

# **EPCOR Natural Gas Limited Partnership**

# 2022 Annual Gas Supply Plan Update (2020-2022 Gas Supply Plan)

**South Bruce** 

EB-2022-0141

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1. Administrative Information

1.1. Introduction

On October 25, 2018, the Ontario Energy Board ("Board" or "OEB") issued its Report of

the Ontario Energy Board: Framework for the Assessment of Distributor Gas Supply Plans

("Framework") which set out a new requirement for all rate-regulated natural gas

distributors in the province of Ontario to file five year gas plans in January 2019. EPCOR

Natural Gas Limited Partnership ("ENGLP") filed the South Bruce Supply Plan for the

period 2019-2024 as part of the utility's cost of service application, in proceeding EB-2018-

0336. In that proceeding, the OEB approved the resulting cost consequences of the plan.

ENGLP filed an updated 3-year Gas Supply Plan for the South Bruce franchise area on

April 30, 2021. That Gas Supply Plan was updated to include the period 2021-2024.

ENGLP has developed the following update to the South Bruce Gas Supply Plan ("Supply

Plan") in accordance with the criteria and guiding principles of (i) cost-effectiveness, (ii)

reliability and security of supply and (iii) public policy, as defined in the Framework.

The guiding Principles for the Assessment of Gas Supply Plans are defined as follows:

i. Cost-effectiveness – The gas supply plan will be cost-effective. Cost-effectiveness

is achieved by appropriately balancing the principles and in executing the supply

plan in an economically efficient manner.

ii. Reliability and security of supply – The gas supply plan will ensure the reliable

and secure supply of gas. Reliability and security of supply is achieved by ensuring

gas supply to various receipt points to meet planned peak day and seasonal gas

delivery requirements.

iii. Public policy – The gas supply plan will be developed to ensure that it supports

and is aligned with public policy where appropriate.

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In addition to the Board's guiding principles above, key considerations in the Supply Plan are **flexibility** and a competitive price vis-à-vis alternative fuels. ENGLP South Bruce is a greenfield operation with limited historical data; therefore, supply planning continues to rely on estimated consumption profiles. As a result, there is a considerable focus on how the plan maintains flexibility in providing reliable supply customers economically in cases when actual demand deviates from the forecasted demand profile used for planning purposes. This must be balanced with the need to provide a burner tip rate which attracts new customers.

To satisfy the Framework requirements, ENGLP developed a demand forecast that reflects its expected annual load profile over the three year rate period starting June of 2020. The demand forecast was used as an input in determining the appropriate mix of gas supply purchases given contracted storage and transportation assets. In this Gas Supply Plan Update, actual consumption data will be reported for August 2020 (when the first customers connected to the South Bruce system) to March 2022, and the demand forecast is extended to the end of 2025.

Applying the Framework's guiding principles of cost-effectiveness and reliability and security of supply, any incremental local gas supply will be assessed against the landed costs of natural gas supply alternatives to ensure this supply will be competitive with any alternative supply source for ENGLP's rate payer. This approach ensures that cost-effectiveness is balanced against reliability and security of supply, which considers flexibility and diversity in commodity procurement. The Supply Plan reflects the notion that cost-effectiveness is not paramount to reliability, or vice versa, rather the two principles are assessed together and the final supply option is a balance of the two principles to ensure that customers receive reliable supply which optimizes the cost-reliability function.

The objective of the Supply Plan is to develop a right-sized portfolio of natural gas supply assets that ensures consumers receive a cost-effective, reliable and secure natural gas supply in a manner that is consistent with public policy. The portfolio is designed to strike a balance between these guiding principles, which are consistent with the Board's

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legislated mandate to protect the interest of consumers with respect to prices, reliability,

and the quality of gas service.

The Framework requires that, where appropriate, the Supply Plan supports and is aligned

with public policy objectives. This includes the Federal Carbon Pricing Program and

community expansion.

The Supply Plan is intended to provide strategic direction that will guide ENGLP's ongoing

decisions related to its natural gas portfolio such that the utility is able to meet Peak Day,

seasonal, and annual demand throughout the winter and summer periods for General

Service Customers in a cost-effective manner. The plan does not commit ENGLP

obligations to procure a set volume and/or source of natural gas, but rather provides a

roadmap that is sufficiently flexible, such that reliable and cost-effective natural gas

commodity and storage assets can still be procured in the event of changing or unexpected

demand, consumption patterns, weather, or market forces.

ENGLP is presenting the update to the 3-year plan, which includes:

Significant Changes to the Gas Supply Plan, describing the significant changes to

the plan from the previously submitted Update and the resulting customer impact,

An updated Gas Supply Plan Outlook, including updated data for the three-year

Outlook, and

A Three-Year Historical Review, which includes a historical comparison of 2020

actuals to the Outlook

## 1.2. Significant Changes

This section outlines changes to the 2021 3-year Gas Supply Plan Update (EB-2021-0146). They are discussed in each section below in detail. The following table summarizes the changes within each section:

Secti	on	Significant changes		
3.1.	Customer Connection Forecast	Changes to customer conversion forecast		
3.2.	Demand Forecast	Changes to demand forecast due to lower than forecasted customer conversion numbers, combined with lower than forecasted average annual residential consumption		
5.3.	Supply Option Update	Changes in procurement as a result of connection delays and lower than forecasted average annual residential consumption		

1.3. Process, Resources, Governance

There were have not been any significant changes to ENGLP South Bruce's processes or

governance since the previous year's filing. ENGLP continues to follow the procedural

document previously submitted in the 2021 Gas Supply Plan Update (EB-2021-0146) to

highlight and summarize key components of ENGLP South Bruce's gas supply

management procedures and processes. No changes to the procedural documents were

made for the 2022 Gas Supply Plan Update.

The Gas supply procurement strategies and processes developed for this Supply Plan

were executed by ENGLP and third party consultant ECNG Energy Group, ("ECNG"). The

annual review of the Plan considered the following:

· Review historical demand, and revise forecasted demand for the upcoming

planning period to review and revise forecasting procedures where needed;

Utilization of storage and transportation assets, and forecast utilization rates in the

planning period and identify if existing assets are sufficient to meet deliverability

requirements, and if additional storage or transportation assets are needed to meet

future needs;

Existing purchases and cost consequences of executed supply plans, and review

whether existing supply plans are cost effective, flexible, and reliable in meeting

demand;

Review processes and procedures related to procurement and management of gas

supply, and identify areas of improvement; and

Supply plan risk assessment, including supplier performance and credit review.

The primary goal of the review process is to identify if additional supply, storage and transportation assets are required to serve projected demand over the planning period,

assessed against the OEB guiding principles of cost-effectiveness, reliability and security

of supply, and public policy. Results of this annual review process are then applied to the

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supply plan for the upcoming period, and reported in this Gas Supply Plan Update. If

additional resource requirements are identified to serve the changes in gas demand, the

review will kick start the procurement process.

Supply plan execution decisions were made throughout the year to accommodate changes

in the South Bruce system. Examples of changes considered include connection counts

that deviate from the assumptions made in this Supply Plan and weather-related impacts.

To address these changes, actual and forecasted price, supply, demand, storage and

Load Balancing Agreement (LBA) imbalances for South Bruce are reviewed on a monthly

basis to determine any adjustments that need to be made in the implementation of the

Supply Plan. Improvement to the procurement processes were also flagged in these

meetings.

ENGLP and ECNG also met on a weekly basis to review changes in natural gas markets

and related drivers, along with any gas nomination operation issues or improvements that

may arise. Adjustments to the execution of the Supply Plan were discussed in these

meetings, and recommendations to these adjustments were then submitted by ECNG to

ENGLP for approval and implementation.

Lastly, ENGLP has developed operational guidelines and processes for supply planning

and procurements that align with organization-wide policies that manages financial risk

exposures, credit risk exposures, and contract execution authorities. These governance

pieces act as additional layers of assurance to ensure the supply planning and

procurement processes are executed in a cost-effective manner that limits risks to the rate

payers.

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2. Market Overview

2.1. Description of Gas Supply and Asset Options

Construction of the South Bruce expansion requires significant distribution and upstream

asset investment for security and balancing demand with supply. ENGLP required

upstream firm transportation (from Dawn) and balancing from Enbridge Gas Inc.

("Enbridge"), as it is the only service provider that can deliver such services. The EB-2019-

0183 proceeding resulted in Enbridge providing M17 firm transportation and balancing

services to ENGLP.

2.1.1. Supply Option

The options related to gas supply require availability at Dawn by suppliers or for ENGLP

to consider reaching beyond Dawn to either supply basins or other market hubs like

Chicago. At this time, the supply availability is abundant at Dawn as described in the

Market Outlook section below. The connectivity of the Dawn hub to the vast majority of

supply basins has resulted in a low basis (difference) between NYMEX Henry Hub -

benchmark price for the North American gas market at large - and Dawn (i.e Dawn is a

discount to NYMEX Henry Hub). Therefore, obtaining supply in supply basins or market

hubs beyond Dawn is not necessary to achieve supply reliability for its customers. Price

diversity is achieved by contracting options discussed in Section 0.

Three types of physical contracts at Dawn were considered for the Supply Plan: fixed price

term purchase, index price term purchase, monthly (spot) and daily "cash" 1 transactions.

Fixed price term purchases are physical delivery contracts where a fixed volume of gas is

procured for one or more months, and the price per GJ is constant throughout the term of

<sup>1</sup> "Cash" transactions are physical delivery contracts for gas for one to three days at a fixed price. Cash prices reflect market conditions closely at the time of transaction.

the contract. For this Supply Plan only fixed price forward period contracts with terms one year or less are contemplated.

Index price term purchases are physical delivery contracts where a fixed volume of gas is procured for one or more months. The price per GJ does change on a monthly or daily basis due to market conditions and how the index is made. The following four indices are considered for the Supply Plan:

- ICE NGX Union Dawn Day Ahead Index (DDAI) in \$CAD/GJ converted from \$US/MMBtu<sup>2</sup>;
- Gas Daily Dawn Daily Index in \$CAD/GJ converted from \$US/MMBtu;
- Canadian Gas Price Reporter (CGPR) AECO Daily Index 5A plus Fixed Basis<sup>3</sup> in CAD/GJ; and
- CGPR AECO Monthly Index 7A plus in CAD/GJ Fixed Basis.

For this Supply Plan, ENGLP has chosen to transact with ICE NGX Union Dawn Day Ahead Index and CGPR 5A.

NGX index DDAI is the preferred choice for the following reasons:

- All suppliers contracted with ENGLP use the NGX electronic trading platform which
  creates the index (ECNG's informal survey of other suppliers at Dawn also
  predominantly use this platform/index);
- The data is readily available through subscription by ENGLP; and

<sup>&</sup>lt;sup>2</sup> Foreign exchange rate are as specified in the contract terms (do we want to say this?). Conversion from MMBtu to GJ based on the SI standard of 1.055056 GJ per mmBtu

<sup>&</sup>lt;sup>3</sup> Fixed Basis is the fixed price transportation value between Alberta AECO and Dawn markets for the term of the contract at the time of transaction.

