1.13-FRPO-1-36

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, pg. 2 & EB-2011-0038

- 1) Notwithstanding the Board's approval of the methodology, please confirm that the Board found that it was inappropriate to provide the shareholder with a return on the estimated cost of assets owned by others from which Union Gas received and expensed storage service.
 - a) Please confirm that the Black & Veatch studies did not identify this issue as anomalous.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, pg. 3

Preamble: We would like to understand better EGI's proposed cost allocation methodology in practical terms and its impact on ratepayers.

- 2) What aspects of the proposed methodology address the principles of transparency and traceability.
 - a) Please provide specific examples from past proceedings and this proceeding.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, pg. 4

3) Please describe the factors that differentiate the scope of Union's storage operations from those of EGD's.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, pg. 6

Preamble: EGI evidence states: To harmonize, Enbridge Gas will allocate a portion of its average of monthly averages of materials and supplies working capital inventory balance to unregulated storage operations using a composite allocation rate based on the equally weighted proportion of the Company's unregulated storage assets and unregulated storage O&M expenses relative to total assets and O&M expenses. (emphasis added)

- 4) When referring to the total assets and O&M expenses, does this refer to specifically to total **storage** assets and **storage** O&M expenses or total **company** assets and **company** O&M expenses?
 - a) Please clarify and explain the choice.
 - b) For each of legacy UGL and EGD, please provide the representative values and the allocation calculation.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, pg. 7

- 5) For each of legacy UGL and EGD, for all capital work associated with storage greater than \$2 million since the last rebasing of each company, please provide (in layman's terms, if possible):
 - a) The nature of the work done
 - b) The purpose of the work
 - c) Any applicable increase to storage performance including quantification of:
 - i) Storage space
 - ii) Deliverability
 - iii) Reduction in lost gas
 - iv) Reduction in company used gas for storage operations
 - v) Increases in ability to cycle storage pools

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, pg. 8-9

Preamble: EGI evidence states: Under the harmonized methodology, new Enbridge Gas general plant assets are allocated monthly to the unregulated storage operations using a composite allocation rate based on the **equally weighted** proportion of the Company's unregulated storage assets and unregulated storage O&M expenses relative to **total assets and O&M expenses**. (emphasis added)

- 6) When referring to the total assets and O&M expenses, does this refer to specifically to total **storage** assets and **storage** O&M expenses or total **company** assets and **company** O&M expenses?
 - a) Please clarify and explain the choice.
 - b) Please clarify what is meant by equally weighted.
 - c) For each of legacy UGL and EGD, please provide the representative values and the allocation calculation.

Preamble: EGI evidence states: Enbridge Gas will allocate unaccounted for gas, which includes all components of gas loss, such as leakages, venting, meter errors and other similar considerations to unregulated storage monthly using actual gross unregulated storage activity for a given month as a percentage of total actual gross storage and transportation activity for a given month. Gross activity is the sum of the absolute volumes as it relates to both injections and withdrawals.

- 7) When referring to activity, please clarify the measurement of activity as:
 - a) Physical movement that is measured
 - b) Nominations on an individual customer basis aggregated on an absolute value
 - c) Other please clarify how the unregulated and total are quantified

Preamble: EGI evidence states: Enbridge Gas will allocate compressor fuel to the unregulated storage business using actual net daily unregulated storage activity as a percentage of total actual net daily storage and transportation activity. Net activity is composed of injections less withdrawals.

- 8) Specific to the transportation activity, how is it quantified (i.e., nominations, net nominations that compensate for requested flow in the opposite direction, actual physical flow of gas, etc).
 - a) Please clarify the calculation with respect to the non-utility allocation.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, pg. 10-11

Preamble: We would like to understand better the proposed O&M calculations

9) For each of the three O&M categories, please provide the working sheets that were used to calculate the proposed allocation of O&M.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, pg. 11 & EB-2011-0038

- 10) In Excel format, please provide the plant capital continuity schedules for the utility and non-utility storage for each of the legacy utilities for each year since the last rebasing.
 - a) We would respectfully request that there would be a separate workbook for the utility and non-utility of each legacy utility with each year included in the individual workbooks using the worksheet sheet tabs within the workbook.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, pg. 13

- 11) For each year since 2019, please provide the Gas Supply plan calculated storage need for the EGD rate zone.
 - a) Please explain how EGI adjusted its load-balancing requirements for each year showing the respective contributors (storage space, Dawn-landed gas, non-EGI third party storage, etc.) to meet the calculated need.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, pg. 15, Table 2 & EB-2022-0200, Exhibit 1, Tab 13, Schedule 2, pg, 12, Table 2

12) Please produce Table 2 of the original evidence in the same format as the Phase 2 version and provide explanation for each of the line item impact change between the two versions.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, Attachment 1, pg. 1

Preamble: EGI evidence states: EY did not perform an audit, review, examination or other form of attestation (as those terms are identified by CPA Canada, the AICPA or by the Public Company Accounting Oversight Board) of Client's financial statements. Accordingly, EY did not express any form of assurance on Client's accounting matters, financial statements, any financial or other information or internal controls. EY did not conclude on the appropriate accounting treatment based on specific facts or recommend which accounting policy/treatment Client should select or adopt.

We would like to understand the level of insight and constructive input that EY provided into the proposed allocation methodologies.

