has already increased both business and policy-related risks for all Ontario utilities and is inevitably going to continue to do so."

Question(s):

a) Please confirm that Energy Transition largely consists of reducing consumption and increasing electricity use.

b) Has Energy Transition increased business and policy-related risks of Enbridge more than of electricity utilities?

Response:

a) As described in Concentric's report, Exhibit M2, at page 5, the Energy Transition is a transformation of the global energy sector from a primary reliance on fossil fuels to an increased emphasis on more non-emitting and decentralized fuel sources. As such, Energy transition involves a move towards the consumption of lower carbon energy sources. While this may include increasing the use of non-carbon-emitting electricity, it also may include a move to other lower carbon fuels. Improving energy efficiency and behavioural changes to reduce energy consumption are also an important part of energy transition.

   The effects and potential effects of the Energy Transition at the electricity distribution level in Toronto are considered in Toronto Hydro's 2025-2029 Distribution System Plan, which was filed in EB-2023-0195 and refers to the Future Energy Scenarios at Exhibit 2B, Section D4, Appendix A at pages 900-911, and Appendix B at pages 912- 1008:

https://www.torontohydro.com/documents/d/guest/exhibit-2b-distribution-system-plan

b) In general, yes (referring to Enbridge Gas, Inc.). While, as described in the Concentric report, the Energy Transition affects nearly every aspect of existing utilities' businesses, from their growth prospects, to the capital projects pursued, to their fundamental ability to secure and offer investors the opportunity to earn a fair return on capital, investors are acutely aware of the Energy Transition risk that natural gas utilities such as Enbridge Gas, Inc. currently bear and seek returns commensurate with the increased risk of uncertainty resulting from environmental policy and increased focus on ESG. Nevertheless, the Energy Transition presents different business risks to electric and natural gas utilities, and those risks should be factored into determining ROE in accordance with the Fair Return Standard in this proceeding, and future proceedings as those risks evolve.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Energy Probe Research Foundation (EP)

INTERROGATORY

Reference:

Exhibit M2 (Concentric report), page 32

Preamble:

"If the deemed equity thicknesses for Ontario utilities diverge from peer equity thicknesses (which, in Concentric's analysis, they have), then the comparable return standard is not being met, even if Ontario utilities have not experienced a significant shift in risk."

Question(s):

Which Ontario utilities have diverged from peer equity thickness?

Response:

Please see page 134-136 of Concentric's report, Exhibit M2, and in particular Figures 35 and 36, where Concentric addresses this question. In summary, all Ontario utilities have diverged from the deemed/authorized equity thickness for their North American peers, especially those in the U.S.

The deemed equity ratios for Ontario's regulated electric distribution and transmission and gas distribution utilities are generally in line with the average equity ratios for their Canadian counterparts but well below the average level for U.S. electric and gas utilities. OPG has no direct peers, but it also falls below the average equity thickness levels for U.S. electric and gas utilities, despite its elevated level of risk. As shown in Figure 35 of Concentric's report, the deemed equity ratio for Ontario's electric distribution and transmission utilities of 40 percent is slightly lower than the Canadian average of 41 percent but substantially lower than the U.S. average of approximately 51 percent. The deemed equity ratio for OPG of 45 percent falls in between. Similarly, the deemed equity ratio for Enbridge Gas of 38 percent is slightly below the Canadian average of 39.9 percent (which includes the BCUC's recent increase to FortisBC Energy Inc.'s deemed equity ratio from 38.5 percent to 45.0 percent due primarily to risks associated with Energy Transition) and significantly lower than the U.S. average of slightly more than 52 percent. This gap in equity ratios with the U.S. means that

Ontario’s regulated utilities have substantially greater financial risk than their U.S. counterparts.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Energy Probe Research Foundation (EP)

INTERROGATORY

Reference:

Exhibit M2 (Concentric report), Page 34

Preamble:

"Concentric specifically disagrees with the extension of the cap to Enbridge Gas and OPG under LEI's proposal."

Question(s):

Why does Concentric disagree with the extension of the cap to Enbridge Gas and OPG? Please discuss.

