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Interrogatories of Commission Expert

TO: Maritime Electric Company, Limited

FROM: London Economics International LLC

DATE: August 1, 2022

RE: 2023-2025 General Rate Application

DOCKET: UE20946

INTERROGATORIES REGARDING THE GENERAL RATE APPLICATION:

1. The General Rate Application does not mention Distributed Energy Resources.

Question(s):

- a) To what extent does MECL anticipate potential for grid defection due to Distributed Energy Resources ("DERs")?
- 2. On page 17 of the General Rate Application, MECL states:

The quarterly customer satisfaction survey is conducted via phone by a third-party provider. Randomly selected customers are asked a series of questions regarding their perception of the overall service they receive. Chart 4-2 shows customers' overall satisfaction with Maritime Electric's service delivery, referred to as the customer service index, from 2016 to 2021.

Question(s):

- a) Have participation rates in the quarterly customer satisfaction surveys changed between 2016 and 2021?
- b) Does MECL believe that use of a phone survey instead of other means of engaging with customers induces any bias into the outcomes?
- 3. On page 20 of the General Rate Application, MECL provides Chart 4-4 SAIDI (MED excluded)
 - Maritime Electric Comparison with other Atlantic and Canadian Utilities 2012 to 2021.

- a) Please provide underlying data and calculations (in excel) associated with Chart 4-4.
- b) EC sample shown in Chart 4-4 includes a small subset of Ontario utilities. Why were New Market-Tay Power Distribution, Veridian Connections and Waterloo North Hydro the only other Ontario utilities (other than Hydro One) that were included in the sample? Are these the only utilities that serve "a mix of urban and rural markets" in Ontario?
- 4. On page 22 of the General Rate Application, MECL states:

Chart 4-6 shows that major events are a regular occurrence on PEI, substantially impacting the service reliability experienced by customers.

Question(s):

- a) Please provide underlying data and calculations (in excel) associated with Chart 4 6.
- b) How does the frequency of major events at MECL compare against the frequency of major events at comparator utilities?
- 5. On page 24 of the General Rate Application, MECL provides Chart 4-7 SAIDI (All in) Five-Year Rolling Average Comparison 2017 to 2021

Question(s):

- a) Please provide underlying data and calculations (in excel) associated with Chart 4 7.
- b) Acknowledging that a 5-year rolling average requires a longer data set (since 2012), is it possible to provide a longer time series? If yes, please provide, with underlying data and calculations (in excel).
- 6. On page 26 of the General Rate Application, MECL states in footnote 29:

Maritime Electric currently follows the Canadian Standards Association recommendations that overhead structures be built to withstand a half inch of radial ice and 100 km/hour winds at -20 degrees Celsius. However, **major weather events are increasingly exceeding these parameters**. [emphasis added]

Question(s):

a) Please provide empirical evidence associated with the following statement: "major weather events are increasingly exceeding these parameters."

7. On page 31 of the General Rate Application, MECL provides Table 4-4 Energy Sales (actuals and forecasts).

Question(s):

- a) Historically, how much variance has MECL observed in their energy sales' forecasts versus actual energy sales? Please provide underlying data/calculations.
- 8. On pages 39 and 40 of the General Rate Application, MECL presents Tables 5-2 and 5-3.

Question(s):

- a) Please provide the historical growth rates in PV adoption.
- 9. On page 41 of the General Rate Application, MECL states:

During the rate-setting period, a single 50-day outage is scheduled for April to May 2024 and replacement energy will be sourced via the EPA. In comparison, a 42-day outage occurred in 2019, a 61-day outage occurred in 2020, three outages occurred in 2021 totaling 100 days, and a 60-day outage is scheduled for April to June 2022.

Question(s):

- a) How does Point Lepreau's outage performance compare to other Candu reactors since its restart?
- b) Under what circumstances is NB Power responsible to pay the incremental cost of replacement power?
- 10. On page 42 of the General Rate Application, in footnote 62, MECL states:

On occasion, Maritime Electric is required to generate electricity to supply NB Power or Nova Scotia Power, in which case the full cost of generation is recovered

Question(s):

- a) Historically, how often has MECL been required to supply electricity to NB Power and NS Power?
- b) How is the full cost of generation defined?
- 11. On page 42-43 of the General Rate Application, MECL discusses company-owned generation.

