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BY E-MAIL

June 27, 2023

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

Dear Ms. Marconi:

Re: EPCOR Natural Gas Limited Partnership (EPCOR)
Consultation to Review 2023 Annual Update to Aylmer Gas Supply Plan and South Bruce Three-Year Gas Supply Plan
OEB File Number: EB-2023-0111

In accordance with the Ontario Energy Board (OEB) initiation letter dated May 9, 2023, please see attached OEB staff questions pertaining to the above-noted matter.

Any questions relating to this letter should be directed to Arturo Lau at Arturo.Lau@oeb.ca.

Yours truly,

Arturo Lau
Digitally signed by Arturo Lau
Date: 2023.06.27 10:23:07 -04'00'

Arturo Lau
Advisor, Natural Gas Applications

Encl.

EPCOR NATURAL GAS LIMITED PARTNERSHIP - AYLMER SERVICE AREA

ONTARIO ENERGY BOARD STAFF QUESTIONS

JUNE 27, 2023

Please note, Enbridge Gas is responsible for ensuring that all documents it files with the OEB, including responses to OEB staff interrogatories and any other supporting documentation, do not include personal information (as that phrase is defined in the *Freedom of Information and Protection of Privacy Act*), unless filed in accordance with rule 9A of the OEB's *Rules of Practice and Procedure*.

Staff.1- Lakeview

Ref: 2023 GSP Update, Aylmer GSP, EB-2023-0111, pg. 12-15
EPCOR Aylmer July 2023 QRAM, EB-2023-0158, Sch 1, pg. 5-6

In the 2023 Gas Supply Plan update (2023 GSP Update), EPCOR compared the peak day consumption against the Contract Demand (CD) of the Enbridge Gas System Supply Contract (ENB SA1550), the Enbridge Gas Direct Purchase Contract (ENB SA25050), and the Lagasco Lakeview Contract.

This work provided EPCOR with a demand day road map in order to assist in determining the required Peak Day and firm Contract Demand requirements from its gas supply sources. The roadmap was updated in the 2023 GSP Update to reflect 2022 actual peak demand and a forecast for 2023 to 2027 as shown in the table below.

Table 3-2
Actual & Forecast Demand Requirements

	ACTUAL / FORECAST	Actual and Forecast Peak Demand (Cornerstone)*	Actual and Forecast Contract Demand (Enbridge)		Lakeview Contract Demand	Total CD
			Sys Gas	Direct Purchase		
2017	ACTUAL	197,278	177,234			177,234
2018	ACTUAL	208,650	208,429			208,429
2019	ACTUAL	241,670	208,429	13,366	30,856	252,651
2020	ACTUAL	187,720	208,429	13,366	30,856	252,651
2021	ACTUAL	213,131	186,100	35,695	30,856	252,651
2022	ACTUAL	248,955	186,100	35,695	30,856	252,651
2023	FORECAST	253,934	186,100	35,695	32,139	253,934
2024	FORECAST	259,013	186,100	35,695	37,218	259,013
2025	FORECAST	264,193	186,100	35,695	42,398	264,193
2026	FORECAST	269,477	186,100	35,695	47,682	269,477
2027	FORECAST	274,866	186,100	35,695	53,071	274,866

*assume 2% growth YOY as per Cornerstone on Lakeview CD (Enbridge remains the same)

EPCOR stated that it plans to increase the CD on the Lagasco Lakeview Contract in 2023 to meet expected system gas peak day requirements.

In EPCOR's July 2023 QRAM application, EPCOR noted that its contract with Lagasco has a primary term which expires on October 31, 2024. ECPOR stated that the Lagasco volumes are described as Local Production (C) in the QRAM.

EPCOR noted that the Local Production (C) contract includes a firm CD of 1,200 GJ/day. For any gas delivered in excess of the firm CD of 1,200 GJ/day delivered, the 5% discount will not apply to the price to be paid, and there will not be any incremental demand charges and no overrun charges.

Question(s):

a) Please advise what the Lagasco Lakeview Contract, discussed in the 2023 GSP Update, is described as in the QRAM applications (i.e., Local Production B or C or both).
b) Please advise whether EPCOR intends to renegotiate the Lagasco Lakeview Contract in 2023 to increase the CD. If not, please confirm that it is ECPOR's intent to overrun the contracted CD and forgo the 5% discount on any overrun volumes.
c) Please advise whether there have been discussions with Lagasco on its ability to provide additional volumes. If so, provide the outcome of those discussions.
d) Please advise whether there been a study completed on the reserves available in the Lakeview wells and how long they are expected to last? If so, please provide a summary of the information available to EPCOR.
e) Please confirm that Lakeview supply is critical to the Aylmer system to maintain integrity across the distribution system?