Response:

In Concentric's experience, North American regulators do not set caps on debt costs. Rather, regulators rely on the utility to demonstrate the reasonableness of their embedded (or forecast) cost of debt. Concentric understands the OEB's desire for some form of benchmark against which to evaluate the reasonableness of these debt costs, especially where the utility is relying on affiliate sources of debt. In the case of Enbridge and OPG, these companies raise large quantities of debt in public markets, and while a benchmark debt cost for current debt may prove a useful tool for the OEB, a cap based on current (or future) rates would not be an accurate benchmark against which to evaluate these utilities' projected cost of debt for the test year (see, for example, the response to N-M2-7-OEB Staff-6). The current process by which Enbridge Gas and OPG forecast debt costs in their respective rate applications has historically been found by the OEB and continues to be a reasonable approach.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Pollution Probe (PP)

INTERROGATORY

Reference:

The Energy Transition affects nearly every aspect of existing utilities' businesses, from their growth prospects, to the capital projects pursued, to their fundamental ability to secure and offer investors the opportunity to earn a fair return on capital. [Page 23]

Question(s):

a) Please provide the definition for the "Energy Transition" that Concentric is relying on and indicated why the OEB should leverage for proceedings such as this. Please include sources and references.

b) Please confirm that the Energy Transition is already underway and what changes are expected over the next 5, 10 and 15 year periods that are material to Cost of Capital.

c) The Province of Ontario already dictated a 'status quo' approach in Bill 165 related to regulatory treatment (e.g. temporarily maintain revenue assumptions pertaining to Capital asset life despite the Energy Transition). Why should Energy Transition be treated differently for Cost of Capital at this time?

d) Electric utility risks will decrease as Ontario continues its pathway to electrification (vs. fossil fuel Capital which will likely be stranded assets before they are depreciated). What does Concentric believe the impacts of this lower risk to be and over what period does this need to be considered.

e) Given the Energy Transition is a more complex issue that impacts specific items (e.g. useful life of assets) more than others, please explain whether it should be more appropriately address in those more specific manners (e.g. rule changes to asset lives) rather than broader Cost of Capital.

Response:

a) "Energy Transition" is defined as the broad-scale transformation from primary reliance on fossil fuels to an increased emphasis on more renewable and decentralized fuel sources. The definition of "energy transition" is further elaborated

upon in S&P Global's February 24, 2020 article, "What is Energy Transition":

"Energy transition refers to the global energy sector's shift from fossil-based systems of energy production and consumption – including oil, natural gas and coal – to renewable energy sources like wind and solar, as well as lithium-ion batteries."

"Energy Transition" applies to the global energy and utility industries and is therefore appropriate to consider in utility cost of capital proceedings in Ontario.

Environmental policies and laws such as the proposed Clean Electricity Regulations and the Canadian Net-Zero Emissions Accountability Act are further supplemented by analogous provincial and municipal regulations and policies that deepen the impact of the Energy Transition on utilities operating in the jurisdiction. As described in "Powering Ontario's Growth: Ontario's Plan for a Clean Energy Future," the government of Ontario describes that electrification and the Energy Transition are intensifying. Furthermore, in April 2022, the Minister of Energy announced the creation of the Electrification and Energy Transition Panel ("EETP") to help prepare Ontario's economy for electrification and the energy transition.

b) Confirmed. The changes that will occur due to the Energy Transition over the next 5, 10, and 15-year periods are uncertain as to the timing and scope, thus increasing risks for all segments of the utility industry. In general, however, the types of changes that will affect utilities are discussed on pages 22-23 and 115-119 of Concentric's report, Exhibit M2.

c) Despite Bill 165's impact on revenue assumptions for natural gas distributor utilities, the Energy Transition continues to impact the cost of capital for regulated utilities, as described in Concentric's report. Evidence of this is provided by S&P Global's June 2024 report on Enbridge Gas, Inc., which followed the passage of Bill 165, and which found that S&P Global's negative outlook on Enbridge Gas "reflects the uncertainty around upcoming regulatory outcomes related to EGI's gas utility operations and the potential for increased business risk from the energy transition." (See, S&P Global, "Enbridge Gas Inc. 'A-' Rating Affirmed; Outlook Remains Negative," June 28, 2024, p. 1).