- a) Are there any prospects of development of district heating in PEI?
- 12. On page 46 of the General Rate Application, MECL states:

The increase in substation costs from 2019 to 2021, beyond inflationary pressures, is a direct result of increasing customer load growth. To respond to load growth, the number of transmission substations have increased by 25 per cent over the last 10 years, from 24 substations in 2011 to 30 in 2021. As the number of substations increases so too does the related inspections, repairs and maintenance

Question(s):

- a) Shouldn't new equipment be more reliable than existing equipment, thus moderating the increase in repairs and maintenance costs? If not, please explain.
- 13. On page 53 of the General Rate Application, in footnote 70, MECL states:

In Order UE09-02 the Commission disallowed, for the purpose of determining the Company's regulated revenue requirement, all Fortis Inc. head office administrative costs charged to Maritime Electric. Therefore, all costs presented in this section do not contain any Fortis Inc. administrative costs.

Question(s):

- a) Over the past 10 years, how many cost items have been disallowed? In each case, what was the dollar value, and the percent of the total annual revenue requirement?
- 14. On page 66 of the General Rate Application, MECL states:

Historically, a comparison has been made between interest rates on government or corporate bonds and utility returns, suggesting that the risk and return on these investment opportunities should be comparable. Concentric's assessment of capital market conditions challenges this traditional comparison. Evidence presented by Concentric highlights that as investors expect stronger economic growth and higher inflation, which is generally expected during the rate-setting period, that higher returns will be required by investors for them to invest in long-term government bonds or similar risk investments, such as utilities.

Question(s):

a) Is MECL suggesting that utilities have similar risk as long term government bonds?

15. On page 70 of the General Rate Application, MECL states:

In determining the appropriate cost of equity range for Maritime Electric, Concentric used both Canadian and US proxy groups to develop and estimate utility cost of equity using a variety of methodologies (Discounted Cash Flow ("DCF") method, Capital Asset Pricing Model ("CAPM"), and Risk Premium method), as is industry practice.

Question(s):

- a) Is there empirical evidence that outside of regulatory proceedings (including FERC proceedings), investors in practice use the DCF (constant growth) method and Risk Premium method as a standard investment valuation tool?
- 16. On page 79 of the General Rate Application, MECL states:

First, the Commission was concerned that current ratepayers are not paying the full cost of energy consumed by them, causing intergenerational inequity and inappropriate price signals for customers. With respect to intergenerational equity, recovering costs over a three-year period versus a one-year period should not be considered a significant delay. With respect to price signals, stable and predictable rate increases would allow customers time to respond to the increasing cost of electricity and make changes to manage their consumption.

Question(s):

- a) What is the average life of a customer account by customer class?
- 17. The MECL GRA provides several charts and tables in their application.

Question(s):

- a) Please provide underlying data and calculations (in excel) associated with:
 - i. Chart 3-1
 - ii. Chart 4-4
 - iii. Chart 4-5
 - iv. Chart 4-7
 - v. Table 5-20
 - vi. Chart 5-1

INTERROGATORIES REGARDING THE REPORT OF CONCENTRIC ENERGY ADVISORS, INC.

18. The Concentric Report provides several figures underlying their analysis.

Question(s):

- a) Please provide underlying data and calculations (in excel) associated with Figures 1, 9, 10, 12, 13, 14, 15, 16, 22, 24, 26, 27, 28, 29, 30, 31, 32, 34, 35, 42, and 44.
- 19. On page 16 of the Concentric Report, Concentric states:

...the use of an interest rate forecast or normalization is appropriate and necessary in order to better reflect the level of expected government bond yields as central banks in both Canada and the U.S. normalize their monetary policies over the next several years to combat higher inflation.