- 13) Please provide the terms of reference of the RFP/RFI that EGI or EI produced to engage EY.
 - a) Please the terms of reference and agreement between EY and the Client (EGI or EI)
 - b) Please provide any initial drafts of the report exchanged with EY and all written communication between EY and the Client during the course of the engagement.
 - c) Please provide documentation of the experience of EY content experts in the area of storage development and operations

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, Attachment 1, pg. 8, 11

Preamble: We would like to understand better the scope of review performed by EY.

- 14) Please provide a list of EY's advice, comments or recommendations that pertain to the application of the principle of cost causality.
 - a) Please identify the advice, comments or recommendations that EGI accepted and implemented in the proposed methodology.

Preamble: EGI evidence states: Under the first category, the replacement of the existing utility asset is driven by the need to replace the existing asset which has reached the end of its useful life, and not by the desire to increase storage capacity and deliverability to service the ex-franchise customers. As a result, the cost of replacing the existing asset is allocated between the regulated and unregulated storage operations based on the historic allocation of asset being replaced, without enhancements to capacity or deliverability, and the incremental cost of enhancing the asset is allocated to the unregulated business.

- 15) Please explain how incremental cost was determined the asset was enhanced.
 - a) Please explain why the costs were not allocated in proportion to the existing and enhanced capability of the asset in light of cost causality principles.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, Attachment 1, pg. 12-13

Preamble: EGI evidence states: Legacy EGD does not currently allocate any general plant assets to the unregulated storage operations.

- 16) Using the proposed allocation methodology, please provide the amount of general plant assets that would have been allocated to the non-utility storage operations in 2013.
 - a) What is the revenue requirement impact of that amount over the deferred rebasing period.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, Attachment 1, pg. 14

Preamble: EGI evidence states: No allocator is required for customer-supplied fuel and external storage costs related third-party storage, as these are driven by services, activities and contracts which are either exclusively regulated or exclusively unregulated.

- 17) Please confirm that EGI has non-utility contracts with no fuel provided by the customer.
 - a) Please explain how that gas is provided to operations to meet injection and withdrawal requirements
 - b) Please provide the total aggregated injection and withdrawal rights from all contracts of this nature
 - c) Using EGI's standard fuel charge in its storage contracts, what would the annual amount of fuel that this charge would represent?

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, Attachment 1, pg. 15

Preamble: EGI evidence states: Total actual fuel consumed is allocated to the unregulated storage operations daily using a volumetric allocator based on net daily unregulated storage activity as a percentage of net daily total activity for storage and transportation.

- 18) Does EGI perform a reconciliation of the allocation of fuel to the non-utility storage operations with the customer supplied fuel on an annual basis?
 - a) If not, why not?
 - b) If so, please present the results of this reconciliation over the deferred rebasing period.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, Attachment 1, pg. 26 & EB-2022-0086

Preamble: EGI evidence states: *There is no unutilized in-franchise storage capacity at legacy EGD.*

- 19) Please provide the determination of the EGD In-franchise Customer Requirement
 - a) Please provide the monthly data that supports this determination including any assumptions included in the calculation.
 - b) How does EGD storage maintain its integrity without an allocation of system integrity space in the fall?
 - c) Please confirm that, after the winter of 2014, EGI changed its approach to storage and increased its targeted utility storage balance at the Corunna storage site as of the end of February to 43.5 PJ from 18.5 PJ.
 - Please confirm that this approach was to ensure that Corunna could meet its Feb. 28th Design Day deliverability.
 - ii) What adjustments were made to the EGD Gas Supply plan to ensure this utility inventory level was maintained to Feb. 28th.
 - iii) Please confirm that EGD did not seek Board approval for these changes.
 - d) Please confirm that this inventory was required to meet the Corunna to Dawn deliverability for both the utility and non-utility prior to the Dawn-Corunna project.
 - i) If not, please provide a detailed explanation of how EGI could meet its non-utility Design Day requirements from the legacy EGD non-utility storage at Corunna if the utility inventory balance was 18.5PJ?

- 20) With the addition of the Dawn to Corunna pipe, what is the targeted utility inventory balance for Feb. 28th at the Corunna site?
 - a) If less than 43.5 PJ, please describe the resulting changes to:
 - i) The Gas Supply Plan
 - ii) The availability of storage for seasonal load balancing

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, Attachment 1, pg. 34 & 44

& Phase 2, Exhibit 1, Tab 13, Schedule 2, Attachment 2. Page 5

Preamble: EGI evidence states: Fuel Consumed to Move Gas: Allocation Details

Legacy UG Net daily activity for unregulated storage × Daily fuel consumed Net daily activity for total storage

- 21) Please explain how the daily fuel consumed is determined.
 - a) Do all meters on storage operations have electronic metering to provide daily consumption of company used gas?
 - b) How does EGI determine the daily fuel consumed specific to non-utility storage operations distinguished from integrated storage operations?
- 22) How are net daily activities measured for non-utility (i.e., net nominations at the contract level aggregated daily or other)?
 - a) Please define Company Use as distinguished from Fuel Used to Move Gas

REF: Phase 2, Exhibit 1, Tab 13, Schedule 2, Attachment 2, pg. 7

Preamble: We would like to understand better the allocation of Support – Admin and General being proposed.

- 23) Do lines 4 and 5 include gas costs?
 - a) If so, please re-calculate the Support Allocator by removing gas costs.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 4, pg. 2

Preamble: EGI evidence states: The Project does not create any incremental storage capacity, withdrawal capability or injection capability.

