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**Enbridge Gas Inc.**  
50 Keil Drive North,  
Chatham, ON N7M 5M1  
Canada

March 1, 2022

**VIA EMAIL and RESS**

Nancy Marconi  
Acting Registrar  
Ontario Energy Board  
2300 Yonge Street, 27th Floor  
Toronto, ON M4P 1E4

Dear Nancy Marconi:

**Re: Enbridge Gas Inc. (Enbridge Gas)  
Ontario Energy Board (OEB) File: EB-2020-0293  
St. Laurent Ottawa North Replacement Project  
Response to FRPO Correspondence February 25, 2022**

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Enbridge Gas Inc. (“Enbridge Gas” or the “Company”) is submitting this correspondence in response to the Federation of Rental-housing Providers of Ontario’s (“FRPO”) letter of February 25, 2022 wherein FRPO asserted that Enbridge Gas did not provide complete and sufficient responses to particular FRPO interrogatories. Contrary to the assertions of FRPO, Enbridge Gas has provided complete responses to the interrogatories identified in FRPO’s February 25, 2022 letter.

**FRPO 23**

FRPO indicates that Enbridge Gas failed to provide requested station inlet pressures on the design day in respect of the proposed replacement. However, in making its submission FRPO has only referred to one part of the question. In Exhibit I.FRPO.23 a) FRPO asked Enbridge Gas to confirm that Table 2 in Exhibit I.FRPO.2 provides simulated peak day station inlet pressures for 2021/22. In response, the Company indicated:

The simulated inlet pressures are peak winter conditions at the time of analysis (2020/2021). The Company does not expect pressures for 2021/2022 to be materially different.

In Exhibit I.FRPO.23 c), FRPO asked for a second table showing the peak day inlet pressures for stations shown in Table 2 in a peak-day simulation after the proposed replacement. In response, the Company stated:

The pipeline replacement was design to meet existing capacity requirements and as such **these station inlet pressures will not change materially** following the completion of construction of the Project. (emphasis added)

Based on this response, the inlet pressures are essentially the same as those already stated in Table 2 of Exhibit I.FRPO.2. Those inlet pressures are set out and the information requested by FRPO has been provided and the response complete. In support of this conclusion, Enbridge Gas will produce a table showing that peak day inlet pressures for stations shown in Table 2 of Exhibit I.FRPO.2 are not materially different. Enbridge Gas will file this additional table within an updated interrogatory response to Exhibit I.FRPO.23 c) in advance of the scheduled Technical Conference.

#### **FRPO 24**

According to FRPO, in Exhibit I.FRPO.24, FRPO requested the simulated outlet pressures and flows and asserted that those were not provided without justification. Enbridge Gas interpreted FRPO's sentence leading into the numbered part-questions posed by FRPO as providing context, together with FRPO's further qualification that:

If the simulated setting was not 275 psig, please re-run the simulation using 275 psig and provide the resulting pressures and flows at the stations pre- and post-proposed replacement.

In response, Enbridge Gas stated that:

The NPS 12 northbound line is limited by its MOP of 250 PSIG and cannot be raised to 275 psig.

As a result, the parameters of the request made by FRPO are not physically possible and the simulation was not provided. Accordingly, the Company provided complete responses to FRPO's inquiries for parts (i) and (ii) since those inquiries reflected scenarios that are contrary to reality.

FRPO appears to now indicate that the un-numbered lead-in sentence was meant to be a broad-based request for all outlet pressures and flows. In an effort to avoid further procedural delay and in the interest of regulatory efficiency, Enbridge Gas intends to file an updated response to Exhibit I.FRPO.24 providing peak day flows out and outlet pressures for each station (for the pre-and post-replacement scenarios) in advance of the scheduled Technical Conference.