Staff.2- Renewable Natural Gas

Ref: 2023 GSP Update, Aylmer GSP, EB-2023-0111, pg. 15-17 and 21

EPCOR Aylmer is expecting another source of local supply to the distribution system through the introduction of renewable natural gas (Production D) injected into the system by a new local RNG facility. This volume was previously expected by the fall of 2022 but commissioning of the RNG facility has been delayed to Q2 2023 due to supply chain issues. The facility is expected to increase supply to the distribution system by approximately 3,000 m^3 to 13,500 m^3 per day, which will be offset by a decrease in volume from other supply sources. While the source of this supply is from a renewable natural gas facility, EPCOR is only purchasing the commodity and not the environmental attributes. Therefore, EPCOR Aylmer will treat the natural gas produced by the facility as another source of local supply, with a pricing structure similar to other Aylmer local supply contracts at the Enbridge commodity rate. EPCOR finalized the supply contract with the RNG producer during the winter of 2022.

The RNG producer is expected to generate approximately 11% to 12% of total system demand by 2024.

EPCOR noted that RNG projects tend to have relatively steady production volumes throughout the year, which presents a challenge to system operations during the summer period when consumption is low, especially for systems like Aylmer where it is not possible for the RNG to physically leave the system. This limits the size and the number of RNG projects to be considered and implemented in the Aylmer system.

Question(s):

a) RNG is expected to offset a decrease in volume from other supply sources. Please discuss which other supply sources are expected to decrease.
b) Please advise whether the RNG volumes have started to flow in EPCOR's distribution system.
c) Please advise whether the RNG injection site is located in where it would benefit ECPOR Aylmer's integrity concerns?
d) RNG is expected to meet 11-12% of total system demand by 2024, is that an annual demand figure? Please also provide the:
   i) percent of summer demand is expected to be met by RNG in 2024?
   ii) percent of winter demand is expected to be met by RNG in 2024?
e) In the context of the steady daily volumes from RNG, please provide EPCOR's views on the connection of additional RNG projects.
f) Please advise whether RNG been included in Table 3-2?
   i) If not, please update Table 3-2 to include the RNG.
   ii) If so, please update Table 3-2 to break out the RNG portion.

Staff.3- Diversity of Supply

Ref: 2023 GSP Update, Aylmer GSP, EB-2023-0111, pg. 14 (Table 3-2) and 17 (Table 3-5)

OEB staff notes that Table 3-4 provides the percentage of gas supply provided by source on a historical and forecast basis.

Table 3-4
Supply Source Breakdown – Forecast and Actual

Supply Source Breakdown-Forecast					
	Enbridge	Production A & B	Production C	Production D	Total
2027	64.8%	1.2%	22.8%	11.3%	100%
2026	63.3%	1.4%	23.6%	11.7%	100%
2025	62.0%	1.7%	24.3%	12.0%	100%
2024	60.7%	2.1%	24.9%	12.3%	100%
2023	64.8%	2.6%	25.5%	7.1%	100%

Supply Source Breakdown-Historical					
	Enbridge	Production A & B	Production C	Production D	Total
2022	70.3%	2.6%	27.1%	0%	100%
2021	67.5%	2.7%	29.8%	0%	100%
2020	67.3%	3.3%	29.4%	0%	100%
2019	94.9%	4.6%	0.5%	0%	100%
2018	96.5%	3.5%	0.0%	0%	100%

<u>Question(s):</u>

a) When Table 3-2 is converted into percentages, it does not reconcile with Table 3-4. Please reconcile Table 3-2 and Table 3-4.
b) Please advise whether the supply source breakdown (Table 3-4) is based only on system supply or does it also include direct purchase volumes?
c) In Table 3-2, Lakeview CD is expected to increase, assuming Lakeview is only Production B & C, please explain why the supply source is decreasing in Table 3-4 going forward into 2027?

Staff.4- Rate M9

Ref: 2023 GSP Update, Aylmer GSP, EB-2023-0111, pg. 20

EPCOR stated that there is a risk that the M9 Rate will not be offered by Enbridge Gas in the future.