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• The trading data is deeper than Gas Daily (more transactions, more volume used

to arrive at the daily index market price).

CGPR 5A index is the preferred choice for the following reasons:

• While both 7A and 5A use the same popular NGX trading platform data as for Dawn

providing depth of transactions and volume, 5A provides more of the same daily

market price capture as that used in Dawn NGX day ahead index; and

• Over time there is little difference between the two prices (the 5A is an average of

all of the trading days as the month happens and the 7A is the average price of the

trading days in the month before.)

There were no changes considered for supply options for the past year, and no changes

considered for the period covered in this Supply Plan Update.

2.1.2. Transportation Options

Upstream transportation to Dornoch has been secured under the M17 rate for 10 years

(EB-2019-0183 proceeding). This is sufficient to access the Dawn hub for supply for the

first 10 years of its franchise development. Upstream transportation to Dawn follows the

same rationale as the Gas Supply Options section above. For the time horizon of this

Supply Plan, there is no cost advantage to contract additional upstream firm transportation

in order to secure supply versus buying at the Dawn hub from suppliers directly.

Investment in gas supply and associated upstream transportation are not required to serve

the franchise in this Supply Plan's time horizon as discussed in the Market Outlook section.

There were no changes considered for transportation options for the past year, and no

changes considered for the period covered in this Supply Plan Update.

2.1.3. Storage Options

As an outcome of the EB-2019-0183 proceeding, ENGLP was not offered cost-based

storage and related daily balancing for T3 or M9 services, which are available to other

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embedded served by Enbridge in Ontario. The option made available to ENGLP for daily balancing was a no-notice service at market price with +/- 12.5% deliverability on 25,000 GJ of space or the same LBA service offered by TCPL to Enbridge in the TCPL delivery areas WDA, NDA, NCDA, and EDA. Either service was paired with a ten year term 100,000 GJ of seasonal storage service space at market price. ENGLP selected the LBA daily balancing for two reasons. The first is that the service is a regulated service with oversight from the Canadian Energy Regulator (CER). The second is that by actively managing the daily delivery requirement coupled with fact that there are no demand charges associated with the service, it is possible to achieve similar operating flexibility at lower costs versus the alternative balancing option offered by Enbridge.

Regarding seasonal storage, ENGLP desired a storage offering at Dawn that included the ability to make multiple nominations daily either within firm contract parameters or for overrun quantities in attempts to reduce daily imbalances, having more options to balance besides buying and selling gas. There are no storage operators at Dawn other than Enbridge to provide this type of storage service. To acquire storage service in Michigan (the closest market for similar storage services) requires dealing with foreign exchange, import-export rules and additional transportation contracts on at least another pipeline to/from Dawn. Accessing storage and associated transportation to/from Michigan adds additional cost and the longer chain of nominations, which makes intra-day nominations more difficult especially for overrun in the winter. These additional items to manage were considered at this time not appropriate in exchange for the added storage service diversity as the franchise needs for storage are relatively small in the first 3 years of development.

There were no changes considered for storage options for the past year, and no changes considered for the period covered in this Supply Plan Update. The existing storage contract have sufficient capacity for the gas supply planning period and ENGLP will not need to contract for additional storage. Storage requirements will be reviewed this upcoming year and the findings will be reported in next year's Gas Supply Plan.

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2.1.4. Market-Based Commodity Solutions

From time to time, a scenario may arise where a unique, short term need can not be

resolved through a standard offer. The resolution of these issues often requires solicited

or unsolicited non-standard offers.

An example of such a scenario is a winter peaking service, which allows ENGLP to secure

additional availability of gas from a supplier for a reservation fee during the winter to

nominate additional gas in order to meet demand (at a discount up to the daily reserved

volume). In some cases, the cost of such a service can be more economical than holding

upstream capacity or purchasing additional deliverability from storage. A second example

is where ENGLP contracts for a storage service gas is purchased in the summer and

nominates it to a supplier at Dawn in return for a redelivery pattern in the late winter to

reduce the amount of day to day gas needed.

As the focus of this Supply Plan is based on serving a new and growing market with

significant transportation capacity and storage capacity available relative to current market

size expectations, the need for market based solutions is unlikely during the time horizon

of this plan and are not taken into consideration for gas supply planning at this time.

2.2. Market Outlook

As an element of the risk mitigation strategy, the following overview of current and future

trends is intended to inform ENGLP of any changes in natural gas market fundamentals

which have the potential to impact its ability to execute the Supply Plan. The North

American fundamental drivers for natural gas are demand, supply, storage and indirectly

crude oil and foreign exchange. ECNG provided the market trending analysis (see ).

3. Rate Zone Description

The South Bruce Distribution system is serviced from a single meter interconnect with

Enbridge at Dornoch. It comprises approximately 75 km of NPS 8 to 6-inch steel high

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pressure ("HP") pipe, 45 km of NPS 6-inch medium density polyethylene ("MDPE") pipe and 178 km of NPS 4 and 2 MDPE distribution piping (the "Project") in the Municipality of Arran-Elderslie, the Municipality of Kincardine and the Township of Huron-Kinloss (collectively, the "South Bruce Municipalities")

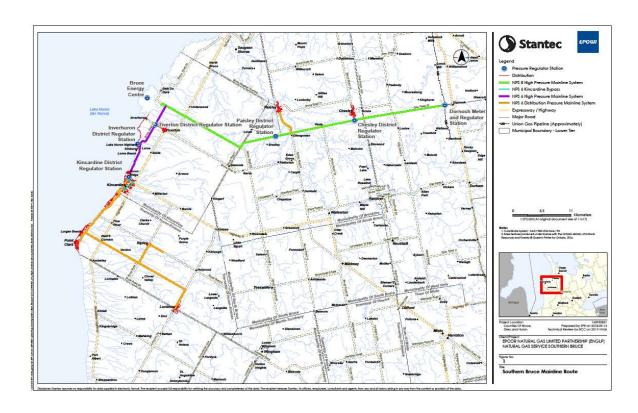


Figure 3-1 – South Bruce Distribution System Map

The utility will service two main classes of customers: General Service and Contract Customers. Contract Customers contract for their own natural gas supplies and storage assets to manage fluctuations in demand. As such, the consumption profile of Contract Customers is not included in the demand forecast and Supply Option Analysis.

In 2021, ENGLP added a third Contract Customer to the South Bruce distribution system. The additional contract customer makes up an additional 3.9% of the total M17 capacity bringing the capacity available to system gas customers to 58%.

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Direct Purchase, for other rate classes, is not taken into consideration in this Supply Plan

Update. Direct Purchase is currently not offered and has been deferred until July 31, 2023

as per the OEB Decision and Order dated September 1, 2020 in proceeding EB-2020-

0068.

General Service customers make up the rest of ENGLP's natural gas system, and are

comprised of residential, commercial, and agricultural customers.

Residential customers make up 67% of ENGLP's General Service demand profile, and

commercial customers make up 22%. Both customer segments have flat, non-weather

dependent demand requirements during the summer period (April to October), and heat-

sensitive demand during the winter period (November to March).

Seasonal agricultural customers, account for the remaining 11% of General Service

demand, are expected to use natural gas for production purposes, and as such, their

natural gas usage is expected to vary year-on-year depending on crop yield, making it

more challenging to forecast demand due to a lack of historical data.

3.1. Customer Connection Forecast

The forecast captures year-on-year demand growth as more customers connect to the

ENGLP distribution system. The 2020 Supply Plan assumed the annual increase in

consumption volumes were based on the level of customer attachments ENGLP

committed to during the Common Infrastructure Plan ("CIP") process. In June of 2019,

ENGLP entered into a design build agreement with AECON Utilities to perform the design,

engineering, procurement, construction, testing, purging, substantial completion and final

completion of the South Bruce Facilities. This included a revised customer connection

forecast which compressed the initial three year customer connection forecast into two

years (note that the connection forecast is essentially the same as those in the Common

Infrastructure Plan (CIP) process by the end of 2021). This revised customer forecast was

used for purposes of gas supply planning in the 2021 Gas Supply Plan Update.

Since the last update, ENGLP has observed a relatively consistent pace of gas-consuming customer additions on the South Bruce system. ENGLP also have received customer applications that is expected to drive the growth of system demand into 2024 and 2025. The observed pace of customer additions in 2021 also informs the adjustment to the customer connection forecast in this Gas Supply Plan Update. Table 3-2 shows the changes in customer connection forecasted in the previous two Gas Supply Plan and Update, actual connections in 2021, and the adjusted customer connection forecast underpinning the demand forecasts in 2022 Gas Supply Plan Update.

Table 3-2 – Customer connection forecast comparison by source

	2020 GSP			2021 GSP Update			2022 GSP Update					
Year	Rate1	Rate6	Rate11	Total	Rate1	Rate 6	Rate 11	Total	Rate1	Rate 6	Rate 11	Total
2020	2,249	34	2	2,285	179	-	1	180	179	-	1	180
2021	3,616	56	5	3,677	2,614	40	3	2,657	1847	7	1	1,858
2022	4,248	78	5	4,331	3,703	56	6	3,765	3,112	21	6	3,142
2023	4,795	87	5	4,887	4,792	71	6	4,869	4,792	34	7	4,939
2024					5,039	91	6	5,136	5,038	34	7	5,903
2025									5,094	34	7	5,903

In 2021, actual customer connections forecast continued to deviate significantly from the forecast presented in the 2021 Supply Plan Update, as the pace of customer conversion was slower than forecasted. This was primarily due to difficulty scheduling HVAC contractors for equipment inspection and conversion. The number of applications received in 2021 requesting service exceeded expectations set out in the CIP, which contributes to higher forecasted conversions in 2024 and 2025.

#### 3.2. Demand Forecast

To develop a natural gas supply portfolio, ENGLP first constructed a demand forecast that reflects its expected customer profile throughout the year over a three-year horizon from 2022 to 2025. This first step ensures that ENGLP procures an efficient volume of natural gas commodity and storage assets. As ENGLP is servicing a new area where the rate

base is expected to grow as customers switch from propane – the traditional heating fuel in the service area – to natural gas, the demand forecast must also sufficiently flexible to mitigate risks associated with a scenario where actual demand growth significantly

South Bruce customers are categorized into four rate classes:

General Firm Service Rate 1

deviates from the forecast.

- Large Volume General Firm Service Rate 6
- Large Volume Seasonal Service Rate 11, and
- Contracted Firm Service Rate 16

As Rate 16 contract customers procure their own supply and manages their own storage, the focus on the Demand forecast is Rates 1, 6 and 11.

The revised 3-year forecast customer conversion in this Supply Plan Update reflects the customer applications received in 2020 to 2021, updated as of March 25, 2022, as well as revised pace of daily customer conversions as discussed above. The demand forecast in this update deviates from the 2021 update due to two reasons:

- Availability of actual historical consumption data which indicates that 12-month consumption for gas-consuming residential customers is materially lower than what was assumed in the CIP.
- A decrease in the expected number of large commercial customers to be connected and consuming gas for the forecast period.