We would like to understand the potential of opportunities of the Dawn-Corunna project.

- 24) Please explain what is meant by cycling of storage
 - a) Please confirm that cycling rights (i.e., number of cycles) can be specified in non-utility storage contracts with counterparties.
 - i) Please confirm that these cycles can be non-peak or interruptible service
 - b) Please confirm that standard utility storage is premised on one cycle.
 - c) On an average basis (aggregated number divided by the number of contracts), please provide the average number of cycles in the non-utility storage contracts
 - d) Please confirm that the Dawn-Corunna pipeline, combined with existing Dawn assets, will increase the opportunity to sell non-peak or interruptible services through enhanced capability relative to the use of the replaced compressors.
 - i) If confirmed, how are these capabilities considered in cost allocation.
 - ii) If not confirmed, please explain why the replacement of the limited reciprocating compressor with the Dawn-Corunna pipeline will not be able to increase non-peak services.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 4, pg. 8-10 & EB-2022-0086 Exhibit JT2.8

Preamble: We would like to understand better the analysis and underlying assumptions used by EGI in evaluating the capabilities of Corunna and Dawn facilities

- 25) Please provide Figure 1 and 2 of JT2.8 and add the Ladysmith and Payne lines' flows and pressures on the Design Day Base and Design Day with TR-7.
 - a) Please confirm these scenarios of flows and pressures were determined using the integrated Dawn-Corunna storage model.
 - i) If not, please explain how these numbers were determined.
 - (1) Provide flows and pressure using the new model.
 - b) For each of the scenarios above, please provide the assumption for the inventory level of utility gas in storage at Corunna
 - c) Please describe the operation of and limitation created by the dehydrator at Dawn.
 - i) Please provide the dates of operation of the dehydrator in each of the last 5 years.
 - ii) What operational strategies does EGI use to minimize the need for dehydration as late as possible in the withdrawal season.

- iii) Please provide a simplified understanding of the need for the dehydrator assuming all non-utility Corunna-based storage is at 25% with full deliverability rights (Firm Dynamic Deliverability at 25% rights, if applicable) on Feb. 28th Design Day with the utility gas at:
 - (1) 43.5PJ
 - (2) 18.5 PJ

EB-2022-0086 EGI ReplyARG_20221021, pg. 33

Preamble: EGI's reply argument states: Since 2014, the Company has also made reference to its storage inventory targets in each of its 5-Year Gas Supply Plan, 89 and its 202090 202191 and 202292 Annual Gas Supply Plan Updates, having included the same statement in each:

"The inclusion of storage assets in the Plan provides a cost effective, reliable and secure alternative to purchasing commodity when required by customers, which is consistent with the Board's guiding principles. Storage provides the Plan further operational flexibility and aligns with the target to fill storage at November 1, maintain sufficient inventory at February 28 to provide required deliverability from all storage assets, and maintain inventory at March 31 to provide sufficient deliverability to meet peak day demand in March."

- 26) Please confirm that not one of the Annual Gas Supply Plan Updates specified the February 28th inventory level at 43.5 PJ or approximately half of the cost-based storage held by the EGD rate zone.
 - a) Please confirm that EGD did not seek Board-approval of the increase in Feb. 28th Design Day from 18.5PJ to 43.5PJ.

REF: EB-2022-0200, Exhibit I.4.2-FRPO-126

And EB-2020-0256 Storage Enhancement project

Preamble: EGI's response states: 2021

• Based on the above-described model comparison exercise, and prior to completing the 2021 design day analysis Enbridge Gas made the decision to utilize the new combined model as the official model going forward.

We would like to understand what has happened since 2021.

- 27) Since the adoption of the model, please provide a summary of
 - a) Investigated potential benefits of integration
 - b) Additional benefits derived from the piping added in the Storage Enhancement project
 - c) Additional operational benefits from lower storage targets to meet deliverability
 - d) Additional operational benefits of using Dawn compression to achieve cycling of the Corunna wells not previously available prior to the Dawn-Corunna additional TR-7 pipeline
 - e) Any other operational or Design Day benefits determined

REF: Phase 2, Exhibit 1, Tab 13, Schedule 4, pg. 16

Preamble: EGI evidence states: The original cost estimate for the Project was \$251.0 million and the current cost forecast is \$377.0 million.

We would like to understand how costs were controlled on the project.

- 28) Please provide the history of pipeline-related and, separately, facility-related estimates, informed by contractor quotes or indicatives, from the first assessment of alternatives through to the current estimate including all change orders or other communication that have contributed to the cost escalation up to now including after the submission of this evidence.
 - a) Where applicable, please explain EGI's consideration of alternatives to the price escalation.
 - b) Please provide the management approval of substantial increases throughout the project with supporting reports, recommendations and authorization of change orders.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 4, Attachment 1, pg. 2-3

Preamble: EGI evidence states: Incremental storage space can only be created by investing capital to develop new storage pools or increase the storage space of the existing storage pools.

29) For each of the respective legacy utilities, please provide the amount of space created by developing new storage pools vs increasing existing storage pools by delta pressuring or other means since NGEIR. Please note that this request includes space that is now deemed non-utility (but still under the regulated purview of the Board).

REF: Phase 2, Exhibit 1, Tab 13, Schedule 4, Attachment 1, pg. 4, Table 2

Preamble: Table 2 shows a counter-intuitive result of the reduction of withdrawal capability when the two storage operations were combined in one model.