EPCOR noted that it reviewed Enbridge Gas's proposed Rate E72 in its 2024 Rebasing application (EB-2022-0200) and does not expect that EPCOR moving to this rate class will have a material impact on EPCOR's GSP.

Question(s):

a) Please confirm that Enbridge is proposing to switch customers from the M9 rate to the proposed Rate E72?
   i) Please advise whether Rate E72 open to all customers or only those customers that are currently on the M9 rate?
b) Please advise whether Rate E72 is exactly the same as the M9 Rate?
   i) If not, please discuss the similarities and differences between the two and discuss any impacts on EPCOR and its customers.

EPCOR NATURAL GAS LIMITED PARTNERSHIP - SOUTH BRUCE SERVICE AREA

ONTARIO ENERGY BOARD STAFF QUESTIONS

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Staff.1- ECNG

Ref: 2023-2025 South Bruce GSP, Pg. 10 – 11
2022 Annual Update, South Bruce GSP, EB-2022-0141, pg. 9

EPCOR contracted ECNG to undertake its gas supply procurement, including:

- Ongoing annual natural gas commodity procurement strategy and execute on a cost effective and reliable basis.
- Nomination services for its natural system gas portfolio as well as for contract (Rate 16) customers.

EPCOR and ECNG have also developed a number of operational triggers that aim to minimize fees and maximize deliverability.

Question(s):

a) Has EPCOR contracted ECNG to execute on the gas supply procurement prior to EPCOR's 2023-2025 GSP?
   i. If not, how was this done previously?
b) OEB staff notes that in the previous GSP (2022), EPCOR and ECNG met weekly, however, this has been changed to monthly. Please note any changes to operations and the impacts.
c) EPCOR described developing "operational triggers." Please discuss these "operational triggers."

Staff.2- CGPR 5A Index

Ref: 2023-2025 South Bruce GSP, Pg. 13
2022 Annual Update, South Bruce GSP, EB-2022-0141, pg. 11-12

In the 2022 GSP Update, EPCOR stated that the CGPR 5A index is the preferred choice for its index price term purchases.

OEB staff notes that in the 2023-2025 GSP, EPCOR removed any references to the CGPR 5A.

<u>Question(s):</u>

a) Please discuss why CGPR 5A index is no longer the preferred choice and advise whether the CGPR 5A index was ever used?
b) How does this affect the gas supply options now that there is only the NGX index DDAI option.

Staff.3- Demand Forecast

Ref: 2023-2025 South Bruce GSP, Pg. 21-23

EPCOR developed a demand forecast that reflects its expected customer profile throughout the year over a three-year horizon from Planning Year 2023 to 2025 (April 2023 to March 2026). EPCOR noted that the three-year forecast customer conversion in the 2023-2025 GSP reflects the customer applications received up to February 2023, as well as the forecasted pace of daily customer conversions as discussed above.

EPCOR will continue to review customer consumption patterns and expand on these findings in future GSP update filings.

<u>Question(s):</u>

a) Please confirm that EPCOR used the most up-to-date information it had available at the time of filing (i.e., customer connections, average use per customer, etc.) in developing its demand forecast.

Staff.4- Design Day Demand

Ref: 2023-2025 South Bruce GSP, Pg. 25-26

EPCOR noted that, while design day peak demand for General Service customers is not expected to exceed the M17 capacity reserved for General Service customers in January for the period covered in the 2023-2025 GSP, there is a risk that if each dryer were to run on the same day during a cold day before December 15, the General Service daily consumption for that day could exceed the capacity allocated to this group of customers.

EPCOR noted that it has proactively initiated discussions with Enbridge Gas on options for procuring additional firm deliverability during the grain drying season. Further, as OEB staff noted in its review of the 2022 GSP Update, EPCOR can ensure deliverability through M17 overrun during the grain drying season.

Question(s):

a) Please describe the outcomes of EPCOR's discussions with Enbridge Gas.

Staff.5- Demand Side Management

Ref: 2023-2025 South Bruce GSP, Pg. 24

EPCOR stated that it plans to develop its Demand Side Management (DSM) program for the Aylmer franchise prior to developing a DSM program for the Southern Bruce Franchise.