ENGLP will continue to review customer consumption patterns this gas year and expand on these findings further in next year's Gas Supply Plan filing.

For residential and commercial customers, the annual forecast was further adapted to monthly volumes by applying the monthly percentage of annual CIP-based usage from the OEB Calculator. For large agricultural customers and grain dryers, monthly breakdown

was determined through a consultative process, where the annual CIP-based usage was broken down to monthly profiles based on information received by customers on their existing energy needs. The actual and forecasted average day volume per month broken down by each customer type is shown in Figure 3-3.

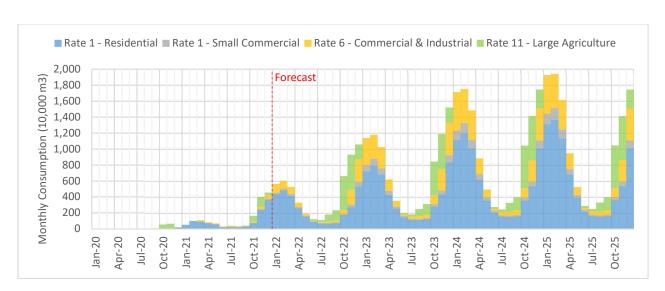


Figure 3-3 - Forecast Monthly General Service Demand, by Customer Type

#### 3.3. **Design Day Demand**

ENGLP's Contract Demand under the M17 is based on the expected capacity required to meet peak day conditions in ENGLP's Year-10 gas flow, which is 141,072 m³ per day (or 5,486 GJ per day) for General Service customers (an additional 86,827 m<sup>3</sup> per day (or 3,377 GJ per day) is currently reserved for Contract Customer that supplies their own gas and manages their own storage).

In December 2021, an additional Rate 16 Contract Customer was added South Bruce distribution system, and a further 8,997 m3/d, or 3.95%, of the overall M17 capacity is now reserved for Contract Customers.

The analysis for Design Day demand in this Supply Plan update deviates from the 2021 update in three ways:

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1) The outlook of January design day demand was revised to equal approximately 1%

of a customer's expected annual consumption. Grain dryers are excluded from this

analysis as their consumption is interruptible between December 16th to May 1st of

the following year. By 2025, January design day consumption from General Service

customers are expected to utilize 68.6% of the contract demand reserved for

General Service customers.

2) The consumption from the grain dryer currently connected on the South Bruce

system exceeded initial expectations, based on the daily consumption observed

during drying season in November 2021. The dryer single day peak consumption

was estimated to be around 16,500 m3, or approximately 11% of the contract

demand reserved for General Service customers.

3) The number of grain dryers expected to connect to the system have increased.

ENGLP has received service applications for six additional grain dryers, and are

expected to connect to the system and consume gas by 2025. Four of the grain

dryers have expected consumption patterns similar to the grain dryer currently

consuming gas. In total, ENGLP expects peak day consumptions for the seven

dryers to be approximately 68,000 m3, or 51.5% of the M17 capacity reserved for

General Service customers.

While design day peak for General Service customers is not expected to exceed the M17

capacity reserved for General Service customers in January, there is a risk that if each

dryers were to run on the same day during a cold day before December 15th, the General

Service daily consumption for that day could exceed the capacity allocated to this group

of customer.

Figure 2-4 below shows the expected January and December peak day demand in

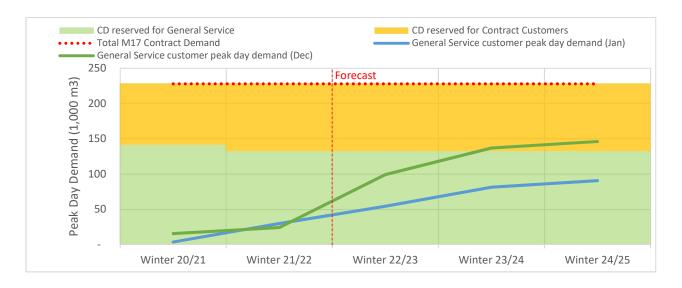
compared against the M17 contract demand, and the portion of that contract demand

apportioned to General Service customers. For general service customers that are not

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grain dryers, December "peak day" is modeled to be 0.72% of average annual consumption.

Figure 2-4 – January and December Forecast Peak Day Consumption vs M17 Contract Demand



Based on the peak January demand forecast shown in Figure 2-4, ENGLP is not expecting to make full use of the Contract Demand in the three-year planning horizon covered by this Supply Plan Update. By 2025, January peak day demand for General Service customers is expected to be approximately 68.6% of the contract demand reserved for General Service customers. However there is a risk by December 2023 that dryer consumption could push single day general service demand above the M17 capacity reserved for General Service customers. A number of dryers are expected to connect to the South Bruce system and consume gas this year, and ENGLP will continue to monitor consumption during the drying season. Furthermore, contracted storage assets with 1,200 GJs of firm withdrawal rights during the winter period, as well as the LBA agreement with allows for an additional +/- 2,111 GJs of daily imbalance between supply and consumption, are more than sufficient to address any concerns related to deliverability and reliability of supply during peak days within the planning period.

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Note that the risk of a General Service Customer peak day in December remains relatively

low. In order for this situation to occur, heating degree days prior to December 16<sup>th</sup> (i.e.

before ENGLP can interrupt grain dryer customer consumption under Rate 11) would need

to be high, and all grain dryers on the system would have to be running at full capacity on

the same gas day. Further, there is still some uncertainty regarding the timing of grain

dryers connecting to the system. Based on this low risk, it is not cost effective for ENGLP

to contract for capacity for relatively rare events. ENGLP will continue to observe daily

customer consumption to assess where additional capacity is needed and will contract

accordingly, and will provide the findings in next year's Gas Supply Plan.

ENGLP is participating in Enbridge's IRP working group as an observing member. As

discussions further develop on Enbridge's implementation of the IRP framework, ENGLP

will review how IRPs would impact future gas supply planning in the 2023 Gas Supply

Plan.

Similarly, ENGLP's DSM program is still in early stages of development. Once developed,

ENGLP will report on how ENGLP's DSM program will impact demand forecast and

associated gas supply plans in future GSP updates.

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4. Current Portfolio

4.1. Commodity Portfolio

For the period covered in this Supply Plan Update, ENGLP plans to continue to procure

all supplies at the Dawn hub for South Bruce as per ECNG's recommendation as part of

the market outlook analysis. South Bruce's system supply needs will continue to be a small

fraction of the Dawn market. For the period covered by this Supply Plan Update, South

Bruce's winter system gas demand is expected to represents a small portion of winter

demand relative to the Eastern Canadian market demand of approximately 4 Bcf/d.

The supply and demand dynamics at Dawn are not expected to change significantly

compared to the outlook from last year's Gas Supply Plan. While natural gas prices have

risen significantly across North America over the past 12 months, Dawn is expected to

continue to be a viable source of cost-effective and reliable source of supply for ENGLP's

base supply and balancing supplies. Dawn prices are expected to rise in proportion to the

North America benchmark price (NYMEX).

No changes were made to ENGLP's transportation portfolio, and none are planned for this

Update.

4.2. Transportation Portfolio

ENGLP's M17 contract with Enbridge is the only Transportation Asset relevant for South

Bruce during the period covered by this Supply Plan. ENGLP has contracted 8,996 GJ per

day of capacity to deliver gas from Dawn to the Dornoch Interconnect, which is sized to

meet peak day demand in Year 10 (2028). ENGLP expects the transportation capacity to

be sufficient to reliability meet gas demand to all South Bruce customers within the

planning horizon of this Supply Plan Update.

The M17 transportation contract includes a provision for daily balancing which is facilitated

by a separate Load Balancing Agreement (M17 LBA) contracted service, which is

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described in Section 4.4. ENGLP considers the M17 LBA another tool that can be used in

the Supply Plan to ensure reliability and cost-effectiveness of supply.

No changes were made to ENGLP's transportation portfolio, and no changes are planned

for this Update.

4.3. Storage Portfolio

ENGLP has contracted for storage from Enbridge as a key tool to manage price risk and

ensure supply reliability to customers by managing variances between supply and

demand. In order to avoid the situation occurring where large volumes of gas need to be

purchased from the cash market, ENGLP forecasts Baseload and month-to-month

purchase requirements in coordination with estimated storage withdrawal targets each

month, such that the maximum deliverability from storage could be maintained until the

beginning of March given a normalized weather scenario.

In May 2020, ENGLP entered into a 10-year contract with Enbridge for seasonal storage

service (LST) with a maximum storage balance (MSB) of 100,000 GJ (100 TJ), a standard

offering to its unregulated terms and conditions which includes no firm injections in October

and November, and no firm withdrawals in April and May. Daily firm injection deliverability

is 0.75% of MSB (750 GJ/d) when inventory is below 75% full, then the daily firm rights

drop down to 0.5% of MSB (500 GJ/d) when inventory is above 75%. Similarly, daily firm

withdrawal ability is 1.2% of MSB (1,200 GJ/d) when inventory is above 25%, then the

daily firm rights drop down to 0.8% of MSB (800GJ/d) when inventory drops below 25%.

When supply exceeds demand, ENGLP will store the excess supply in its contracted

storage account on a planned basis and in the M17 LBA on an unplanned basis.

Conversely, when demand exceeds supply, ENGLP will use this stored supply to service

the deficiency. Storage also enables ENGLP to procure gas at times of the year (typically

in the summer) when the price of gas is typically lower and/or less volatile. It should be

noted that seasonal storage is not allocated to Contract Customers.

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ENGLP has assessed that the 100,000 GJs of seasonal storage in combination with baseload and month to month firm supplies is sufficient to meet deliverability required within the planning horizon in this Supply Plan Update.

No changes were made to ENGLP's storage portfolio, and none are planned for this Update.

#### 4.4. Daily Balancing Management

The M17 transportation contract includes a provision for daily balancing which is facilitated by a separate M17 LBA contracted service. The M17 LBA enables ENGLP to manage daily mismatches between supply (confirmed nominations) and demand (measurement estimate) at the Dornoch Interconnection Point and eliminate the accumulated imbalance on the next earliest gas day to the best of its ability. ENGLP considers the M17 LBA another tool that will be used in the Supply Plan to ensure reliability and cost-effectiveness of supply.

Supply Option C, chosen in the 2020 Gas Supply Plan, assumes that on a daily planned basis when purchased gas exceeds consumed gas, the planned excess gas first maximizes the use of the firm injection rights. Excess gas remaining after confirmed storage injection is captured as an injection into the M17 LBA as a daily imbalance and is added to the cumulative imbalance. Demand in excess of planned purchased gas and maximum allowed amount withdrawn from storage is captured as a daily imbalance and a withdrawal from the M17 LBA cumulative imbalance. If in case storage injection and withdrawal rights are not sufficient in bringing the M17 LBA into balance, spot purchases and sales are then considered. Contract Customers, are apportioned a share of the M17 LBA and are responsible to manage their own supply-consumption imbalance.