#### **FRPO 25**

In Exhibit I.FRPO.25, which related to Exhibit I.FRPO.3 and Exhibit I.FRPO.5, FRPO sought the study, together with other aspects, that determined the number of customers lost on a 47 HDD and the cost to repair, make safe and relight. In response, Enbridge Gas provided the Schedules attached to this correspondence. This supplemented the information already provided in response to Exhibit I.FRPO.3 and Exhibit I.FRPO.5.

As indicated by Enbridge Gas in its response to Exhibit I.FRPO.25:

The **entirety of the details of the assessments** completed by Enbridge Gas in support of the conclusions drawn within Exhibit B, which are based on the Company's historical experiences mitigating system outages, are set out in Tables 1 and 2 below for a 47 HDD and 1 HDD respectively. (emphasis added)

As noted, all of the details have been provided. There are no additional studies in addition to the information provided in Exhibit B-1-1 regarding customer loss and the information provided in the above responses.

## **FRPO 28**

In Exhibit I.M.2.FRPO.28 b), FRPO requested that Enbridge Gas provide a map showing the locations of the stations including the Rockcliffe Control station. The Company referenced FRPO to Exhibit B-1-1, Figure 1 which is attached to this letter. As requested by FRPO the map shows the locations of the stations. It is important to note that FRPO did not in its original question indicate that cross-streets be identified or provide an explanation of the purpose of the map requested.

FRPO, in its February 25 letter, has now altered its request and is now inappropriately posing a new question while at the same time asserting that Enbridge Gas has not fully responded to the question asked. In an effort to avoid further procedural delay and in the interest of regulatory efficiency, Enbridge Gas intends to file an updated response to Exhibit I.M.2.FRPO.28 b) providing a legend for the map set out in Exhibit B-1-1 Figure 1.

Based on the foregoing, Enbridge has provided sufficient and complete responses to all of the original and additional questions asked by FRPO.

Please contact the undersigned if you have any questions.

Yours truly,

(Original Signed)

Adam Stiers  
Manager, Regulatory Applications – Leave to Construct

c.c. Guri Pannu (Enbridge Gas Counsel)  
Charles Keizer (Torys)  
Zora Crnojacki (OEB Staff)  
Intervenors (EB-2020-0293)

ENBRIDGE GAS INC.

Answer to Interrogatory from  
Federation of Rental-housing Providers of Ontario ("FRPO")

INTERROGATORY

Preamble:

In FRPO.3 and FRPO.5, we asked EGI to file the study(ies). Instead, we received assorted assumptions that answered a few of our questions. We ask again that EGI file:

Question:

- a) The study(ies)
- b) The report(s) to management
- c) The technical analysis document(s) and
- d) Whatever EGI would call the information sources provided by analysts to management that documents the methodologies and assumptions used to determine for both Enbridge Gas and Gazifere:
  - i) the assumptions – e.g., static or transient simulation
  - ii) minimum pressures deemed to prompt an outage
  - iii) methodology and assumptions employed in estimating the costs of:
    - (1) actions for mitigation
    - (2) repair
    - (3) make safe and relight
    - (4) customer claims

Response

- a) - d)  
The entirety of the details of the assessments completed by Enbridge Gas in support of the conclusions drawn within Exhibit B, which are based on the Company's historical experiences mitigating system outages, are set out in Tables 1 and 2 below for a 47 HDD and 1 HDD respectively.<sup>1</sup>

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<sup>1</sup> Total customers lost are set out at Exhibit B, Tab 1, Schedule 1, Tables 1 & 2 for Customer Loss at 47 Degree Day and 1 Degree Day, respectively.