30) Please provide a list of assumptions from either legacy Corunna or Dawn that were tested and confirmed in putting the model together.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 4, Attachment 1, pg. 6

Preamble: EGI evidence states: As an example, in 2021 and 2022 Enbridge Gas completed the Corunna Meter Run Replacement Project at the Corunna Compressor Station. This project modernized the former meter area in the Corunna Compressor Station yard by removing piping and above ground meter runs that were no longer needed and replaced them with a series of headers and valving that provides increased operability, safety, and reliability to the system.

- 31) Does the enhanced operability provide additional opportunities to cycle Corunna storage in conjunction with the Dawn-Corunna TR-7 pipeline?
 - a) Does the pipeline increase the reliability of the non-utility storage services?
 - i) If not, why not.
 - b) How were the costs of the project allocated between the utility and non-utility?

REF: Phase 2, Exhibit 1, Tab 13, Schedule 4, Attachment 2, pg. 4-5

Preamble: EGI evidence states: The estimated direct capital cost for the Project set out in the LTC application was \$206.4 million⁵. There was also an indirect overhead allocation of \$44.4 million, for a total cost estimate of \$250.8 million....

The Project direct capital cost is \$302.6 million. This represents a variance of \$96.2 million from the Project direct capital cost estimate filed in the LTC application. The indirect overhead allocation has increased with the increase of the direct capital cost and is now \$74.3 million which equates to a total Project cost of \$376.9 million.

We would like to understand better the indirect overhead calculations and the total pool of indirect overhead costs these allocations were allocated from.

32)Please provide the original calculation of \$44.4 million showing the percentage and total pool of indirect overheads.

- a) Please provide the actual aggregated allocation of indirect overheads as calculated from the original pool.
- b) Please provide the updated calculation that yielded \$74.3 million.
- c) Please provide updated actual aggregated allocation of indirect overheads.
- d) Please provide the total actual costs from which these indirect overheads were derived.
- e) For all of the above calculations, please provide the quantities that are for EGI staff separate from EI staff.
- f) How are these EI staff allocations for projects isolated from allocations of EI overheads charged to EI?
 - i) Please explain with examples related to the Dawn-Corunna project spending.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 4, Attachment 2, pg. 9

Preamble: EGI evidence states: Enbridge Gas attributes \$20.6 million of the overall variance to the incremental costs associated with inflation.

We would like to understand better this assessment asserted.

- 33) Please provide the calculation that determined the \$20.6 attribution to inflation.
 - a) Please ensure there is specific definition of the timing of the related to the base price for which the inflation measure is being derived from.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 4, Attachment 2, pg. 12

Preamble: Table 4.2 provides an increase in scope from preliminary design to detailed design. We would like to understand better how these costs are accounted for in the project.

- 34) Please confirm that the \$3.2 million would be direct overhead.
 - a) If not, why not.
- 35) If considered indirect overhead, is there a compensating adjustment in the indirect overhead calculation to account for the specific allocation of the \$3.2 million.

REF: Phase 2, Exhibit 1, Tab 13, Schedule 4, Attachment 2, pg. 13 And EB-2022-0086 Exhibit D, Tab 1, Schedule 1, Table 1

36)Please provide the specific date that these estimates were made for the project given the application filing of 2022-03-01.

1.17-FRPO-37-45

REF: Phase 2, Exhibit 1, Tab 17, Schedule 1 pg. 6, 7, 10, Table 1 and 11 And EB-2022-0200, Exhibit 2, Tab 6, Schedule 2, Page 51-52

And https://www.tssa.org/compliance-standards-pipeline-owners-and-operators

Preamble: EGI evidence states: *Prior to the introduction of EDIMP, limited asset condition data was available on distribution pipelines.*

We would like to understand the Technical Standards & Safety Association's (TSSA) data requirements in light of the Distribution Integrity Management Program (DIMP) implementation and best practices that have been expected by the safety regulator.

- 37) Please provide the initial year that the TSSA required compliance from utilities for the DIMP.
 - a) Please provide EGI's compliance with the TSSA's requirements for collecting, integrating and analyzing information for the following:
 - i) Design and construction
 - ii) Condition monitoring
 - iii) Maintenance and repair
 - iv) Operating conditions
 - v) Failure incidents
 - vi) Damage incidents
 - vii) Damage and deterioration (e.g., corrosion)
 - viii) Manufacturing imperfections
 - ix) Environmental protection
 - x) Safety
 - b) Please provide EGI's latest filing to the TSSA on these requirements.
 - c) Specifically, please provide EGI's internal compliance driven reporting on:
 - i) Condition monitoring
 - ii) Maintenance and repair
 - iii) Operating conditions
 - iv) Failure incidents

- v) Damage incidents
- vi) Damage and deterioration (e.g., corrosion)
- vii) Manufacturing imperfections
- viii) Safety
- b) In 2022, how many FTE's did EGI have allocated to functions that ensured compliance with the TSSA's requirements?
 - i) Please provide a breakdown of EGI's response aligned with the categories defined in Table 1

Preamble: EGI evidence states: Following data collection and evaluation, additional effort will be required to assess risks on this subset of distribution pipelines. A risk evaluation will be completed using information collected (including through ILI, operating history, and other surveys) to complement the analysis of the potential threat likelihood and consequences. Calculated risk and reliability results from the risk assessment will be evaluated against established industry and Company standards and thresholds (e.g., health and safety, operational reliability, and financial) to determine if mitigation actions are required, and the relative urgency of such actions to reduce risk to a tolerable level. This type of risk analysis requires incremental work, as it has not previously been used to evaluate distribution pipelines.