Also available to the Supply Plan is the HUB service offered by Enbridge. While this payper-use service is interruptible, it can be useful during low interruption risk periods of the year. For HUB injections, the low risk periods are December through August. For HUB withdrawals the low risk periods are May through January. The HUB will likely be used on

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a short term basis only to pack and draft at minimal cost within a month or from one month to another, either in the middle of the summer or winter, to complement the use of the M17

LBA avoiding larger balancing costs during those short term periods.

The HUB service was not used this year, and will remain an option for ENGLP to manage

gas supply for South Bruce for the period covered in this Gas Supply Plan.

No changes were made to ENGLP's daily balancing management, and none are planned

for this Update.

4.5. Unutilized Capacity

4.5.1. Unutilized Transportation Capacity

During the period covered under this Supply Plan, ENGLP does not expect M17

transportation capacity to be fully utilized. As ENGLP does not currently have the ability to

assign its excess transportation capacity to another party (ENGLP is the only party that

will be taking the gas at the Dornoch Interconnect), ENGLP will have unutilized

transportation capacity for which costs will not be fully recovered from the in the planning

period. In ENGLP's 2019-2028 rate application (EB-2018-0264) ENGLP applied for and

was granted a Storage and Transportation Variance Account for Rates 1, 6 & 11 ("S&TVA

Rates 1, 6 & 11"). This account provides for ENGLP the ability to defer the recovery of the

additional capacity ENGLP was required to contract with Enbridge Gas/Union Gas initially

in order to provide service to its customer base in future years. Accordingly, this under

recovery will accrue in the S&TVA Rates 1, 6 & 11 account.

4.5.2. Unutilized Storage Capacity

In summer 2021, ENGLP procured gas at Dawn, with a mix of fixed price and spot

purchases, to fill storage to 99.92% full by the end of firm injection season.

In the 2021/22 Winter, General Customers consumed 113,088 GJs in the firm withdrawal

season (October 1, 2021 to March 31, 2022). Approximately 73.2% of the winter demand

was met by storage gas, with the rest of the winter demand met by market purchases at

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Dawn. As a result, approximately 16.5% of the storage gas was unutilized by the end of

firm withdrawal season on March 31st, 2022. Along with market purchases, storage gas is

continued to be withdrawal on an interruptible basis to meet General Service customer

demand in April.

As General Service demand continues to grow, ENGLP expects minimal unutilized storage

capacity in the upcoming winters covered by this Supply Plan Update. Given the current

forecast, storage gas is expected to meet 42.3% of system gas demand this upcoming

winter. The Supply Plan Update takes into account the full 100,000 GJs of contracted

storage capacity and will utilize storage to its fullest capacity to ensure deliverability and

supply cost stability.

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## 5. Updated Gas Supply Plan Outlook

#### 5.1. Design Day Analysis

As described in Sections 3.3 and 4.2, ENGLP has contracted sufficient transportation assets to service South Bruce within the planning horizon - the M17 Contract Demand reserved for General Service customers is approximately 45.8% higher than the forecasted January peak day in January 2025. While a portion of the transportation capacity from Dawn to Dornoch is reserved for the Rate 16 Contract Customers, ENGLP has included unauthorized over-run charges in its Rate 16 tariff to protect deliverability to its General Service customers during peak days. In addition, the M17 LBA agreement provides an additional safeguard to ensure availability of supply (additional gas can be drafted from the M17 LBA on peak days).

#### 5.2. Average Day Requirement

This section focuses on procurement options and strategies that ENGLP has contemplated and evaluated to meet South Bruce's expected average day demand for the planning horizon. The following operating assumptions apply for each Supply Option considered. These assumptions were accounted for in last year's Gas Supply Plan and have not changed in this Supply Plan Update:

1) Between May 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 30<sup>th</sup> (last day of firm injection right given ENGLP's storage contract). To fill the contracted storage requires 150 days to fill (100 days of 750 GJ/d plus 25 days of 500 GJ/d). ENGLP 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.

 October and November months have no firm injection rights, so month to month or spot gas are purchased to satisfy demand. Withdrawals from storage and the M17

LBA are available to be used to supplement supply as needed on days with higher

than expected demand.

3) Commencing December 1st, firm withdrawal rights from storage are fully utilized to

meet winter demand when baseload supply and month to month supply are

insufficient to meet daily demand. In order to maintain highest deliverability in

January and February, the plan assumes an average day withdrawal of 1,000 GJ/d

during those months and maintaining MSB just above the 25% level at March 1

each year. This maintains maximum deliverability from storage for January to March

in the event of a persistently cold January and February. If either colder weather or

customer connections do not materialize, month to month purchases will decrease

accordingly.

ENGLP worked with ECNG to build a customer commodity portfolio tracking model that

tracks and forecasts demand, supply and resulting storage positions (net of fuel

requirements). The inputs include anticipated future connections by rate class, ongoing

regression analysis for heat sensitive demand forecasting, near term weather forecasts to

estimate demand plus known supply acquired, planned supply base scenarios, and

resulting storage and LBA positions. The model is currently in use to forecast short term

demand (2-months forward view) and is updated and reviewed on a weekly basis, and

adjusted periodically as needed to improve model performance. The Gas Supply Planning

model that underpins the analysis of the Gas Supply Plan and subsequent updates is used

for planning purchases from a longer-term (seasonal) perspective.

5.3. Supply Option Update

As introduced in section 2.1.1, three supply options were considered and modeled for the

2020 Supply Plan to meet the guiding principles of cost-effectiveness and reliability and

security of supply. Additional consideration include flexibility and burner-tip price

competitiveness in order to address the start- up nature of the utility and to attract new

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customers. Option C - a mix of month to month index purchases and seasonal baseload

purchases priced at AECO and Dawn – was selected.

In the OEB Staff Report for the 2020 Gas Supply Plan submission (EB-2020-0106), OEB

Staff agreed that the chosen Option is a conservative option, performs better in response

to price fluctuations, provides higher price diversification during the summer months, and

the fixed price contract along with storage withdrawals is sufficient to meet winter demand

reducing the need for spot purchases when prices are higher<sup>4</sup>. In the same report, OEB

staff also agreed that purchasing 65% of the season's average consumption prior to start

of the season is a logical approach.

Due to delay in customer connections, slower than expected rate of conversion as well as

lower than expected annual consumption for the typical residential customers, the

following adjustments were required to manage system supply and demand, which

deviated from the 2020 Supply Plan:

1) Forecasted consumption continued to be lower than expected heading into the

winter months. With storage heading into winter at over 99% full, ENGLP made the

decision to mainly use storage gas to service system gas demand, with market

purchases contributing to approximately 21% of General Service demand between

November 1, 2021 and March 31, 2022.

2) Over summer 2021, General Service customers continued to record consumption

much lower than what was originally anticipated in the CIP, and it remained

challenging for ENGLP to evaluate whether assumptions for customers of different

rate classes and types used in the CIP process will accurately predict natural gas

consumptions over the summer. General Service consumptions in continue to

suggest that the CIP assumptions may be overestimating consumption. ENGLP

continues to monitor system gas demand on a daily basis, and is has determined

<sup>4</sup> OEB Staff Report to the Ontario Energy Board Consultation to Review Natural Gas Supply Plans (EB-2019-0106)

that a seasonal-term gas purchase this summer as planned in 2020 Gas Supply Plan continue to carry an elevated risk of over-procurement. ENGLP has decided to procure system supply this summer (May to September 2020) on either a month-to-month basis or as spot / cash purchases.

3) ENGLP's expectation of system gas consumptions this upcoming winter will continue to evolve as customer connections and conversions continue to grow. Since customer conversions will be driven by a number of external factors (such as HVAC contractor availability), system gas consumption estimates for the upcoming winter will be more accurate as winter approaches. ENGLP is still committed to procuring Dawn fixed priced term gas for the upcoming winter later this summer, and is continuing to assess conversion rates and market prices on a frequent basis before deciding on the procurement volume. As a conservative measure, ENGLP will procure 50% of the estimated system demand as fixed Dawn purchase, down from 65%.

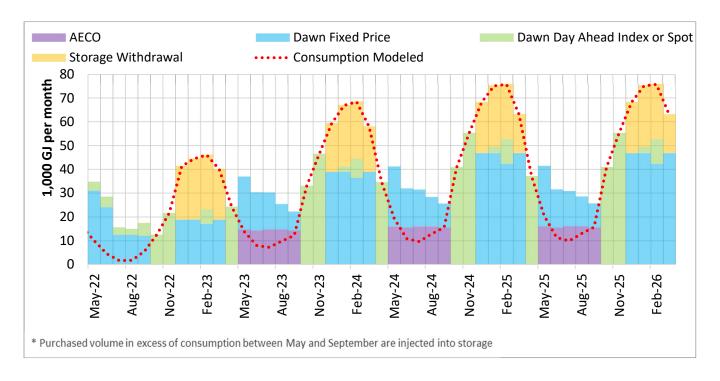
Another adjustment made to the 2020 Gas Supply Plan is for ENGLP to continue to focus on Dawn as the supply hub.

Finally, ENGLP is exploring forward purchases for summer 2023 in an effort to stabilize system gas commodity prices for General Service customers. Given the volatile prices this year in the North American natural gas market (see Appendix B), there fundamental drivers will likely continue to exert upward pressure on prices across all market hubs in North America, including the Dawn and AECO hubs relevant to South Bruce. As such, ENGLP is looking to procuring a portion of expected summer 2023 demand between May 2022 and March 2023 at Dawn fixed price, to be delivered in 2023. As shown in the Market Outlook, natural gas prices in Summer 2023 are currently priced much lower than gas for delivery this summer and upcoming winter. Since the QRAM price setting mechanism takes average market settlement prices in the future markets 12 months beyond the date of the filing, procuring a portion of expected demand in advance will allow ENGLP to lock in the a portion of the cost of future summer gas purchases, which will remain stable over the course of the upcoming number of filings. Note ENGLP will only go out for a portion

rather than all of the forecasted demand, which will allow for market prices to flow through still for a portion of the portfolio, as well as mitigate the risk of over procurement (for example, if demand is over forecasted for those future months).

**Error! Reference source not found.** below shows the procurement based on forecasted monthly consumption for the period covered in this Supply Plan Update.

Figure 5-1 – Supply Plan Update – Consumption vs. Delivery (GJ/Day)



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## 6. Gas Supply Plan Execution

ENGLP continues to works with ECNG to carry out the Supply Plan as per the Board's guiding principles of cost-effectiveness and reliability of supply while remaining flexible to changes in actual customer demand. ENGLP and ECNG maintain a number of internal controls throughout the execution phase of the supply plan to ensure adherence to the board's guiding principles, with a focus on mitigation of risks highlighted in last year's Gas Supply Plan. ENGLP submitted its Procurement Procedural documentation in the 2021 Gas Supply Plan Update. No changes were made to the document this past year.