**Table 1 – 47 HDD**

Category	Item	Qty	
Service Visits	<b>MAKE SAFE COSTS</b>		
	<b>Fitter Assumptions</b>		
	Total Number of Customers (ON only)	31,623	
	Fitter Cost (\$/hr) – approximate	\$100	
	Fitter Supervisor Cost (\$/hr)	\$150	
	Number of Make Safe per Hour	15	
	Per Diems and Hotel per Day	\$200	
	Mileage (\$/km)	\$0.50	
	<b>Make Safe Assumptions</b>		
	Number of Person-Hours Making Safe	2108	
	Number of Person-Days Making Safe	210.8	
	Number of Fitters to Make Safe in 48 Hrs	105.4	
	<b>Make Safe Costs</b>		
	Cost for Fitters to Make Safe (Salary Only)	\$252,984	
	Per Diems for Fitters to Make Safe	\$42,164	
	Supervision for Fitters (1 Supervisor/10 Fitters)	\$39,600	
	<b>TOTAL MAKE SAFE</b>	<b>\$334,748</b>	
		<b>RE-LIGHT COSTS</b>	
		<b>Re-Light Assumptions</b>	
		Number of Re-Lights per Hour	5
Number of Person-Hours Re-Light		6325	
Number of Person-Days Re-Light		632	
Number of Fitters to Re-Light in 5 Days		126.5	
<b>Re-Light Costs</b>			
Cost for Fitters to Re-Light (Salary Only)		\$758,952	
Per Diems for Fitters to Re-Light		\$126,492	
Supervision for Fitters (1 Supervisor/10 Fitters)		\$117,000	
<b>TOTAL RE-LIGHT</b>	<b>\$1,002,444</b>		
	<b>COSTS FOR FITTER TRAVEL</b>		
	Travel (Salary)	\$202,387	
	Travel (Mileage)	\$56,921	
	Travel (Per Diems)	\$50,597	
	<b>TOTAL FITTER TRAVEL</b>	<b>\$309,905</b>	
<b><u>Service Visit Costs</u></b>		<b><u>\$1,647,097</u></b>	
Replacement Costs (Contractor)	<b>REPLACEMENT COSTS – CONTRACTOR</b>		
	<b>Replacement Assumptions</b>		
	Cost assumed to be an average of a typical repair cost (\$420,000) and actual 2018/2019 cost for replacement on St. Laurent (\$3,182,417)		
	<b>Replacement Cost – Contractor</b>	\$1,801,209	
	<b>TOTAL REPLACEMENT COST</b>	<b>\$1,801,209</b>	
<b><u>Replacement Costs (Contractor)</u></b>		<b><u>\$1,801,209</u></b>	
Replacement Costs (Internal)	<b>REPLACEMENT COSTS – INTERNAL</b>		
	<b>Replacement Assumptions – Field Staff</b>		

	Number of Field Staff Responding Cost per Hour (OT Considered) Hours per Day Per Diem Hotel Number of Days  <b>Replacement Assumptions – Supervision</b> Supervision (1 Supervisor/5 Staff) Cost per Supervisor per Day Number of Days  <b>Replacement Assumptions – Liaison, Planning, Engineering</b> Number of EGI Liaisons Number of Planning/Engineering Support Number of Days Cost per Day Transportation per Employee  <b>Replacement Costs</b> Field Staff Costs Supervisor Costs Liaison, Planning, Engineering Costs  <b>TOTAL REPLACEMENT COST – INTERNAL</b>	25 \$62 10 \$75 \$125 10  5 \$500 10  20 20 10 \$500 \$450  \$205,000 \$35,000 \$298,000  <b>\$538,000</b>
<b><u>Replacement Costs (Internal)</u></b>		<b><u>\$538,000</u></b>
Claims	<b>COST OF CLAIMS</b>  <b>Commercial/Industrial Claims Assumptions</b> Total Commercial/Industrial Customers Impacted Percentage of Customers with Claims Cost of Commercial Claim per Day Average Number of Days to Make Safe, Re-Light  <b>Residential Claims Assumptions</b> Total Residential Customers Impacted Percentage of Customers with Claims Cost of Residential Claim per Day Electric Heater Cost Percentage of Customers with Supplied Heat Average Number of Days to Make Safe, Re-Light  <b>Claims Costs</b> Commercial/Industrial Claims Residential Claims  <b>TOTAL CLAIMS COSTS</b>	3,362 40% \$5,000 5  28,261 30% \$200 \$250 10% 5  \$33,619,992 \$9,184,825  <b>\$42,804,818</b>
<b><u>Claims Costs</u></b>		<b><u>\$42,804,818</u></b>
Administrative	<b>ADMINISTRATIVE COSTS</b>  <b>Administrative Cost Assumptions</b> Number of Staff Cost per Hour (OT Considered) Hours per Day Number of Days  <b>Administrative Costs</b> Administrative Costs  <b>TOTAL ADMINISTRATIVE COSTS</b>	25 \$62 10 10  \$155,000  <b>\$155,000</b>