d) Increased electricity usage positively affects the growth prospects for electric distributors and transmitters but does not necessarily decrease their business risk. As described in Concentric's report, at 116, electric distributors and transmitters will need to secure sufficient electricity supplies and enhance grid reliability as significant demand growth occurs for electric power. Electric distributors and transmitters will need to invest in assets as interconnectivity from energy sources to the customer becomes fundamental in supplying increased loads to meet demand. Given the expected higher reliance on electricity as it further displaces natural gas, electric distributors and transmitters will increasingly

prioritize reliability and safeguarding their assets amid increased environmental risks, necessitating increased levels of investment in the electric system. Uncertainty about the pace of the Energy Transition will also increase planning risk in the near-term for electric distributors and transmitters.

e) The cost of capital does not “address” the Energy Transition, but rather reflects its impact on utility companies. To the extent the risks of Energy Transition are addressed through asset lives or other regulatory means, that may, however, impact the risk profile of regulated utilities.

Ontario Energy Association (OEA)

Answer to Interrogatory from
Pollution Probe (PP)

INTERROGATORY

Question(s):

a) Please provide a summary and references from electric and gas utilities in Ontario that have taken specific action to change their Capital planning processes to mitigate Energy Transition risk.

b) For each example in part A, please identify the outcomes in relation to risk mitigated for the system and ratepayers.

c) For the Ontario electric and gas utilities that have not taken all possible actions to mitigate Energy Transition risk from their Capital planning processes, please explain why the utility should not bear the risk rather than ratepayers.

Response to a) and b):

The questions suppose that Energy Transition related risk outcomes are entirely known to the utilities, while the reality is that the most significant risk is the unknown. Energy Transition risk is driven by a complex interplay of policy, technological developments and consumer choice. While utilities begin to take steps to address foreseeable risk, much of the risk remains unquantifiable at this time. While there is certainty that fundamental change is ahead, there are degrees of uncertainty about how that change will unfold (e.g., the pace and adoption of EVs and heat pumps; the role of low emission gas; and the scale of local vs. bulk electricity supply).

In any event, to mitigate risks associated with the Energy Transition the Ontario electricity sector considers wires, supply, and demand-side solutions to respond to identified needs. For example:

- Transmission - Regional Planning Process – consider supply, bulk wires, local wires, and non-wires solutions – joint efforts between IESO, Hydro One Transmission, local utilities, and municipalities.
- Distribution – Local utilities are developing approaches to consider non-wires alternatives, as well as exploring customer demand response capabilities to complement existing solutions to respond to growth.

Ontario utilities continue to further wires and non-wires solutions to minimize costs and the environmental impacts of the Energy Transition.

Below are some examples of changes to capital planning processes taken by utilities to mitigate the foreseeable effects of the Energy Transition:

Toronto Hydro

Toronto Hydro has implemented a "least regrets" investment strategy with respect to its capital planning process for its 2025-2029 rate period, which:

- included additional drivers in its System Peak Demand Forecast (e.g., EVs, data centers and Municipal Energy Plans) to assess the anticipated future demand;
- augmented its decision-making process with the results of a Future Energy Scenarios model to understand the impact of different policy, technology and consumer behavior drivers; and
- used the Future Energy Scenarios to stress-test whether the utility's capacity plan can accommodate Energy Transition needs (e.g., building heating electrification) in the early part of the next decade, if required.

Please see Toronto Hydro's 2025-2029 Distribution System Plan which was filed in EB-2023-0195. In particular, please refer to the Capacity Planning & Electrification evidence at Exhibit 2B, Section D4.2 at pages 9 and 10 for a summary of the utility's least regrets investment planning philosophy.[1]

With respect to mitigated outcomes, Toronto Hydro has identified a series of risks related to underinvestment, including:

- **Distribution System**: Underinvestment in infrastructure to support EVs, DERs and various other drivers of demand could lead to increased strain on the system. This could result in more frequent outages, reduced reliability, and lower service quality. Toronto Hydro could face higher operational costs and emergency repairs due to the inadequacy of the current infrastructure to handle peak loads.
- **Customers**: Lack of access to adequate EV charging capacity could slow down the adoption of electric vehicles.
- **Investments in DERs**: Underinvestment could hinder the integration of DERs, affecting local energy generation and storage solutions. This could result in lost opportunities for customers to reduce energy costs and emissions, and for the broader grid to benefit from more distributed energy production.