There are no major changes to report since the last Supply Plan update, and no major changes are expected for the period covered in this Supply Plan Update.

#### 7. Historical Review

The following section provides a review of the 2020 planning years, comparing the Plan for each year to the actuals experienced.

### 7.1. Heating Degree Days

The purpose of this section is to provide a brief review of the 2020 planning years, comparing the forecasted HDD underlying each gas supply plan to the actual HDD experienced.

Table 7-1 - Actual vs Plan Annual HDDs

	Heating Degree Days (HDDs)				
	Planned Actual Variance				
2020/2021	3,831	3,741	90		
2021/2022	3,831	3,709	122		

- 2020/2021 HDDs were lower than planned due to warmer than expected temperatures
- 2021/2022 While HDDs were initially higher in January 2022, results were lower than planned due to warmer than expected temperatures in February and shoulder months

#### 7.2. Annual Demand

The purpose of this section is to provide a brief review of the 2020 planning years, comparing the demand forecast underlying each gas supply plan to the actual throughput volume. Actual volumes have not been normalized for weather variances.

Table 7-2 - Actual vs Plan Annual Demand

	Annual Demand (TJ)			
	Planned	Actual	Variance	
2020/2021	138	15	122	
2021/2022	272	120	152	

- 2020/2021 Delay in construction and slower than forecasted pace of conversion lead to lower than forecasted demand
- 2021/2022 South Bruce continued to see delay in HVAC conversion. In addition, actual per residential customer demand was also lower than what was modeled in the original CIP, which was the basis for the 2020 Gas Supply Plan and the 2021 Gas Supply Plan Update.

#### 7.3. Commodity Portfolio

The purpose of this section is to provide a brief review of the prior three years, comparing the supply forecast underlying each gas supply plan to the actual supply procured.

**Table 7-3 - Actual vs Plan Commodity Purchases** 

		Commodity Purchases (GJ)			
		Planned	Variance		
2020/2021	Dawn	138	102	36	
2020/2021	AECO	0	0	0	
2021/2022	Dawn	272	49	223	
2021/2022	AECO	0	0	0	

- 2020/2021 Delay in construction and slower than forecasted pace of conversion lead to lower than forecasted gas supply deliveries
- 2021/2022 in the previous gas year (ending March 31, 2021), a high volume of gas remained in storage as discussed in the last Gas Supply Plan update. Coupled with very low consumption in the summer of 2021, most of the gas procured over

the summer was to fill storage. Consumption in winter of 2021 / 2022 was also lower than anticipated, leading to most of the demand being met by storage withdrawal.

#### 7.4. Unutilized Transportation Capacity

The purpose of this section is to provide a brief review of the prior three years, comparing the Unutilized Transportation Capacity underlying each gas supply plan to the actual Unutilized Transportation Capacity incurred.

Table 7-4 - Actual vs Plan M17 Capacity

	Unutilized M17 Capacity (GJ)				
	Planned	Variance			
2020/2021	4,308	4,941	633		
2021/2022	3,874	4,021	147		

- 2020/2021 The actual Unutilized M17 Capacity incurred was 633 GJ lower than planned primarily due to delay in construction and slower than forecasted pace of conversion
- 2021/2022 The actual Unutilized M17 Capacity was 147 GJ lower than planned primarily due to slower than forecasted pace of conversion, as well as lower than anticipated average residential customer consumption

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## 8. Public Policy

### 8.1. Community Expansion

ENGLP has been actively working to bring secure, reliable and affordable natural gas to unserved communities. The South Bruce project represents one of the largest community expansion projects awarded to date. ENGLP will continue to work to expand access to natural gas service to communities who are not currently connected to a natural gas distribution, and pursuant to ENGLP's obligation to serve, to any customers or communities who request natural gas service.

In August of 2020, ENGLP submitted "The Brockton Expansion Project" to the OEB as part of the Ontario government's Phase 2 natural gas expansion program funding. The project intends to connect 500 customers in the Municipalities of Brockton, West Grey and the Township of Chatsworth. Natural gas would be supplied from the South Bruce system in order to reach these customers. ENGLP received conditional Certificate of Public Convenience and Necessity (CPCN) approval for this project in February 2022 (EB-2021-0269) and is planning on filing a Leave to Construct application later this year. The impact of the Brockton expansion on demand forecast and gas supply planning is expected to be detailed in next year's Gas Supply Plan.

### 8.2. Federal Carbon Pricing

As part of the Government of Canada's Federal Carbon Pricing Program ("FCPP"), a federal carbon pricing system has been implemented in Ontario, under the *Greenhouse Gas Pollution Pricing Act*, with the following features:

For larger industrial facilities, an output-based pricing system for emissions-intensive trade-exposed ("EITE") industries applied in January 2019. This will cover facilities emitting 50,000 tonnes of carbon dioxide equivalent ("CO2e") per year or more, with the ability for smaller EITE facilities that emit 10,000 tonnes of CO2e per year or more to voluntarily opt-in to the system; and,

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A charge applied on applicable fossil fuel deliveries, as set out in the Greenhouse Gas

Pollution Pricing Act, Part 1, effective April 1, 2019.

ENGLP continues to file annual applications for FCPP rates and recoverable costs,

effective April 1, most recently EB-2021-0268.

8.3. Demand Side Management (DSM)

ENGLP is in process of developing a DSM staged roll-out within its Aylmer and/or South

Bruce territories. In 2021 and 2022, ENGLP had a number of conversations with OEB

staff as well as a number of consultants to develop an initial program and to determine

feasibly and program effectiveness. The DSM program is now expected to be filed in 2023.

If proved to be successful, ENGLP would look to expand the DSM offerings into other rate

classes. ENGLP has been working with OEB staff to better understand the DSM

framework and budgetary expectations. Customer rate impacts and uptake will be key

drivers of the success of the pilot and future DSM program.

8.4. Renewable Natural Gas (RNG)

ENGLP understands and supports the development of an RNG market and facilitates

inclusion of RNG in its gas supply portfolio. ENGLP recognizes the importance of

Greenhouse Gas (GHG) abatement across the province, as well as the role that ENGLP

plays in supporting the achievement of GHG emission reduction targets.

At this time, ENGLP does not hold any RNG supply in its Supply Plan. ENGLP will update

the Supply Plan as strategies of a RNG solution are developed and finalized in the South

Bruce service territory.

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## 9. Performance Measurement

ENGLP has drafted a performance metric scorecard in order to measure the effectiveness of the Supply Plan. Please see

for details.

The continuous improvement to the supply planning process undertaken by ENGLP is an important element of the transparency objective of the Framework. ENGLP continues to proactively evaluate new supply and transportation options in accordance with the Framework's guiding principles.

ENGLP will also continue to proactively identify new opportunities to meet its gas supply obligations while meeting the Framework assessment criteria. ENGLP will also continue to review and improve the information it receives for market outlook and forecasting purposes.

ENGLP commenced service to customers in its South Bruce customer area in late 2020. There may be opportunities to combine gas supply plans for both the Aylmer and South Bruce areas but ENGLP believes that at this time, this opportunity is beyond the scope of this gas supply planning period.

As discussed in the OEB Staff Report to the Ontario Energy Board - Review of 2021 Annual Update to EPCOR Natural Gas Limited Partnership Natural Gas Supply Plan (EB-2021-0146), performance metrics and targets for RNG and DSM are not established as part of a gas supply annual update.

## **10.Link to Other Applications**

Related Application	How the Gas Supply Plan (Plan) informs the related applications	How the related application informs the Plan	Rate implications
Quarterly Rate Adjustment Mechanism	Will result in ongoing changes to the pass-through gas supply cost which are generally recovered through QRAM applications	QRAM applications include data and information which will help to inform Annual Updates and the next five year Plan	Mechanism through which most commodity and gas supply costs are passed through to customers in rates
Cost of service application for the rate stability period (2019-2028) (EB-2018-0264)	May inform mid- term updates and evidence when seeking specific deferral and variance account clearances, and service offerings, e.g. direct purchase option	The approved cost of service application set the assumptions underpinning the system configuration, customer connections, and volume forecast for the 2020 update to the Plan.	Rate schedules across rate classes defined by this filing, which include some limited gas supply charges and terms and conditions for rates.
Annual Rate Applications	Limited impact until end of rate stability term. On incentive rates formula until end of 2028 calendar year.	Not expected to influence the plan	Some gas Supply cost charges are updated pursuant to the incentive rates adjustment formula, and costs passed through to customers through Annual rate applications.
Leave to Construct Applications	The Plan provides the foundation for related Leave to Construct applications. Helps to align execution of these LTCs in accordance with the OEB's guiding	New gas supply options, if any, resulting from new LTCs to be reflected by the Annual Update and the next iteration of the five year plan.	Any resulting changes to gas supply costs will be reflected in QRAM and/or Annual Rate applications.

	principles in the EB-2017-0129 Framework.		
Potential Projects to Expand Access to Natural Gas Distribution re: 2019 Minister's Directive	Projects are evaluated within the context of the framework set by the Board. Plan informs only the cost of gas supply generally speaking for bill impact and conversion analysis for bids.	Annual updates to the Plan to reflect new customer additions and any new incremental supply from existing supply points, as well as any diversity and flexibility provided by new potential points of supply and new/other suppliers as applicable.	By nature, any projects connected would be with funding which brings the P.I. to 1.0, therefore no material changes to rates, and harmonized into the existing service area and rates.
Long-Term Contract Applications	The Plan does not give rise to Long-Term Contracts, and therefore Long-Term Contract Applications are not foreseen.	ENGLP has no plans to enter into Long- Term Contracts as part of the Plan. There are limited fixed-price contracts for periods less than 12 months.	Material changes to gas supply costs resulting from Long-Term Contract applications will be reflected in QRAM and/or Annual Rate applications.

## **Appendix A - Key Terms**

**AECO 5A Index:** Popular index pricing instrument for the Alberta AECO Hub.

Arithmetic average of daily prices, which are weighted average settlement prices for same-day delivery at AB-NIT.

Tracks Alberta market prices closely.

**Balancing Gas:** The volume of gas purchased for the purpose of clearing the

Cumulative or Daily Operating Imbalance.

**Baseload Gas:** The amount of natural gas delivered or contracted over a

given period of time at a steady rate or price structure.

**Contract** The maximum volume or quantity of gas that ENGLP is obligated to deliver in any one day to a customer under all

services or, if the context so requires, a particular service at

the consumption point.

**Contract Demand** 

("CD"):

Means the maximum volume or quantity of Gas that Union is obligated to deliver in any one Day to ENGLP under all

Services or, if the context so requires, a particular Service at

the Consumption Point.

**Contract Year:** Means a period of twelve consecutive Months beginning on

the Day of First Delivery and each anniversary date

thereafter unless mutually agreed otherwise.

**Dawn:** Located southeast of Sarnia, Ontario, Dawn is referred to as

a Hub as it represents the point where Enbridge supply, storage and transmission systems meet. A number of other pipeline systems (e.g. TCPL, Vector) are interconnected to

Enbridge Gas' distribution system at Dawn.