Question(s):

- a) Does the forecast need to go beyond the 3 years relevant for this GRA? If yes, please explain.
- b) Given that the investors are able to hedge based on rates at the beginning of the regulatory period, is forecast or normalization truly necessary?
- 20. On page 23 of the Concentric Report, Concentric presents long-term forecast for 10-year government bond yields in Figure 11.

Question(s):

- a) Is there a similar long-term forecast for 30 year government bond yields as well? If yes, please provide.
- 21. On page 31 of the Concentric Report, Concentric states:

In a world of increasingly linked economies and capital markets, investors seek returns from a global basket of investment options. Investors distinguish between risks on a country-to-country basis, factoring in the comparability of the economic, business and political environments.

Question(s):

a) Is there evidence to suggest that home country bias has diminished for Canadian investors over the past 10 years?

22. On page 31 of the Concentric Report, Concentric states:

Country-specific economic, business and political conditions that affect investment risk can be measured through a variety of qualitative and quantitative metrics. One such measure, produced by The Economist Intelligence Unit, rates Canada and the U.S. precisely the same from an overall country risk perspective (i.e., A) with AAA being the highest rating.

Question(s):

- a) Just because two countries have the same country risk rating, does that in isolation prove integration between the two markets?
- 23. On page 35 of the Concentric Report, Concentric presents the Canadian Proxy Group in Figure 19.

Question(s):

- a) Other than for Hydro One, what percentage of assets for each of the companies in Figure 19 are in the US?
- b) If a large proportion of assets within the Canadian proxy group are in the US, is it appropriate to continue using this Canadian proxy group?
- 24. On page 35 of the Concentric Report, Concentric discusses its screening criteria for its second proxy group (US electricity utility companies). Two of the five criteria include:
 - (b) Consistently pay quarterly cash dividends, with no recent reductions or omissions of the dividend payment
 - (c) Positive earnings growth rate forecasts from at least two sources

Question(s):

- a) Don't these two criteria distort the risk profile of the industry? Please explain.
- b) Had neither of these criteria included, which companies would be added to this proxy group?
- c) Please provide the starting list of all 36 companies, to which the five criteria were applied.
- 25. On page 39 of the Concentric Report, Concentric states:

Although each model brings a different perspective and adds depth to the analysis, each model also has its own inherent weaknesses and should not be relied upon individually without corroboration from other approaches.

- a) Please elaborate on the weaknesses of each of the models.
- 26. On page 40 of the Concentric Report, Concentric states:

The Constant Growth DCF model requires the following assumptions: (1) a constant average growth rate for earnings and dividends; (2) a stable dividend payout ratio; (3) a constant price-to-earnings multiple; and (4) a discount rate greater than the expected growth rate. The assumptions of the Constant Growth DCF model are generally reasonable for regulated utility companies, which operate in a stable and mature industry and are characterized by a relatively steady state of earnings and dividend growth.

Question(s):

- a) The assumption of a constant P/E multiple contradicts with Concentric's statement on page 29: "...according to industry analysts such as Value Line, these high valuations are not expected to continue, as Price-to-Earnings ("P/E") ratios are projected to decline from current levels in the period from 2023-2027." Please explain.
- b) Please provide historical evidence for: (i) earnings and dividends growing at a constant rate; and (ii) dividend payout ratios remaining stable.
- 27. On page 40-41 of the Concentric Report, Concentric states:

The dividend yields were calculated for each company in the respective proxy groups by dividing the current annualized dividend by the average stock price for each company for the 90-trading days ended February 28, 2022.

Question(s):

- a) Was there a specific reason to choose the average stock price for 90-trading days? Please explain.
- b) Did Concentric perform a sensitivity analysis using the average stock price for a different term (e.g., 180 days or 365 days)?
- c) Please provide the backup excel files underlying the analysis, showing the formulae and source data.
- 28. On page 50 of the Concentric Report, Concentric states:

Forward-looking MRPs currently are about 300 basis points higher than historical MRPs, reflecting the fact that the historical MRP is based on much higher government bond yields than are available in the current low interest rate environment.