<b><u>Administrative Costs</u></b>		<b><u>\$155,000</u></b>
Temporary Facilities	<b>TEMPORARY FACILITIES COSTS</b>  <b>Facilities Assumptions</b> Rental Trailers, Command Centers, Relief Centers  <b>Facilities Costs</b> Facilities Costs	\$200,000
	<b>TOTAL FACILITIES COSTS</b>	<b>\$200,000</b>
<b><u>Temporary Facilities Costs</u></b>		<b><u>\$200,000</u></b>
Deferred Work	<b>DEFERRED MAINTENANCE/SERVICE WORK COST</b>  <b>Deferred Work Assumptions</b> Total Hours Worked (Internal/Contractor) 10,933 Percentage of Deferred Work Made-Up with OT 15% OT Premium \$31  <b>Deferred Work Costs</b> Deferred Work Costs \$50,838	
	<b>TOTAL DEFERRED WORK COSTS</b>	<b>\$50,838</b>
<b><u>Deferred Work Costs</u></b>		<b><u>\$50,838</u></b>
<b><u>Contingency Costs (15%)</u></b>		<b><u>\$7,083,339</u></b>
<b><u>TOTAL ESTIMATED COST</u></b>		<b><u>\$54,305,598</u></b>

**Table 2 – 1 HDD**

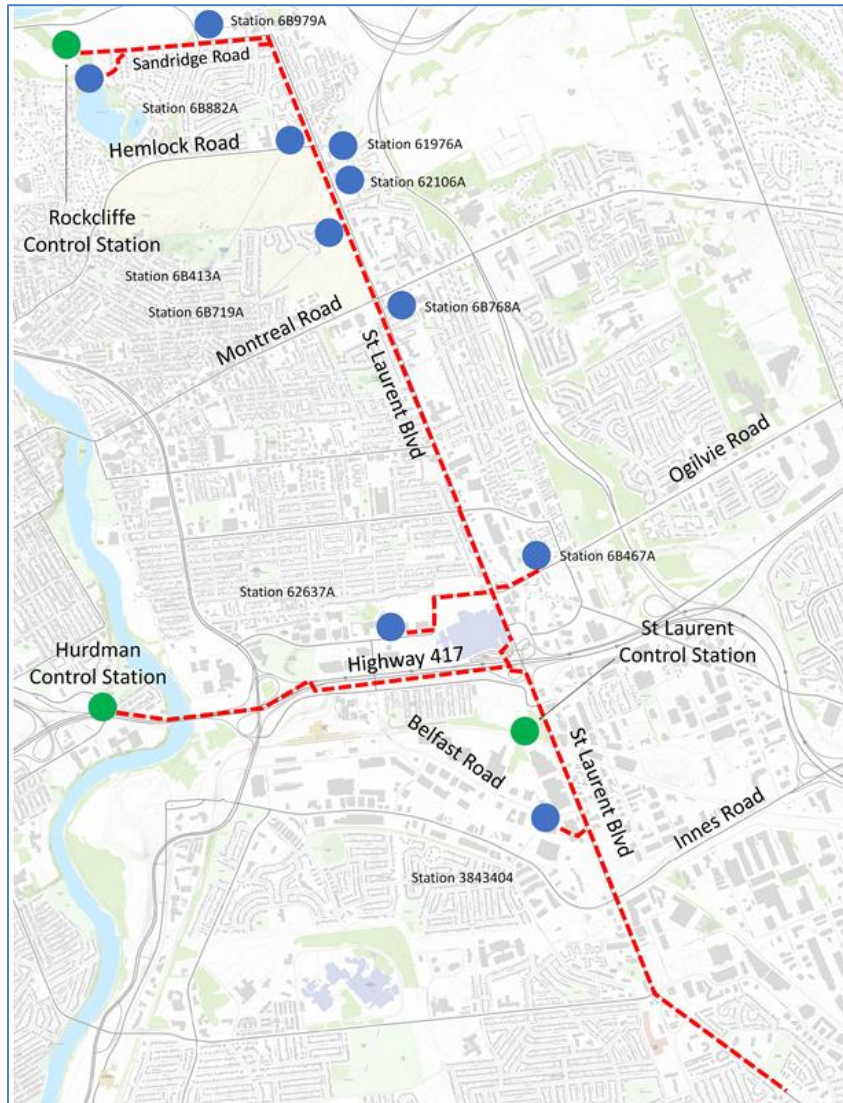
Category	Item	Qty
Service Visits	<b>MAKE SAFE COSTS</b>	
	<b>Fitter Assumptions</b>	
	Total Number of Customers (ON only)	16,676
	Fitter Cost (\$/hr) – approximate	\$100
	Fitter Supervisor Cost (\$/hr)	\$150
	Number of Make Safe per Hour	15
	Per Diems and Hotel per Day	\$200
	Mileage (\$/km)	\$0.50
	<b>Make Safe Assumptions</b>	
	Number of Person-Hours Making Safe	1112
	Number of Person-Days Making Safe (12 hr day)	111.2
	Number of Fitters to Make Safe in 48 Hrs	55.6