Question(s):

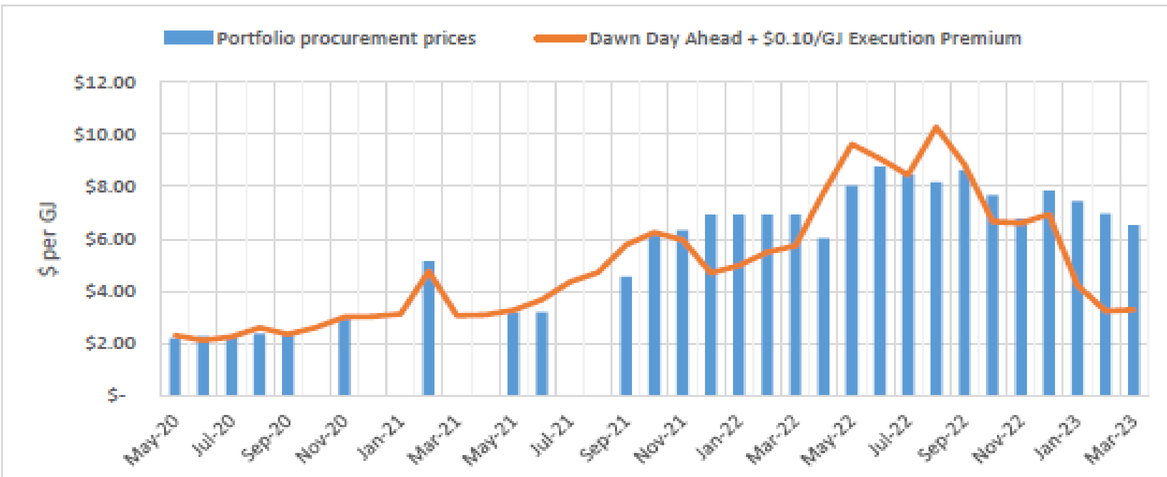
a) Please provide a status update regarding the completion of the DSM programs for each (Aylmer and South Bruce) franchise. As part of the response, please advise when it expects to file an application for approval of a DSM program for the Aylmer franchise (and advise whether it intends to file this application on standalone basis or as part of its next rebasing application).

Staff.6- Supply Option Analysis

Ref: 2023-2025 South Bruce GSP, Pg. 28-29

EPCOR compared its monthly actual portfolio rate ($/GJ) to the Dawn Day Ahead Index plus a 10 cents/GJ execution premium (Figure 5). EPCOR stated that the Dawn Day ahead index is indicative of what EPCOR would have purchased at market without entering into fixed priced contracts.

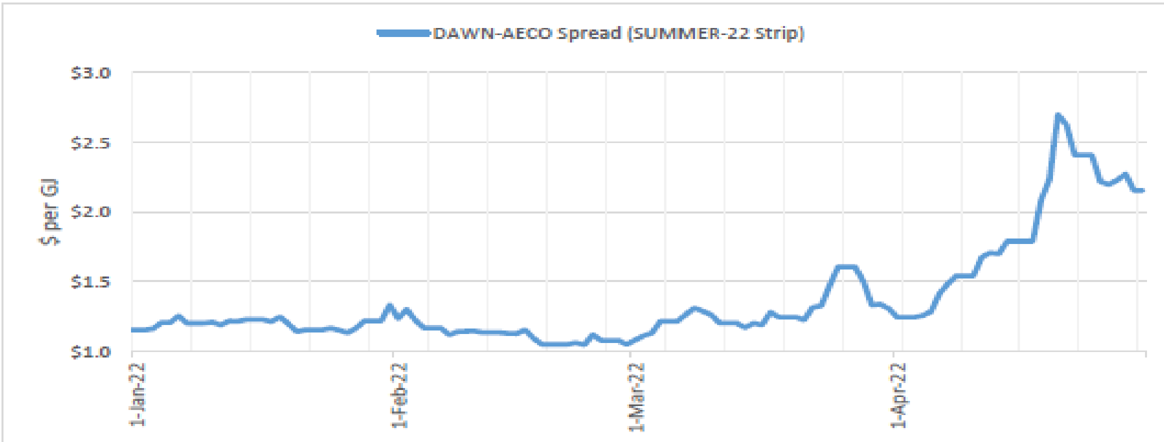
Figure 5 – Portfolio Commodity Rate compared against Dawn Market Prices



EPCOR noted that had prices spiked as in the winter polar vortex of 2013/2014, the gas supply strategy would have protected consumers from these spikes, which aligns with EPCOR's initial strategy in selecting Option C.