38) Given the TSSA's requirements for TSSA's requirements for collecting, integrating and analyzing information, please specifically identify what aspects of the above EGI evidence are not included in the expectations of the safety regulator.

Preamble: The second reference above is EGI's approach to a risk matrix extracted from its evidence in this proceeding. The third reference is the TSSA's manual for field verification which includes their risk matrix developed from the US Military Standard MIL-STD-882E

- 39)Please explain why EGI has developed its own risk matrix as opposed to following the risk matrix of its safety regulator.
 - a) Please distinguish where EGI believes that its approach is superior in the public interest.
- 40) Given that Asset Life Extension analysis is a predominantly a technical exercise that is focused on safety and security of supply, why is EGI requiring the same number of finance and regulatory advisors as risk engineers?

Preamble: EGI evidence states: Under alternative actions required to extend the of an asset include:

- b) Capital
 - i. Significant pipeline repairs to address identified defects;
 - ii. Partial targeted replacement of short sections of a larger pipeline system; and
 - iii. Additional measures to reduce third-party damage risk (e.g., installation of physical protection).
- 41) Given the above categories, please identify which, if any, of the three categories is has not been used by EGI in the past (prior to EDIMP).
 - a) If not used previously, please explain why not?
 - b) If these categories are going to be expanded, please explain why EGI cannot channel resources that would have been consumed by a full replacement of the pipe into these ALE projects.

REF: Phase 2, Exhibit 1, Tab 17, Schedule 1

And EB-2022-0200 Exhibit O1, Tab 1, Schedule 1

And EB-2022-0200 Dec_order_EGI_2024 Rebasing_Phase I_20231221

Preamble: The second reference includes the following: Parties agree that \$12.5 million is included in the 2024 O&M budget for these programs, and that variances will be recovered from or credited to ratepayers on an annual basis from 2024 until Enbridge Gas next rebases. Enbridge Gas will provide annual reporting on actual DIMP/EDIMP spending, setting out the work done (and associated costs), listing the projects/facilities where work was done, describing what facilities work was deferred or avoided or otherwise impacted as a result and discussing the cost/benefit analysis of the DIMP/EDIMP work done during the past year. emphasis added

We are concerned that Tab 17 does not provide any information on how EGI plans to report and demonstrate.

42)Please provide EGI's proposed format for data, information and evidence to demonstrate value for money from the investments in DIMP/EDIMP.

Preamble: In the third reference, the Board decision directs: *The OEB finds that the 2024 capital budget proposed by Enbridge Gas has not been justified and shall be reduced from the updated \$1,470.3 million to \$1,220.3 million, a reduction of \$250 million or 17.0%.*

We would like to understand how EGI effected this reduction for the purposes of a baseline for capital spending.

- 43) Please provide the proposed 2024 capital budget by investment categories.
 - a) Please provide the updated 2024 capital budget by investment categories.
 - b) Please provide the rationale for the percentage reductions in each respective category.

REF: Phase 2, Exhibit 1, Tab 17, Schedule 1, pg.22

Preamble: EGI evidence states: The IRP Program could offer customers incentives to defray the cost of replacing their gas equipment, or investment by the utility to cover the cost of the electric equipment to be recovered over time, with a return on that investment.

- 44)Please clarify if the return contemplated would stem from capital going into rate base or flowing to Enbridge Sustain.
 - a) Please provide EGI's views on customer's choosing their own contractor with compensation from the company upon completed conversion to electric equipment.

REF: Phase 2, Exhibit 1, Tab 17, Schedule 1, pg.23-24

Preamble: We would like to understand better the approach to evaluate system pruning.

45)Please provide EGI's views on including new development (residential or commercial) being incented to choose electrification at the outset of construction for developments that would otherwise be fed by a pipeline that is limited in capacity to meet additional demand.

4.2-FRPO-46-80

REF: Phase 2, Exhibit 4, Tab 2, Schedule 1, pg. 3

Preamble: EGI evidence states: Based on the review and recommendation of ICF, Enbridge Gas's 2024 storage requirement of 227.7 PJ includes 10 PJ of storage for load balancing. To meet Enbridge Gas's 2024 storage requirement of 227.7 PJ, 28.0 PJ of market-based storage is required in addition to the 199.7 PJ of utility-owned cost-based storage. The 2024 market-based storage requirement of 28.0 PJ is an increase of 1.9 PJ from Enbridge Gas's 2023 forecast requirement of 26.1 PJ.

- 46)In Excel format, please provide the calculation of in-franchise load balancing requirements for each respective legacy utility that underpin the 2023 and, separately, the 2024 figures.
 - a) Please explain EGI's views on using Dawn-delivered winter gas at a price fixed 6-18 months in advance of the deliveries to mitigate price risk for load balancing services.

REF: Phase 2, Exhibit 4, Tab 2, Schedule 1, pg. 4

- 47) What is the full, one cycle unit cost of cost-based storage for 2024.
- 48) What percentage of Ontario-based storage does EGI own?
 - a) Does EGI contract for Michigan-based storage while holding the transportation rights back to Ontario?
 - b) What is the cost of the combined (storage and transportation) service?
- 49) Please file the results of the market-based EGD Rate zone storage for the RFP for each year since the merger.