	<b>Make Safe Costs</b>	
	Cost for Fitters to Make Safe (Salary Only)	\$133,408
	Per Diems for Fitters to Make Safe	\$22,235
	Supervision for Fitters (1 Supervisor/10 Fitters)	\$21,600
	<b>TOTAL MAKE SAFE</b>	<b>\$177,243</b>
	<b>RE-LIGHT COSTS</b>	
	<b>Re-Light Assumptions</b>	
	Number of Re-Lights per Hour	5
Number of Person-Hours Re-Light	3,335	
Number of Person-Days Re-Light (12 hr day)	334	
Number of Fitters to Re-Light in 5 Days	66.7	
<b>Re-Light Costs</b>		
Cost for Fitters to Re-Light (Salary Only)	\$400,224	
Per Diems for Fitters to Re-Light	\$66,704	
Supervision for Fitters (1 Supervisor/10 Fitters)	\$63,000	
<b>TOTAL RE-LIGHT</b>	<b>\$529,928</b>	
<b>COSTS FOR FITTER TRAVEL</b>		
Travel (Salary)	\$106,726	
Travel (Mileage)	\$30,017	
Travel (Per Diems)	\$26,682	
<b>TOTAL FITTER TRAVEL</b>	<b>\$163,425</b>	
<b><u>Service Visit Costs</u></b>		<b><u>\$870,595</u></b>
Replacement Costs (Contractor)	<b>REPLACEMENT COSTS – CONTRACTOR</b>	
	<b>Replacement Assumptions</b>	
	Cost assumed to be an average of a typical repair cost (\$420,000) and actual 2018/2019 cost for replacement on St. Laurent (\$3,182,417)	
	<b>Replacement Cost – Contractor</b>	\$1,801,209
<b>TOTAL REPLACEMENT COST</b>		<b>\$1,801,209</b>
<b><u>Replacement Costs (Contractor)</u></b>		<b><u>\$1,801,209</u></b>
Replacement Costs (Internal)	<b>REPLACEMENT COSTS – INTERNAL</b>	
	<b>Replacement Assumptions – Field Staff</b>	