- a) Please cite examples where Commissions have accepted the use of Forward Looking MRPs in calculating cost of capital.
- 29. On page 57 of the Concentric Report, Concentric states:

As shown in Figure 33, Maritime Electric has the lowest weighted equity return among these Canadian utilities on this basis

Question(s):

- a) Please provide Figure 33 with two additional columns: (i) Lower Bound ROE; and
 (ii) Lower Bound Weighted ROE.
- 30. On page 59 of the Concentric Report, in relation to 'small size', Concentric states: "Nothing has changed in this regards since the Company's 2018 GRA filing."

Question(s):

- a) If 'nothing has changed', does Concentric believe the 'small size' risk is relevant in assessing 'change in business risk' between current GRA term and upcoming GRA term? Please explain.
- 31. On page 59 of the Concentric Report, Concentric states:

Further, effective January 1, 2017, the Electric Power Act requires Maritime Electric to maintain a common equity ratio of at least 35.0 percent but not to exceed 40.0 percent, which contributes to greater financial risk than its Canadian and U.S. peers.

Question(s):

- a) On Pg 57 (Figure 33), Concentric shows the equity ratios of Maritime Electric and peers. Other than Newfoundland Power (which has a higher equity ratio of 45% and correspondingly lower ROE of 8.5%), no other entity has an equity ratio of more than 40%. In fact, the Authorized ROEs for these utilities also range between 8.34% and 9.15%, with Maritime Electric's Authorized ROE at the highest level of 9.35%. As such, please explain how this EPA requirement "contributes to greater financial risk" for MECL?
- 32. On page 64 of the Concentric Report, Figure 37 presents the sources of the Company's electricity supply in 2021.

Question(s):

a) Please provide the same for 2016-2020; and forecasts (if available) for 2022-2026.

33. On page 65 of the Concentric Report, Concentric states:

The Company does not have enough generation if its electricity supply is cut off from New Brunswick. This risk materialized in November 2018, when an ice storm cut off power to PEI for 24 hours.

Question(s):

- a) How often has this risk materialized in the last 10 years, in addition to November 2018? Please provide details.
- 34. On page 65 of the Concentric Report, Concentric states:

Weather-related service disruptions represent another important operating risk for Maritime Electric. The Company's service territory is subject to severe ice and wind storms. The need to address supply disruptions caused by severe weather conditions involves unpredictable and potentially volatile capital and operating costs.

Question(s):

- a) Please provide details of historical 'unpredictable capital and operating costs' actually incurred over the last 10 years due to weather-related service disruptions.
- b) Have any of the costs described above not been recovered in MECL's revenue requirement? Please explain.
- 35. On pages 65-66 of the Concentric Report, Concentric states:

Given the intermittent nature of wind and solar as sources of generation, there are additional operational and contractual complexities for Maritime Electric which distribution utilities in other provinces do not face to the same degree.

Question(s):

- a) Which specific additional operational and contractual complexities is Concentric referring to here? Please explain.
- 36. On pages 66 of the Concentric Report, Concentric states:

Maritime Electric has very limited protection against costs that tend to fluctuate significantly from year to year, are material in nature, and over which utility management has no control. While several utilities in Canada have deferral and variance accounts to mitigate the risk associated with operating and capital costs, Maritime Electric has relatively few. The only accounts that Maritime Electric has implemented are: 1) the Energy Cost Adjustment Mechanism ("ECAM"), which allows the Company to recover the actual cost of fuel and

purchased power compared to the forecasted amount, 2) a weather normalization reserve account that represents the cumulative change in the contribution margin (average selling price less average cost of energy purchased) resulting from variations in heating degree days from normal; and 3) a variance account for OPEB costs.

Previously on pages 65 of the Concentric Report, Concentric states:

Maritime Electric does not have cost recovery mechanism or deferral account for storm-related costs to mitigate this risk, although it was allowed to defer the costs associated with Hurricane Dorian for future recovery in rates.