REF: Phase 2, Exhibit 4, Tab 2, Schedule 1, pg. 5

Preamble: EGI evidence states: Throughout this Exhibit, Enbridge Gas outlines the approach and considerations made in the determination of the 2024 storage requirement and discusses the firsthand experience Enbridge Gas has in operating this level of storage to the benefits of ratepayers.

50) Please clarify how EGI could have "first-hand experience" in operating a level of storage that it has not obtained.

Preamble: EGI evidence states: Significant costs incurred by utilities on behalf of customers were reported across the natural gas industry, such as Atmos Energy (\$2 billion USD)10, CenterPoint Energy (\$1.1 billion USD)11 and Xcel Energy (\$1 billion USD)12.

- 51) Please provide the drivers of these costs at a high level.
 - a) As these utilities have significant geographical span, for each of those franchise areas of the respective utilities that incurred the most substantial costs, please provide the Heating Degree Days (HDD) during Winter Storm Uri versus normal February (HDD's) during Winter Storm Uri.

REF: Phase 2, Exhibit 4, Tab 2, Schedule 1, pg. 9 and Attachment 1

Preamble: EGI evidence states: Enbridge Gas is requesting OEB approval for forecast load balancing costs²¹ of \$17.3 million and market-based storage costs of \$25.3 million. Included in the \$25.3 million of market-based storage costs is \$11.4 million related to implementing ICF's recommendation for 10 PJ of storage for load balancing. The \$11.4 million of storage costs for load balancing is partially offset by commodity costs savings of \$5.8 million²². The 2024 Test Year gas cost forecast has been updated at Attachment 1 for the proposals in this Application.

We would like to understand better EGI's proposal for load balancing costs.

- 52) Please clarify if EGI is requesting the load balancing costs be incorporated into:
 - a) Storage rates
 - b) Load balancing rates
 - c) Distribution rates
- 53) Is EGI requesting that the \$17.3 be included on a forecast basis?
 - a) In EGI's proposal, would the forecast load balancing costs be reconciled with actuals?
 - b) If so, would the reconciliation be done as part of:
 - i) QRAM
 - ii) Annual deferral account
 - iii) Other?
 - c) If not, would EGI change the expected monthly gas cost on annual basis?

- 54) Footnote 21 refers to Attachment 1 for details on the load balancing costs proposed. Using the format provided on pg. 5 of Attachment 1, please provide the 2022 and, separately, the 2023 forecast and actual load balancing costs.
- 55) Please show the determination of the expected \$5.8M reduction in commodity costs with the proposed purchase of additional storage.
 - a) Please explain the appropriateness of a distribution/storage increase in cost for all customers including direct purchase resulting in a reduction in commodity cost for the system gas customers.
 - i) If we have this wrong, please explain.
- 56) Please explain the source of the demand charge in line 7.
 - a) Why is this gas not sourced as delivered gas at Dawn without demand charge and optionality based upon need?
- 57) What is the unit cost of market-based storage (\$/GJ).

REF: Phase 2, Exhibit 4, Tab 2, Schedule 1, pg. 12

Premble: EGI evidence states: Unlike Union, EGD did not set aside additional storage for operational contingency purposes. Instead, EGD managed operational contingency within its storage portfolio using inventory targets, and therefore, EGD did not plan to use all of its storage portfolio to meet demand requirements.

- 58)Please provide the inventory targets used throughout the gas year for:
 - a) The years before 2013
 - b) The change to higher Feb. 28th target after winter Of 2014
 - i) Please provide the year these targets were adjusted
 - c) Any subsequent changes in targets
 - i) Please provide the year those targets were adjusted

REF: Phase 2, Exhibit 4, Tab 2, Schedule 1, pg. 17-20

Preamble: We would like to understand the determination of load-balancing related Dawn-purchased requirements on a seasonal and design day basis.

59) In an Excel file, please provide the forecasted monthly profile of receipts and consumption of gas for each rate zone providing the monthly difference between the two cumulated into month-end storage balances that provide deliverability (specifying the withdrawal capability available). Please start the annual cycle at end of March/April 1.

Month	April	(May-Feb)	March
Prev. month storage balance			
Deliveries into Rate Zone (not Dawn)			
Consumption			
Difference (Deliveries-Cons.)			
Dawn delivered gas			
End of month storage balance			
Withdrawal capability at storage level			

Preamble: EGI evidence states: Enbridge Gas received notices of force majeure impacting over 230 TJ of supply deliveries contracted to flow to Dawn.

- 60) Please provide the maximum daily supply that was not received during this period and the date it occurred.
 - a) On a percentage basis, what would that amount of supply be relative to the forecasted load balancing gas planned for February.
 - b) Specific to the day of maximum failed supply, what was the utility storage level?
 - i) Given that level of storage what was the maximum withdrawal capability available from the utility storage?

REF: Phase 2, Exhibit 4, Tab 2, Schedule 1, pg.15

Preamble: EGI evidence states: The starting point of ICF's analysis reflected Enbridge Gas's preferred option of embedding operational contingency requirements in the aggregate excess storage, rather than procuring incremental storage for operational contingency.

We would like to understand how when storage space is reserved for seasonal load balancing by aggregate excess, how it can also be used for contingency space.

61) Please explain how the operational contingency space can be embedded in the aggregate excess storage.