	Number of Field Staff Responding Cost per Hour (OT Considered) Hours per Day Per Diem Hotel Number of Days  <b>Replacement Assumptions – Supervision</b> Supervision (1 Supervisor/5 Staff) Cost per Supervisor per Day Number of Days  <b>Replacement Assumptions – Liaison, Planning, Engineering</b> Number of EGI Liaisons Number of Planning/Engineering Support Number of Days Cost per Day Transportation per Employee  <b>Replacement Costs</b> Field Staff Costs Supervisor Costs Liaison, Planning, Engineering Costs  <b>TOTAL REPLACEMENT COST – INTERNAL</b>	25 \$62 10 \$75 \$125 10  5 \$500 10  20 20 10 \$500 \$450  \$205,000 \$35,000 \$298,000  <b>\$538,000</b>
<b><u>Replacement Costs (Internal)</u></b>		<b><u>\$538,000</u></b>
Claims	<b>COST OF CLAIMS</b>  <b>Commercial/Industrial Claims Assumptions</b> Total Commercial/Industrial Customers Impacted Percentage of Customers with Claims Cost of Commercial Claim per Day Average Number of Days to Make Safe, Re-Light  <b>Residential Claims Assumptions</b> Total Residential Customers Impacted Percentage of Customers with Claims Cost of Residential Claim per Day Electric Heater Cost Percentage of Customers with Supplied Heat Average Number of Days to Make Safe, Re-Light  <b>Claims Costs</b> Commercial/Industrial Claims Residential Claims  <b>TOTAL CLAIMS COSTS</b>	1,303 40% \$5,000 5  15,373 15% \$200 \$250 10% 5  \$13,029,959 \$2,690,276  <b>\$15,720,235</b>
<b><u>Claims Costs</u></b>		<b><u>\$15,720,235</u></b>
Administrative	<b>ADMINISTRATIVE COSTS</b>  <b>Administrative Cost Assumptions</b> Number of Staff Cost per Hour (OT Considered) Hours per Day Number of Days  <b>Administrative Costs</b> Administrative Costs  <b>TOTAL ADMINISTRATIVE COSTS</b>	25 \$62 10 10  \$155,000  <b>\$155,000</b>

<b><u>Administrative Costs</u></b>		<b><u>\$155,000</u></b>
Temporary Facilities	<b>TEMPORARY FACILITIES COSTS</b>  <b>Facilities Assumptions</b> Rental Trailers, Command Centers, Relief Centers  <b>Facilities Costs</b> Facilities Costs	\$200,000
	<b>TOTAL FACILITIES COSTS</b>	<b>\$200,000</b>
<b><u>Temporary Facilities Costs</u></b>		<b><u>\$200,000</u></b>
Deferred Work	<b>DEFERRED MAINTENANCE/SERVICE WORK COST</b>  <b>Deferred Work Assumptions</b> Total Hours Worked (Internal/Contractor) 6,947 Percentage of Deferred Work Made-Up with OT 15% OT Premium \$31  <b>Deferred Work Costs</b> Deferred Work Costs \$32,303	
	<b>TOTAL DEFERRED WORK COSTS</b>	<b>\$32,303</b>
<b><u>Deferred Work Costs</u></b>		<b><u>\$32,303</u></b>
<b><u>Contingency Costs (15%)</u></b>		<b><u>\$2,899,602</u></b>
<b><u>TOTAL ESTIMATED COST</u></b>		<b><u>\$22,230,286</u></b>

Figure 1: St. Laurent Pipeline



4. The Project will be constructed in two Phases. Since filing its original Application, Enbridge Gas has refined and adjusted the Project construction schedule to accommodate the delay that resulted from the Ministry of Transportation's (MTO) objections to the original Phase 4 preferred route (PR) and the OEB's subsequent

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