EPCOR noted that its gas procurement execution deviated from the GSP in the last three years due to the exclusion of AECO purchases. In Option C of the 2020-2022 GSP, AECO summer seasonal strips was planned for 50% of the expected summer demand (including storage injection). EPCOR has opted to fulfill summer strip purchases at Dawn fixed price instead due to the lower Dawn Prices at the time (Figure 6) as well as to avoid high volatility of AECO prices.

Figure 6 – Dawn AECO Spread for Summer 2022 (May 2022 to September 2022)



Question(s):

a) Please provide a comparison between Dawn Fixed Price and AECO prices?
   i. Please discuss the risk and opportunities when using each.
   ii. Please discuss the limitation of each (e.g., procurement volumes required to transact at AECO, etc.).

b. Please confirm whether "AECO 5+" is "AECO". If not, please describe the differences.

b) Please provide the percentage difference in price between Dawn and AECO (similar to Figure 6) keeping Dawn Fixed Price as a baseline.

c) What were the original reasons that AECO was proposed in Option C?
   i. Do those reasons continue to be valid? If not, why?

d) Based on Figure 5, ratepayers may have been better off using Dawn day ahead (including execution premium) when compared to the portfolio executed by EPCOR in 2023. Please confirm this.
   i. Please provide the differences in total commodity prices between the Portfolio commodity rate paid by EPCOR and the price EPCOR would have paid if it just used Dawn market prices. Please break down by years (i.e. 2021, 2022 and 2023 (January to present)).
   ii. Did EPCOR over-procure natural gas due to using fixed-price contracts during the 2020-2022 period?

e) Please clarify if EPCOR intended to state, "prompt month purchase <u>or</u> index price purchase" on page 29 of the 2023-2025 GSP.

Staff.7- Supply Option Analysis

Ref: 2023-2025 South Bruce GSP, Pg. 34-35

Between April and September of each year, supply would be procured to meet both monthly demand and maximize firm injection rights to fill contracted storage by September 30th. To fill the contracted storage requires 150 days to fill (100 days of 750 GJ/d plus 25 days of 500 GJ/d). EPCOR elects to start firm injections in May instead of April, as a colder than normal April can increase market prices, resulting in higher weighted average value of gas in storage.

Question(s):

a) Has EPCOR historically been able to meet the maximum daily injection rate during the summer months?
   i. If not, please explain why not?
b) 100 days of 750 GJ/d plus 25 days of 500 GJ/d is only 87,500 GJ. EPCOR has a 100,000 GJ maximum storage balance (MSB). Please clarify if EPCOR is able to fully utilize the MSB prior to entering into the winter season (i.e. after September).

Staff.8- Supply Option Analysis

Ref: 2023-2025 South Bruce GSP, Pg. 6

EPCOR emphasized the importance of flexibility. EPCOR also discussed that “Southern Bruce is still a relatively new operation with little historical data.”

Question(s):

a) Given that EPCOR stated that there is a need for flexibility in the supply plan “in cases when actual demand deviates from the forecasted demand profile,” why has EPCOR decided to pursue a hedged gas supply plan as opposed to a more flexible approach given the lack of historical usage data?
b) What is the rationale for EPCOR not pursuing purchases on the spot market to maximize flexibility?
c) On a best-efforts basis, please provide examples of how other energy utilities have implemented fixed-price hedging strategies in Canada and the USA. Please also explain how these examples are relevant to EPCOR.
d) Please compare and contrast the cost-associated risk of fixed vs spot purchases based on temperatures above and below historical average HDDs.

Staff.9- Supply Option Analysis

Ref: 2023-2025 South Bruce GSP, pp. 38-44

In all of the supply options, cost is identified as a potential risk. In Options 3 and 4, both cost and flexibility are identified as risks due the additional purchase of an annual fixed priced strip (April to March) at the lowest forecasted monthly consumption for the upcoming summer.

Question(s):

a) Given EPCOR's stated focus on reducing risks associated with cost and flexibility, how does EPCOR intend to deal with the loss of flexibility should customer demand turn out to be lower than anticipated?

Staff.10- Supply Option Analysis

Ref: 2023-2025 South Bruce GSP, Pg. 38-44
Enbridge 2024 Rebasing, EB-2022-0200, Transcript Technical Conference, Vol. 7, March 30, 2023, Pg. 74-76

OEB staff notes that all of the supply options provided in the 2023-2025 GSP include fixed price purchases as part of the procurement strategy.