Dawn Day Ahead

Index:

Popular index pricing instrument for the Ontario Dawn hub.

Arithmetic average of daily prices, which are weighted average settlement prices for next-day delivery at Dawn.

Tracks Ontario market prices closely.

Federal Carbon

**Pricing Program** 

A Federal carbon pricing system implemented in Ontario, under

the federal Greenhouse Gas Pollution Pricing Act.

**Gas Day:** A period of 24 consecutive hours, beginning at 10:00 am ET.

The reference date for any day shall be the calendar date upon which the twenty-four (24) hour period commences.

**Gas Year:** A period of twelve (12) consecutive months usually beginning

on November 1st and continuing until October 31st of the

following year.

Heating Degree Days (HDD):

The number of degrees that a day's average temperature is below 18°C, which is the temperature below which buildings

need to be heated.

**Planning Year:** A period of twelve (12) consecutive months usually beginning

on April 1<sup>st</sup> and continuing until March 31<sup>st</sup> of the following year.

Rate 1 – General Firm Service Rate:

Any customer in ENGLP's South Bruce Natural Gas System who is an end user and whose total gas requirements are equal to or less than 10,000 m3 per year.

Rate 6 – Large Volume General Firm Service Rate: Any customer in ENGLP's South Bruce Natural Gas System who is an end user and whose total gas requirements are greater than 10,000 m3 per year.

Rate 11 – Large Volume Seasonal Service: Any customer connected directly to ENGLP's South Bruce Natural Gas High Pressure Steel System and who enters into a contract with ENGLP for firm contract daily demand of at least 2,739m3.

Rate 16 – Contract Firm Service Rate:

Any customer connected directly to ENGLP's South Bruce Natural Gas High Pressure Steel System and who enters into a contract with ENGLP for firm contract daily demand of at least 2,739m3.

**WACOG:** Weighted Average Cost of Gas.

Western Canadian Sedimentary Basin (WCSB): The Western Canadian Sedimentary Basin (WCSB) is a vast sedimentary basin underlying 1,400,000 square kilometres (540,000 sq mi) of Western Canada including south-western Manitoba, southern Saskatchewan, Alberta, north-eastern British Columbia and the southwest corner of the Northwest Territories. It consists of a massive wedge of sedimentary rock extending from the Rocky Mountains in the west to the Canadian Shield in the east. This wedge is about 6 kilometres (3.7 mi) thick under the Rocky Mountains, but thins to zero at its eastern margins.

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## **Appendix B - Market Trends Analysis**

## **Current and Future Market Trends Analysis Provided by ECNG**

As an element of the risk mitigation strategy, the following overview of current and future trends is intended to inform EPCOR of any changes in natural gas market fundamentals which have the potential to impact its ability to execute the Supply Plan. The North American fundamental drivers for natural gas are demand, supply, storage and in a more limited/indirect way crude oil and underlying currency foreign exchange. "Near-term" is within the next 12 months, "Mid-term" is 1-2 years after Near-term, "Long-term" is 3-5 years after Mid-term.

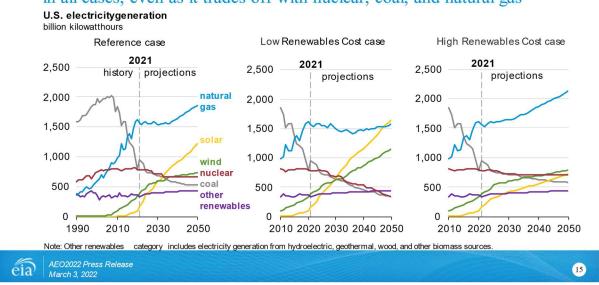
Unique to this outlook is the unexpected war in Ukraine which has led to unprecedented global free-world unification regarding economic sanctions against the Russian economy and oligarchs. This in turn has led to a plan to phase out European imports of Russian oil, natural gas, coal and steel and resulting surge in prices of these and related commodities alternatively sourced around the globe.

#### Demand: Impact on pricing – Near-term Bullish, Mid and Long-term Bullish

The 2021/2022 Winter weather overall, across most of North America (N.A.) resulted in average to more than average demand in the residential, commercial (R&C) and industrial sectors. Mid-term and Long-term gas demand growth is largely expected by most forecasters in the United States (U.S.) in industrial and gas fired power generation demand sectors. At the time of this writing, near term N.A gas pricing is approximately \$4 US/MMBtu higher than last year. Coal-fired power generation retirements continue in favour of gas-fired generation. Also, gas fired generation will likely continue running more baseload hours not only due to attrition of the coal fired fleet but due to the surge in coal pricing making it higher priced than gas as coal supply is pulled to Europe. This is offset by the increase in solar generation expected to be added of 20 Gigawatts (GW) and 24 GW in 2022 and 2023 respectively forecasted by the U.S. Energy Information Administration's (EIA) Short Term Energy Outlook 2022 (April 2022). In December 2021 the International Energy Agency (IEA) forecasted 200 GW of renewable additions by 2026 (split 150 GW solar and 50 GW wind). Not accounting for load growth this could cut the power sector burn by over the next 5 years which is approximately 8% of current U.S. domestic demand.

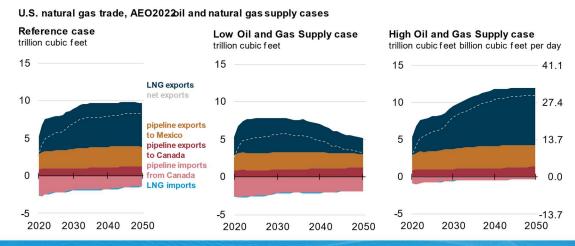
The EIA in its latest Annual Energy Outlook (AEO2022) cites an expectation of generally unchanged consumption of natural gas for power generation to the end of 2030 with coal fired generation dropping at the expense of renewables.



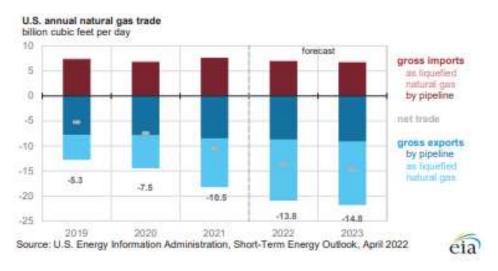


The single largest increase in demand is in exports of liquified natural gas (LNG) in the next 5 years. All the scenarios in the graphic below identify that by 2025 approximately 7,500 Tcf/yr (20.5 Bcf/d on average) is expected. This is an increase of nearly 10 Bcf/d from 2021 average of 10.7 Bcf/d.

# Natural gas and liquefied natural gas (LNG) trade reaches 8 trillion cubic feet in the Reference case



eia AEO2022 Press Release March 3, 2022 U.S. LNG exports including fuel gas for refrigeration are now operating at capacity between 13 and 14 Bcf/day in early in Q2 2022 (except for planned maintenance or unexpected outages). EIA estimates on average 14.8 Bcf/d will be exported in 2023 which is realistic if high load factors can be maintained. This will continue to be the most significant contributor to a tight supply-demand balance in N.A.



U.S. natural gas R&C sector consumption in 2021 rebounded from a pandemic influenced lower demand in the sector (weather normalized) the previous year showing increasing demand closer to pre-pandemic levels. Industrial demand however appears to have grown by 1-2 Bcf/d from pre- pandemic levels.

Expectations for exports to Mexico during this outlook's horizon could see average exports to Mexico well exceed 7 Bcf/d from the current flows of 5-6 Bcf/d. This increased demand is mostly for LNG liquefaction for Pacific side exports which shorten LNG routes to Asia and lower transport costs by approximately \$2 US/MMBtu. Costa Azul is likely the first Mexican LNG export project supplied via with TC Energy receiving FERC approval of its North Baja Xpress Project in Arizona accessing the Permian supply basin (Texas and Oklahoma). There are another 3 LNG export projects that have not yet reached FID (Final Investment Decision) which will require supply via U.S. pipeline also likely from the Permian basin which would increase U.S. exports to Mexico post 2024.

The U.S. demand outlook for 2023 and beyond is for modest growth in domestic demand from R&C, industrial and gas fired power generation sectors and those sectors combined growth is not nearly as significant as LNG exports (including exports to Mexico).

## Supply: Impact on pricing – Near-term Bullish (NYMEX) and Bullish (AECO); Mid and Long-term Mildly Bullish (NYMEX) and Neutral (AECO)

While year over year U.S. dry gas production (supply) growth has been impressive in 2018 and 2019, 2020 was setback mostly due to the pandemic - uncertainty in demand led to prompt month's price softening which then led to reduced investment by producers. Since then, consistent reporting of U.S. producer sentiment regarding supply growth has been of disciplined sustainable expansion due to more focus related

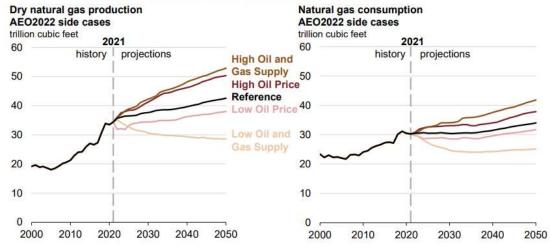
to producer financial health, shareholder dividends and growth in stock price. This has also been met with labour shortages, higher labour and raw material costs and a global shortage of drilling rigs as the free world searches for alternative fossil fuel production to replace Russian supplies. Although production to date in 2022 appears to be nearly 3 Bcf/d higher YoY this is not enough to meet the growth of LNG exports confidently expected in 2022 and early 2023. (Table below data from S&P Global Platts)

UNITED STATES					-								2022	
Supply & Demand	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	Y/Y
Dry Production	50.5	55.7	58.9	60.7	64.8	68.5	67.7	70.3	80.5	88.5	87.5	89.1	92.7	4%
Canadian Imports	6.5	5.6	5.1	5.0	5.1	5.3	5.7	5.4	5.3	4.6	4.3	5.1	5.8	
LNG Imports	1.1	0.7	0.5	0.3	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	
Total Supply	58.1	62.0	64.5	66.0	70.0	74.0	73.7	75.9	86.0	93.3	92.0	94.4	98.8	
Power Burn	20.3	20.9	24.7	22.6	22.6	26.4	27.1	25.5	29.0	30.9	31.8	31.0	27.4	
Industrial	18.9	19.2	19.7	20.3	20.9	20.6	21.2	21.8	22.8	23.0	22.4	22.5	24.6	
Res/Comm	23.7	23.2	21.7	25.4	26.5	24.4	23.2	23.6	26.9	27.3	24.7	24.6	40.4	
Mexican Exports	8.0	1.3	1.7	1.8	2.0	2.9	3.7	4.3	4.6	5.1	5.4	6.0	5.7	
LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.2	3.4	5.7	7.3	10.7	12.5	17%
Pipe Loss	1.8	1.8	1.9	1.9	2.0	2.0	2.0	2.0	2.3	2.3	2.3	2.2	2.6	
Total Demand	65.5	66.4	69.7	72.0	74.0	76.3	77.8	79.4	89.0	94.3	93.9	97.0	113.2	
Updated March 29, 2022 All	figures in BCF	per day		Strong Growth			Flat Growth				Significant Item			
	Note: 2022 is only Year to date so some numbers are not relevent.								ent.					