[1] https://www.rds.oeb.ca/CMWebDrawer/Record/834051/File/document at pp. 52-53.

- **Workforce**: Insufficient investment could result in a workforce that is ill-prepared for the evolving energy landscape, lacking skills in new technologies and customer service demands associated with EVs and DERs, as well as missed opportunities to build and apply efficiency-enhancing digital solutions including data analytics.

Enbridge Gas Inc.

Enbridge Gas has undertaken the following actions to mitigate Energy Transition risk in the capital planning process, which are discussed in EB-2022-0200 Exhibit 1, Tab 10, Schedule 4:

- The forecasts used in the capital planning process have been adjusted to consider the impact of Energy Transition. This includes Energy Transition adjustments to forecasts for number of customers, average use, design day and design hour demand. Enbridge Gas will continue to update demand forecasts annually, including updating the Energy Transition adjustments, and reflect these changes within the annual Asset Management Plan updates.
- Integrated resource planning ("IRP") has been incorporated into the asset management process in accordance with the OEB IRP Decision and Order and IRP Framework (EB-2020-0091). This includes the identification of IRP alternatives that could defer or avoid infrastructure.

In Phase 2 of the rebasing application (EB-2024-0111 Exhibit 1, Tab 17, Schedule 1), Enbridge Gas outlined how the Company is addressing stranded asset risk associated with system renewal investments. Enbridge Gas is doing so by considering economic alternatives to gas infrastructure replacement projects as part of a new Asset Life Extension ("ALE") program. Projects that are evaluated through the Enhanced Distribution Integrity Management Program ("EDIMP") will be assessed to determine the most cost-effective alternatives to address system renewal, which may include ALE alternatives, full pipeline replacement, IRP alternatives or a combination of these. Enbridge Gas will incorporate Energy Transition sensitivity analysis into the assessment of replacement versus ALE, which will contemplate the potential drivers and pace of customer electrification in areas served by the assets being considered for replacement or ALE. This approach to Energy Transition sensitivity analysis has been documented in the Leave to Construct for the St. Laurent Pipeline Replacement Project (EB-2024-0200 Exhibit B, Tab 3, Schedule 1).

Moving forward, as outlined in Enbridge Gas's Reply Argument in EB-2022-0200, Enbridge Gas is planning to submit an evolved Energy Transition Plan in the Company's next rebasing application. This evolved Energy Transition Plan will further inform Enbridge Gas's capital and operational plans. Enbridge intends for this Plan to

include the creation of regional profiles, development of regional pathway scenarios, and the modeling of these different regional pathway scenarios by region to identify risks and opportunities and to consider the impacts on the Asset Management Plan and other aspects of system planning

OPG

OPG's decisions to proceed with major capital projects in support of Energy Transition are within the purview of the Province of Ontario, as informed by the IESO's system planning to meet such future needs. By way of example, the Ministry of Energy and Electrification recently published its *Powering Ontario's Growth*[2] report, which identifies actions necessary to meet growing electricity demand in Ontario through 2050, including moving ahead with three additional small modular reactors at the Darlington New Nuclear Site and optimizing OPG's hydroelectric fleet to increase generation.

With respect to the sustaining portfolio, while OPG already employs a sophisticated portfolio management approach to assess, prioritize and deliver these projects (see for example EB-2020-0290, Ex. D2-1-1), as requirements and impacts of Energy Transition emerge, it will continue to seek opportunities to improve these processes based on industry best practices and their application to OPG.

A discussion of OPG's approach to risk management with respect to some of the Energy Transition risks that have emerged to date can be found in OPG's 2023 MD&A.[3]

Response to c)

In providing safe and reliable service to customers, utilities may face competing requirements in their capital plans. This does not, however, alter the Fair Return Standard and its legal requirements for returns that support financial integrity, access to capital on reasonable terms, and comparable returns. Nor does it alter the regulatory compact, which provides that in return for accepting the obligation to provide a public service and being subject to regulatory oversight, the utility is provided the opportunity to recover its prudently-incurred costs, including the cost of capital.

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2 https://www.ontario.ca/page/powering-ontarios-growth

3 OPG's 2023 Financial results and MD&A (https://www.opg.com/documents/2023-financial-results-pdf/), pp.67-79, PDF pp. 74-86.