REF: Phase 2, Exhibit 4, Tab 2, Schedule 1, pg. 23-29 & Attachment 2

- 62) Please provide the terms of reference and contract for engagement of ICF.
 - a) Please provide the data and assumptions used by ICF.
 - b) Please provide all written communication between EGI and ICF pertaining to the study.
 - c) Please provide the method of pricing the winter gas assumed in study (i.e., was incremental supply at Dawn assumed to be purchased as spot, index or fixed and, if fixed, how long in advance).
- 63)Please provide the monthly amount of gas that EGD purchased at Dawn for each month of the winter of 2013/14 ("polar vortex winter").
- 64)Please provide in Excel format, all data that were used in development of the graphs in the Exhibits in the study report.
- 65)Please provide the data and graphs for the storage profile and the Dawn Deliveries given a proposed 10TJ using the forecasts in the evidence.
 - a) Please provide the withdrawal available from the storage balances throughout the winter.

Preamble: EGI evidence states: Incremental storage capacity above the level indicated by the Aggregate Excess methodology also increases the utility's ability to optimize purchase patterns, including reducing purchases at Dawn at the highest priced days and increasing purchases at Dawn on days with lower prices. Over the last five years (2019 – 2023), the highest priced day in January has averaged about US\$0.79 per MMBtu higher than the average January price. The lowest price day in January has averaged about \$0.40 per MMBtu below than the average January price. Hence the ability to shift purchases from the highest cost day to the lowest cost day in January would reduce gas purchase costs by \$1.19 per MMBtu. Achieving this degree of cost savings is unlikely to be feasible. However, it would be reasonable to expect a degree of cost savings associated with the flexibility in supply purchase timing associated with

incremental storage capacity. ICF calculated a rough assessment of the potential savings to be C\$113,165 per year per PJ of storage capacity based on the ability to shift five days per month of high-priced purchases to the average monthly price excluding the five highest price days. The monthly average prices and the 5-day high prices at Dawn are shown in Table A 1.

We would like to understand better EGI's actual shifting of purchases to reduce costs over the last 5 years.

- 66) In table and excel format, for the 2019-2023 period, please provide the monthly gas shifts including the dates and prices that were avoided and dates and prices of subsequent re-purchasing of those avoided purchases.
 - a) For the dates when the sales were made, what was the system gas storage level and resulting withdrawal capability.
 - b) For each of those times, please indicate if the 10TJ additional storage would be essential to accommodate or increase that specific shift in the future.

REF: Phase 2, Exhibit 4, Tab 2, Schedule 4 and Phase 2, Exhibit 4, Tab 2, Schedule 1, pg. 13, Table 3

Preamble: EGI evidence states: The 4.8 PJ of empty space is required for the end of the injection season to help manage unplanned events related to weather variances, storage pool factors and operational balancing agreement (OBA) imbalances. The empty space is most critical in October and November until the storage system is on sustained withdrawals. The last 4.8 PJ of empty space will remain empty throughout the withdrawal season since available supply beyond the end of injections will be utilized to meet customer demands. Purchasing additional supply to fill this space is unnecessary and will lead to higher gas supply costs since additional winter supply is more expensive than summer supply.

The 10.8 PJ of filled space is required for the end of the withdrawal season to help manage unplanned events related to weather variances, system linepack, storage pool factors and OBA imbalances. The filled space is most critical in March and April until the storage system is on sustained injections.

We would like to understand better the utilization of the components of contingency space.

- 67) Over the last 10 years, please provide the years that utility (EGI/UGL), used the contingency space for:
 - a) Late season injections in October & November
 - i) For each identified year, please specify how much space was used.
 - ii) For those years filled, how was the space re-emptied in each case.
 - iii) How were the cost consequences handled for the commodity?
 - b) Late season withdrawals in March and April.
 - i) For each identified year, please specify how much space was used and which category of need was the space used for.
 - ii) For those years emptied, how was the space re-filled in each case.
 - iii) How were the cost consequences handled for the commodity?
 - c) For each of the above categories of empty and full contingency space, please specify if the non-utility benefits from the functionality of have the contingency space for the purposes described.
 - i) If not, please explain why the non-utility operations do not benefit from each category.
 - ii) If so, please explain how the non-utility benefits from each category.

Preamble: EGI evidence states: On injection, EGD planned to leave 4 PJ of empty space to manage the system. On withdrawal, EGD did not plan to fully empty its storage space. Enbridge Gas is planning for 9.5 PJ of gas to be in storage (filled space) for the EGD rate zone at the end of Winter 2023/2024. Therefore, based on historical methods, the EGD rate zone will have a total of 13.5 PJ of space and 9.5 PJ of molecules available for operational contingency for Winter 2023/2024.

A simple read of the above statements read as if EGD had contingency space built into its operating plan.

- 68) Please confirm our read or clarify the distinction between Union and EGD.
 - a) Do those allocations come from the 99.4 PJ that the Board deemed utility space in the NGEIR decision?
 - b) How were the costs of these allocations handled between the utility and nonutility operations?
 - i) Please provide the evidentiary references in support of these allocations.
 - c) Please provide the evidentiary references of EGD/EGI requesting and obtaining approval to this approach to storage management.