The EIA's High Oil and Gas Supply is forecasting for 2023 37.0 Tcf (101 Bcf/d) vs 34.4 TCF (94.0 Bcf/d) 2021 actual for an increase in 7 Bcf/d. At this point in time that appears optimistic return to grow 2021 supply levels by that much, even in the reality of high pricing driven by high overall demand growth. The EIA also expects supply to be able to satisfy growing demand at current prices.



### U.S. natural gas production and consumption



eia

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)

www.eia.gov/aeo

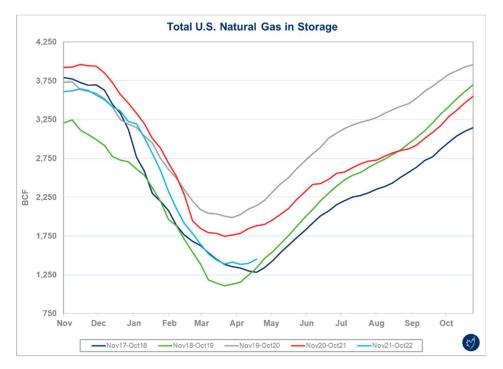


The Western Canadian Sedimentary Basin (WCSB) production has grown substantially in response to the confluence of higher AECO pricing, higher oil sands and Alberta power generation demand (continued phase out of coal fired generation) and increased access to domestic and export markets through significant NGTL (Nova Gas Transmission Limited) expansion nearing full completion. The NGTL expansion Drilling activity is robust in Alberta resulting in growth of supply exceeding 17.5 Bcf/d in April 2022. Unfortunately, British Columbia production has not grown to the same extent due entirely to lack of new BC licenses being issued since July 2021. A new resolution framework for resource development is required between the BC provincial government and the Blueberry River First Nation before any new licenses can be issued. On June 29, 2021 a historic BC's Supreme Court ruling determined the Treaty 8 rights of the Blueberry River First Nations had been breached by development authorized by the BC government over many years. The BC government has decided not to appeal the decision, has begun negotiations and an initial agreement has been reached for existing permit holders to manage current business. We are optimistic that a final settlement will be reached in 2022 such that growth in BC supply will begin growing again.

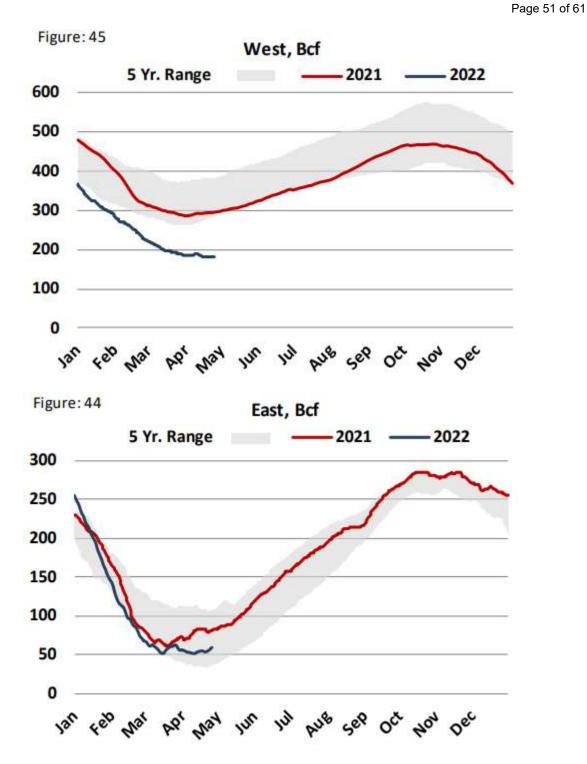
At current elevated forward NYMEX prices relative to last year, the supply response in the WCSB will be quicker on a percentage basis compared to the U.S. however there will not be enough to materially increase exports and meet growing regional demand. This sentiment is driving the bullish sentiment in the short run. Mid and Long-term there is little disagreement that there are ample N.A. reserves to meet the demand forecasts.

Storage: Impact on pricing – Near term mildly Bullish (NYMEX and Dawn), Very Bullish (AECO); Mid and Longer-term No Impact on price

Total U.S. working inventories on March 31, 2022 fell below the five-year average of 1.67 Tcf by 284 Bcf (deficit). Most industry forecasters see end of the 2022 injection season ending significantly less than 2021's value of nearly 3.65 Tcf mostly as a result of increased LNG exports and slow to arrive supply growth. The likely outcome has storage filling approximately 150 Bcf less than last year or about 1 Bcf/d less supply available in the upcoming winter. This may also lead to an inventory level at the end of the upcoming winter season significantly less than the 5 year average and possibly reaching a new 5 year low. (Data for graph below is from the EIA.)



In Canada, storage at winter's end in Alberta (essentially the "West" graph below) is much below last year's 5 year low, whereas storage at Dawn (essentially the "East" graph below) is between the 5 year low and average.



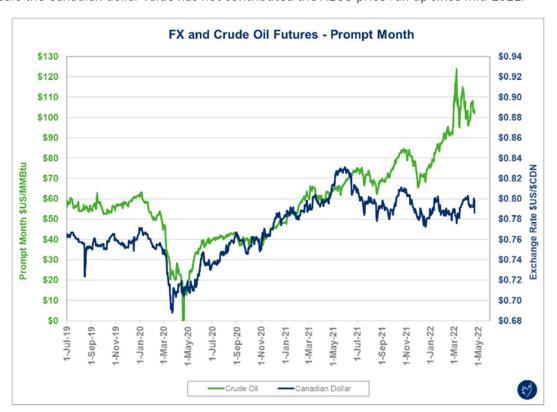
Storage graphs from RBN Energy LLC 2021 at April 26, 2022.

All these current storage balances lead to a more bullish sentiment on gas pricing year over year as it either increases summer demand (U.S. and Eastern Canadian) or maintains demand (Western Canadian) to refill.

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## Crude Oil and Foreign Exchange: Impact on NYMEX and Dawn pricing – Near-term Mildly Bearish, Longer-term Neutral; Impact on AECO pricing Neutral Near and Longer-term

World oil pricing in early 2022 has remained well supported over \$90 USD/barrel price with the war in Ukraine leading to a world shortage of non-Russian supply to meet world demand. The U.S. planned release of a significant amount of its Strategic Petroleum Reserve (1 MMBbl/d April-September 2022) and a COVID new wave in China suppressing its demand has helped to dampen crude prices in the short run. It is difficult to forecast the end and outcome of the Ukraine war especially regarding world use of Russian oil over the next few years. However, this current event has increased the world's pace to bring on more renewable energy sources and to reduce the use of fossil fuels, mostly coal and oil. Increased U.S. supply of oil especially from the Permian basin results in associated natural gas supply which is predominantly the reason for our bearish sentiment in this category. A persistent high oil price and/or incentive to move to more renewable power generation has a bearish effect on gas fired power generation demand as well. Historically with higher oil pricing the Canadian buyer should enjoy a stronger dollar which will offset the higher price of NYMEX priced gas (which mostly drives Dawn pricing) however, since 2022 start, the correlation appears to have de-linked likely due to the increased planned Canadian government expenditures and/or uncertainty related to the Ukrainian war support from North America. The next two graphs show the relationship of crude oil pricing and the U.S./Canadian foreign exchange (FX) and FX on the price of gas in the WCSB (AECO). It appears the Canadian dollar value has not contributed the AECO price run up since mid-2021.



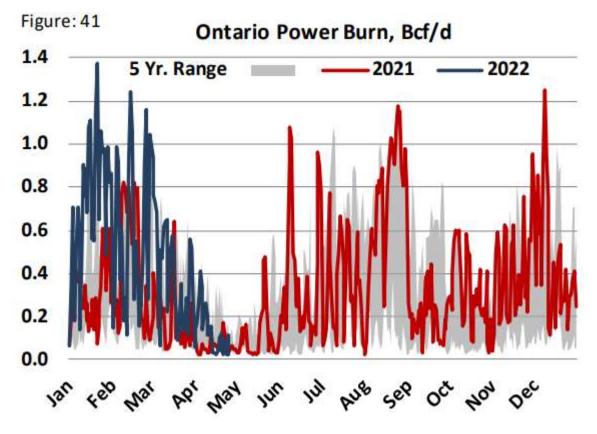


#### Dawn Market Hub Discussion

Natural gas primarily flows into the Dawn Hub ("Dawn") from the WCSB and from the U.S. Marcellus and Utica shale plays in the Appalachian region as well as from the Chicago Citygate (a market Hub with excess supply from WCSB and other U.S. supply regions). There are no new projects expected in the Dawn connected infrastructure over the planning period that will shift the fundamental supply and demand dynamics to a degree that will impact the viability of the Supply Plan. With its multiple pipeline connections to the largest supply basins in N.A. providing supply reliability and access the Dawn market can be vulnerable to pipeline contracting, renewals and long-term toll negotiations between pipelines and its shippers (suppliers, distribution utilities, marketers and large industrial buyers). Within the next 5 years, some long-term contracts will expire or may be reopened and may not be renewed under the same terms. This change in contracting can change the flow dynamics into and out of Dawn which will influence the price of gas there. Despite these potential undercurrents, the Gas Supply Plan is expected to be able to deliver on the guiding principles of cost-effectiveness, reliability and security of supply.

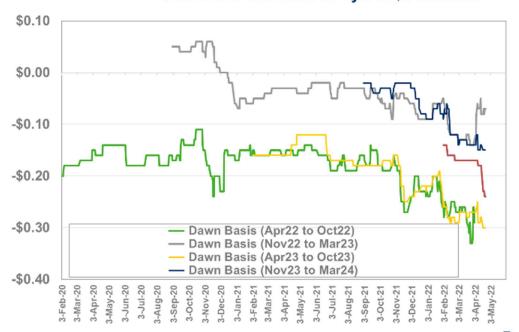
Nearer term Dawn basis forward pricing are showing trends that are a larger discount to NYMEX of late as seen in the basis graph below. This is despite a higher Ontario gas fired power generation demand seen last summer as nuclear refurbishments continue in Ontario coupled with higher YoY overall power demand. Further forward curves are trading at a lesser discount in winters and summers starting November 2026 likely due to slow demand growth and or risk of long term pipeline contracts not being fully renewed.

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Ontario Power Burn from RBN Energy LLC 2021 at April 26, 2022.