OEB staff notes that Enbridge Gas advised that it does not purchase gas at fixed prices for terms greater than three months in advance of the transaction date in its 2024 rebasing proceeding[1]. Enbridge Gas noted that it stopped purchasing gas on a fixed price basis for periods longer than three months at the same time that it stopped its risk management activities as directed by the OEB in previous decisions.[2]

Question(s):

a) For each option, please provide the expected length of the term(s) of the fixed price contracts.
b) Assuming EPCOR expects to have fixed price contracts with terms greater than three months, please discuss why EPCOR believes it is appropriate to rely on longer term fixed price contracts relative to Enbridge Gas.

[1] EB-2022-0200
[2] EB-2006-0034 and EB-2007-0606/0615

Staff.11- Supply Option Analysis

Ref: 2023-2025 South Bruce GSP, Pg. 44

EPCOR provided Table 3 to summarize its evaluation of the various options.

Table 3 - Supply Options Evaluation Summary

Supply Options	Reliability	Flexibility	Diversity	Price Stability
Option 1: 50% Summer AECO 5A+ baseload 50% Winter Dawn fixed baseload	↑	↑	↑	↓
Option 2: 50% Summer and Winter Dawn fixed baseload	↑	↑	–	↓
Option 3: Annual Dawn fixed baseload 50% Summer AECO 5A+ baseload 50% Winter Dawn fixed baseload	↑	↑	↑	–
Option 4: Annual Dawn fixed baseload 50% Summer & Winter Dawn fixed baseload	↑	↑	–	↑

<u>Question(s):</u>

a) Please indicate what these options are being compared to in Table 3?
   i. Please set Option 1 as a baseline and do an analysis similar to Table 3 comparing all of the options to Option 1.
b) Please discuss the risk of having neutral diversity (i.e., Options 2 and 4).
c) EPCOR stated that Options 1, 3, and 4 "Maintain price diversity through setting of Fixed Basis in the summer." Please explain how Option 4 provides "Fixed Basis" price diversity given that all supplies are purchased at Dawn.
d) EPCOR stated in Sections 5.6 and 5.7 that Options 3 and 4 respectively provide "Less flexibility in managing risk of over-procurement in the summer (low risk)." However, Section 5.8 indicates that Options 3 and 4 provide good flexibility, consistent with Options 1 and 2. Please reconcile these statements.

Staff.12- Supply Option Analysis

Ref: 2023 -2025 South Bruce GSP, Pg. 48-49

Table 4 provides the impact of demand and price shocks for each supply option and reveals that Option 4 (the chosen supply option) minimizes pricing volatility with the lowest price in a high-price environment and the highest price in a low-price environment.

Question(s):

a) For each option, please provide the ratio of the price scenarios (i.e., price in high price environment divided by price in low price environment).
b) Pease explain why EPCOR did not select the option that has the lowest ratio from the question above to balance the potential for savings in a low-price environment with protection against high price periods.

Staff.13- Supply Option Analysis

Ref: 2023 -2025 South Bruce GSP, Pg. 65-66

Question(s):

a) Please provide the live Excel files used in each scenario analysis with all cell references and formulas intact.

Staff.14- Supply Option Analysis

Ref: 2023 -2025 South Bruce GSP, Pg. 65-66

Question(s):

For each Scenario Analysis (i.e., combination of Option and Scenario), please provide:

a) The total annual quantity of gas to be procured
b) The total length of fixed price contracts
c) The quantity of gas (GJ) and percentage of annual supply (%) to be procured under each procurement strategy:
    i. Annual Baseload at Dawn, based on the expected lowest month consumption for the planning year (April to March),
    ii. AECO fixed price contract up to 50% of summer demand (including storage injection requirements),

iii. Dawn fixed price contract up to 50% of summer demand (including storage injection requirements),
iv. Dawn fixed price contract at up to 50% of expected winter demand, and
v. Dawn month-to-month prompt fixed prices, day ahead index, or spot.

d) The price ($/GJ) of gas to be procured under each procurement strategy:

vi. Annual Baseload at Dawn, based on the expected lowest month consumption for the planning year (April to March),
vii. AECO fixed price contract up to 50% of summer demand (including storage injection requirements),
viii. Dawn fixed price contract up to 50% of summer demand (including storage injection requirements),
ix. Dawn fixed price contract at up to 50% of expected winter demand, and
x. Dawn month-to-month prompt fixed prices, day ahead index, or spot.