- 69)Over the last 10 years, please provide the years that utility (EGI/EGD), used the contingency space for:
 - a) Late season injections in October & November
 - i) For each identified year, please specify how much space was used.
 - ii) For those years filled, how was the space re-emptied in each case.
 - iii) How were the cost consequences handled for the commodity?
 - b) Late season withdrawals in March and April.
 - iv) For each identified year, please specify how much space was used and which category of need was the space used for.
 - v) For those years emptied, how was the space re-filled in each case.
 - vi) How were the cost consequences handled for the commodity?
 - c) For each of the above categories of empty and full contingency space, please specify if the non-utility benefits from the functionality of have the contingency space for the purposes described.
 - i) If not, please explain why the non-utility operations do not benefit from each category.
 - ii) If so, please explain how the non-utility benefits from each category.
- 70) In Table 3, please provide the deliverability allocated to each of the functions for each of the respective legacy utility space allocations.

Preamble: EGI evidence states: *UFG forecast variances and supply backstopping components are no longer required to be part of the operational contingency methodology. Existing processes are used to manage UFG variances and supply disruptions.*

71) Please clarify these existing processes and were those approaches available over the last 10 years.

REF: Phase 2, Exhibit 4, Tab 2, Schedule 5 and Phase 2, Exhibit 4, Tab 2, Schedule 1, pg. 14, Table 3

Preamble: EGI evidence states: *The amount of firm injection and withdrawal capacity available from cost-based storage is outlined in Phase 2 Exhibit 4, Tab 2, Schedule 5. The maximum firm withdrawal capability is 3.8 PJ/d and the maximum firm*

injection capability is 1.7 PJ/d associated with total cost-based storage space of 199.4 PJ established with the OEB NGEIR Decision₂₈. The impact of the firm cost based withdrawal capabilities is a 0.3 PJ/d decrease in storage withdrawals on the design day compared to 2023.

- 72) Please provide a detailed explanation of what is causing the asserted 0.3 PJ/d of withdrawal capability relative to 2023?
 - a) Please provide or reference the determination of this reduction.

Preamble: EGI evidence states: The withdrawal and injection capabilities to serve infranchise customers for the Union rate zones are consistent with the allocation of costs. Enbridge Gas took the design day capability for February 29, 2024, and subtracted the capability associated with the direct investment of non-utility firm injection and withdrawal capability since the NGEIR Decision.

- 73) Please provide the total deliverability in PJ/d from Union storage in 2006.
 - a) Please provide the amount of deliverability allocated to in-franchise customers from the rebasing proceeding for 2007 rates (EB-2005-0520)
 - i) Please provide the evidence in support of the total and the in-franchise allocation.
- 74) Do the percentage allocations included Michigan storage assets that were included as non-utility storage in that proceeding.
 - a) If yes, what quantity of space and deliverability were included.
 - b) If not, how were they removed from the assets used in these measures?

REF: Phase 2, Exhibit 4, Tab 2, Schedule 8

Preamble: EGI evidence states: Increased economic development in Ontario prompted the development of various products and services including High Deliverability Services for the power generation market. This non-utility storage has become integral to an active market that has matured since 2007 and includes customers and utilities beyond Ontario. The availability of market-based storage at Dawn has supported the development of the liquidity of the Dawn Hub, attracting pipelines and counterparties that offer commodity and natural gas services to Enbridge Gas as well as direct purchase customers in Ontario. As this market has developed, the number of counterparties that transact for storage services at Dawn has increased from 29 in 2010 to 55 in 2023, an increase of approximately 90%.

- 75) How much high deliverability space (above 1.2% withdrawal) were contracted from UGL in:
 - a) 2008?
 - b) 2022?
- 76) How much storage space has legacy Union developed (not purchased from others) since 2008?
- 77) What percentage of Ontario-based natural gas storage space does EGI hold at the end of 2023?
 - a) How much of that space has been developed since 2006 by increasing the allowable pressure in the existing pools?
 - b) What was the aggregated cost of these storage pool developments created by increasing allowable pressures?

Preamble: EGI evidence states: In examining the issue of what remedy in-franchise customers have should the 100 PJ cap of storage space be exceeded, the OEB clarified that it expects Union to seek incremental storage space above the 100 PJ by procuring such services from the market. The OEB stated:

No "remedy" is required. Once the 100 PJ limit is exceeded, incremental infranchise storage requirements will be met through purchases by Union in the open market, a market the Board has determined is competitive. The all-in cost for in-franchise consumers for storage services will be a blend of historical costs for 100 PJ and competitive market prices for the balance.

- 78) Please confirm that the finding of competitive was needed to for the Board to forebear to ensure that the competition was sufficient to protect customers in the interest.
 - a) If the Board finds in this proceeding that the competition is inadequate to protect customers, how would EGI propose to manage customers' load balancing?

Preamble: EGI evidence states: STAR established Posting and Protocol Requirements and Reporting Requirements for Storage companies including Customer Index and storage capabilities. Today, STAR continues to ensure a level of transparency and customer protection within the competitive storage market.

- 79) Please explain how STAR ensures a level of transparency and customer protection when there is:
 - a) No indication of price for contracts
 - b) No revenue generated by contracts with differentiated parameters.

REF: Phase 2, Exhibit 4, Tab 2, Schedule 9

- 80) Please expand Table 1 to include differentiated columns for:
 - a) Non-Ontario based physical storage
 - b) Synthetic storage created by a constant daily amount bought during the winter and sold during the summer to the counterparty.
 - c) Amount of storage with less than 1.2% deliverability