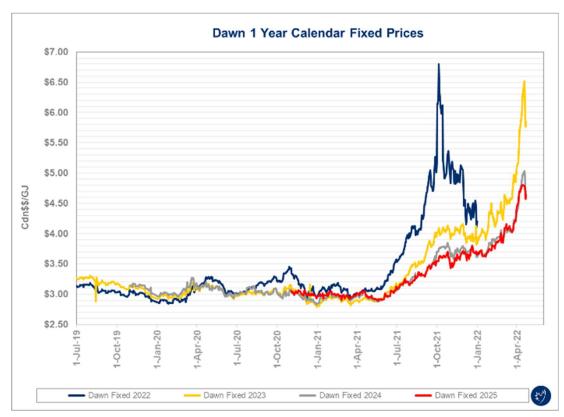
#### Seasonal Dawn Basis to Nymex \$US/MMBtu



The current Dawn basis market looks like good value however based on lack of interest in purchasing forward basis which is in USD, there is no purchase opportunity (based on this index). However, there appears to be upside price risk in the Dawn market either from demand growth, no new supply, or the risk of supply (transport) non-renewals.

#### Near-term Summary – Bullish (NYMEX and Dawn), Bullish (AECO)

In summary, in N.A. strong and growing LNG exports, increased gas fired power generation demand, low inventories at winter's end, with only marginal increase in supplies relative to 2021 make for a continued tightly supplied market moving forward for the next few years. As a result, NYMEX and Dawn price outlooks in the short term are at likely to remain at elevated levels until supply growth is proven and sustained. The forward Dawn price for 2022 has much high volatility risk to the forward prices seen in 2021 price shown in the graph below. AECO pricing is expected to stay strong and move with or go narrower to NYMEX with a higher demands year over year from oil sands, local power generation, expected U.S. exports and regional storage deficits supporting its pricing. Current forward pricing history is found below.





#### Mid to Long-term Summary – Mildly Bullish (NYMEX and Dawn), Mildly Bullish (AECO)

In the U.S. the expectation of continued strong LNG exports, continuing economic growth, continued fuel of choice in power generation and a return to shale gas supply growth (including supply from oil production) we expect pricing to move modestly upward. The current forward landed cost of gas at Dawn exceeds \$4.50 CAD/GJ for calendar years 2024-2027. This is good value as the cost of raw materials, labour and global energy prices are likely to persist and support this price over the next year. Also supporting this view and not mentioned previous is the potential for existing pipeline capacity in N.A. to be closer to capacity in moving supply basin gas to markets. Greenfield pipelines are exceedingly difficult to be built due to environmental opposition and the likelihood that 30 – 40 year amortizations will not be accepted by regulators going forward. Capacity expansions may be limited to new capital of compression only and safety related "lift and replace" pipeline segments. N.A. natural gas production may be able to respond in the years ahead but there may not be sufficient growth in pipeline capacity access. AECO pricing follows the same sentiment as above only pipeline access from field zone to AECO appears to continue to be approved and implemented in reasonable timeframes however downstream of AECO there are limitations to accessing traditional downstream markets as mentioned above. Also not mentioned earlier are persistent LNG export projects to the Canadian Pacific coast for WCSB supply for LNG Canada (1.0 Bcf/d flow in 2024, delayed from 2023) and Woodfibre (0.3 Bcf/d flow in 2027) and Cedar LNG (0.4 Bcf/d flow in 2027). As a result, we believe current forward pricing for calendar years 2024-2027 at AECO of about \$3.70 CAD/GJ are also likely to persist and support this price over the next year.

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### **Appendix C - ECNG Credentials**

#### **ECNG Energy Group**

ECNG Energy Group is Canada's largest full-service energy management consultant that works exclusively for the end-user in contracting for natural gas and electricity supply as well as delivery services. Further, we provide complete solutions ranging from energy conservation to electricity generation. We manage a volume of approximately 150,000 gigajoules per day of natural gas and 2.5 billion kilowatt hours annually on behalf of our clients, making ECNG the largest purchaser, other than the major utilities, in Canada. The advantages of retaining ECNG are access to specialized in-depth industry expertise, encompassing day-to-day market knowledge, utility rate options, existing regulatory framework, impending changes in these ground rules, and contact with a wide range of reliable gas suppliers.

ECNG's fees are fully transparent. At no time does ECNG take title to supply nor do we receive supplier kickbacks on any natural gas or electricity supply procurement transactions. The client always pays the true cost as offered by the supplier with zero margins being given back to ECNG. This ensures we always achieve the utmost competitive and transparent pricing while providing end-use consumers with objective and expert energy advice.

ECNG has been in business since 1987 and has built a large and loyal client base, including many of Canada's leading corporations, retailers, healthcare providers and associations. Our service to these clients includes over 21,000 end-use locations in all deregulated jurisdictions across the country. With this scale of operation, ECNG receives virtually every cost saving proposal from the supply and transportation communities. Finally, economies of scale and scope permit ECNG to provide its services at a fee that is a small fraction of the delivered cost of your energy. Additional information is available by visiting our web site <a href="https://www.ecng.com">www.ecng.com</a>.

#### **ECNG PRINCIPALS CVs**

#### Angelo P. Fantuz – Director, Client Services

A Professional Engineer, Angelo brings 35 years of experience to his current role advising Canada's large commercial and industrial end-users about natural gas and electricity procurement and developing procurement strategies for clients. Angelo and his team are also responsible for monitoring regulatory development in order to ensure ECNG and its clients are prepared for what's ahead. Prior to joining ECNG in 2003, Angelo held senior roles at Eastern Pan Canadian/EnCana and Union Gas Limited. While at Union Gas he was a key sponsor in the development of Gas C.A.R.E. relational database to track, control and schedule the gas flow between Union Gas and its interconnected pipelines. He also testified at the Ontario Energy Board defending gas costs embedded in customer rates.

#### Dave Duggan – Director, Energy Supply & Market Risk

One of Canada's leading authorities on energy commodity purchasing and market fundamentals, Dave is a respected thought leader. He has shared his expertise and understanding of the Ontario and Alberta power

markets and Eastern and Western Canada natural gas markets at various conferences presenting multiple times at EMC's Future of Manufacturing Conference, BOMA Canada's BOMEX – Canada's Building Excellence Summit and other conferences. Since 1995, he has held various senior leadership roles within ECNG and executed thousands of natural gas, power and transportation hedge purchases. He is currently responsible for setting market strategy and leading the Energy Commodity Supply and Price Risk Management team, which procures natural gas and electricity supply for utilities, institutional, commercial and industrial clients across Canada. Dave and the team collect and assess market intelligence and conduct fundamental analysis and financial modeling of risk management strategies for natural gas and electricity.

#### Paul Weingartner – Director, Client Services

Paul is both a Certified Energy Manager and Certified Energy Auditor with almost 20 years' experience building Canada's largest direct-purchase programs across multiple industries. He is a subject matter expert and speaker for organizations such as: the Canadian Healthcare Engineering Society, where he currently serves as Chair of its Corporate Advisory Council; the Independent Electricity System Operator; and Natural Resources Canada, among others. He joined ECNG Energy Group in 2008 after managing national energy programs for HealthPRO Procurement Services. Paul is responsible for managing ECNG's largest clients, developing and implementing customized multi-pronged commodity hedging strategies designed to meet their unique needs and bringing added value by identifying opportunities in the highly complex and volatile natural gas and electricity markets.

#### Steve Williams – Senior Energy Analyst, Supply & Risk Management

Steve has a deep understanding of the complex Canadian natural gas and power markets, from pricing to storage to logistics and more. He analyzes the markets to transact cost-effective natural gas and power deals in Ontario and Alberta. Steve's training as an accountant informs his detailed approach and helps ECNG's clients create impactful commodity strategies. He joined ECNG in 2007 after building his career in finance at Horizon Utilities and Burlington Hydro.

#### Althea Rothwell, Senior Consulting Analyst

Althea Rothwell has over 20 years of industry experience ranging from pipeline maintenance to operational controls. Working closely with utilities, pipelines and customers, Althea maintains high standards in meeting operation, supply and utility objectives. Drawing on past experience within the Accounting and Financial Trades sector, Althea provides detailed and accurate reporting to clients regarding contracted financial and volumetric balancing of natural gas.

2022 Annual Update to the 2020-2022 EPCOR (South Bruce) Gas Supply Plan Filed: 2022-04-29 EB-2022-0141 Page 59 of 61
LP South Bruce Performance Scorecard

	Performance Categories	Intent of Measures	Measures	Sample	2020	2021	
		Demonstrates consideration of timely pricing information and utility's ability to transact according to internal policies for managing counterparty risk	Procurement plan reviewed and approved as outlined in the policy	С	С	С	
	Policies & Procedures		Transacting counterparties have met appropriate credit requirements	%	100%	100%	
		Demonstrates diversity of supply terms within procurement plan through a layers approach to contracting Illustrates Price Stability	Distribution of procurement terms:				
			1. < 1 Month	%	18.7%	5.0%	
			2. Monthly	%	81.3%	58.5%	
			3. Seasonal	%	0%	36%	
1. Cost			4. Annual	%	0%	0%	
Effectiveness	Price Effectiveness		5. Reference Price History	Graph	16.0 15.0 E 14.0 25 13.0 12.0 11.0	Jan-21 Apr-21 Oct-21 Jan-22	

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	Performance Categories	Intent of Measures	Measures	Sample	2020	2021
	Design Day	Demonstrates ability to procure transportation assets required to meet design day demand	Acquired assets to meet design day	100%	100%	100%
	-	Demonstrates execution of storage	1. % of storage level Sept 30th	%	99%	99%
	Storage	inventory strategy	2. % of storage level March 31st	%	70%	16%
2. Reliability &	Coordination	Demonstrates ENGPL ability to invest in capital distribution required to meet design day demand	Monthly meetings between gas supply, engineering, operations	12/yr	4	12
Security of Supply	Communication	Ensure ongoing communications	Communication to ratepayers re material bill impacts	С	С	С
	Diversity	Demonstrate the diversity of the	1. % of contract vol. per delivery point	%	Dawn: 100% AECO: 0%	Dawn: 100% AECO: 0%
	,	portfolio	2. # of unique counterparties	#	3	3
	Deliability	Demonstrate the reliability of the	Days failed to deliver to customers	#	0	0
	Reliability	portfolio	2.Days customer interrupted (1)	#	0	0
	Performance Categories	Intent of Measures	Measures	Sample	2020	2021
3. Public Policy	Supporting	Reports public policy in ENGLP supply plan	1.Community expansion     (% customer converted/unlocked vs. CIP)	%	15.40%	49.58%
			2. FCC	С	С	С
,	Policy		3. RNG	С	N/A	N/A
			4. DSM	С	N/A	N/A

#### Definitions:

- 1. Cost Effectiveness: The gas supply plans will be cost-effect. Cost effectiveness is achieved by appropriately balancing the principles and in executing the supply plan in an economically efficient manner
- 2. Reliability and Security of Supply: The gas supply plans will ensure the reliable and secure supply of gas. Reliability and security of supply is achieved by ensuring gas supply to various receipt points to meet planned peak day and season gas delivery requirements
- 3. Public Policy: The gas supply plan will be developed to ensure that it supports and is aligned with public policy where appropriate