Question(s):

- a) Other than storm-related costs, please identify additional costs that Maritime Electric has historically incurred that are not covered by these three accounts which tend to fluctuate significantly from year to year, which are material in nature, and over which utility management has no control. Please provide detailed breakdown of such additional costs over the last 10 years.
- 37. On page 67 of the Concentric Report, Concentric states:

....the market data used to estimate the cost of equity reflects investors' expectation that all utility companies have a variance account for fuel and purchased power costs.

Question(s):

- a) What evidence is there that investors have the expectation that "all" utilities have a variance account?
- 38. On page 67 of the Concentric Report, Concentric states:

Maritime Electric no longer faces competition from alternative fuel sources such as fuel oil for space heating needs.

Question(s):

- a) Is there any potential for biomass for space heating?
- 39. On page 68 of the Concentric Report, Concentric states:

The government acted on the recommendation regarding ownership of Maritime Electric's future generation assets by announcing a policy which provides the government the option to own and finance future generation on PEI.

- a) In Concentric's view, does the fact that the province is responsible for owning the future generating plant increase or decrease the risk to Maritime Electric?
- 40. On page 69 of the Concentric Report, Concentric states:

Our assessment is that Maritime Electric continues to have many of the same business and operating risks as in prior GRA filings.

Question(s):

- a) In Concentric's view, how have the business and operating risks changed for this upcoming GRA period to justify a change in the ROE?
- 41. On page 72 of the Concentric Report, Concentric presents Figure 39 showing 'Operating Recovery Mechanisms' for Maritime Electric and select Canadian utilities.

Question(s):

- a) Please provide MECL's historical costs (in \$ and as a % revenue requirement) associated with bad debts, change in interest rates, and energy efficiency and DSM.
- b) Please explain if these: (i) have tended to fluctuate substantially from year to year, (ii) are significant in magnitude, and (iii) are generally beyond the control of utility management.
- 42. On page 72 of the Concentric Report, Concentric states:

Importantly, while Maritime Electric has protection against pension and OPEB expenses, the Company does not have the ability to recover extraordinary storm costs despite operating in a service territory characterized by severe ice and wind storms.

Question(s):

- a) Please provide examples of extraordinary storm costs that have not been recovered by MECL historically.
- 43. On page 74 of the Concentric Report, Concentric states:

Concentric contacted Moody's to check if the agency has updated its 2013 report, and the lead utilities rating analyst indicated that 2013 remained its most recent assessment, although it anticipated publishing an update in mid-2022.

Question(s):

a) Has an update been published by now? If yes, please provide.

44. On page 75 of the Concentric Report, Concentric states:

UBS ranked PEI's regulatory environment in Tier 3 out of five in a December 2020 report. UBS also placed Ontario and Newfoundland and Labrador in Tier 3. British Columbia and Nova Scotia were rated more highly by UBS, falling in Tiers 1 and 2, respectively, while Alberta was rated in Tier 4. In the U.S., UBS ranks 18 state jurisdictions in Tier 3, 9 states in Tier 2, and 7 states in Tier 1.

Question(s):

- a) Has PEI's ranking (actual and relative to other provinces) changed in UBS December 2020 report, relative to UBS' previous reports? Please explain.
- 45. On page 80 of the Concentric Report, Concentric states:

2021 estimated credit metrics for Maritime Electric indicate that FFO ratios were projected to decline compared to 2020.

Question(s):

- a) Please provide underlying data and calculations (in excel) associated with this statement.
- 46. On page 81 of the Concentric Report, Concentric states:

Maritime Electric has consistently maintained a long-term issuer rating from S&P of "BBB+" since January 2004

Question(s):

- a) Does S&P's decision to keep Maritime Electric's credit rating the same for 17 years indicate that, for the ratings agency, Maritime Electric's combined business and financial risks have not meaningfully changed since 2004? If no, please explain.
- 47. Appendix I provides 2021 actuals and 2022-2025 forecasts for MECL financial statements.

Question(s):

a) Please provide historical MECL financial statements for 2015-2020.

Additional interrogatories may follow.