

EPCOR Natural Gas Limited Partnership

2021 Annual Gas Supply Plan Update (2020-2023 Gas Supply Plan)

South Bruce

EB-2021-0146

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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 ("EPCOR") filed the Southern 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 Southern Bruce franchise

area on June 15, 2020. That Gas Supply Plan was updated to include the period 2020-

2023.

EPCOR has developed the following update to the Southern 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.

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iii. Public policy – The gas supply plan will be developed to ensure that it supports and is aligned with public policy where appropriate.

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. Southern Bruce is a new operation with limited historical data; therefore, supply planning in the period covered by this plan must be done based on estimated consumption profiles. Thus, there is a considerable focus on how the plan can be flexible in cost effectively providing reliable supply to Southern Bruce customers 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, EPCOR 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 2021, and the demand forecast is extended to the end of 2024.

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 EPCOR'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.

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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 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 EPCOR'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 EPCOR to procuring 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.

EPCOR 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 3-year Gas Supply Plan (EB-2020-0161). They are discussed in each section below in detail. The following table summarizes the changes within each section:

Section		Significant changes	
1.3.	Process, Resources, Governance	Added Procurement document in Appendix A	
3.1.	Customer Connection Forecast	Discussed changes to customer conversion forecast	
3.2.	Demand Forecast	Discussed Changes to demand forecast due to lower than forecasted customer conversion numbers	
4.5.2.	Unutilized Storage Capacity	Discussed unutilized storage capacity in 2020 due to lower than forecasted customer conversion numbers	
5.3.	Supply Option Update	Discussed changes in procurement as a result of connection delays and lower than forecasted customer conversion numbers	

1.3. Process, Resources, Governance

While there were no significant changes to EPCOR South Bruce's processes and governance, a procedural document has been completed to highlight and summarize key

components of EPCOR South Bruce's gas supply management procedures and

processes as requested by Board Staff in the Final OEB Staff Report EB-2020-0106. This

is included in Appendix A.

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

was executed by EPCOR and ECNG Energy Group, a third-party consultant ("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 review process aimed 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 is then applied to the supply plan

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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 Southern 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.

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

and related drivers, as well as to address any gas nomination operation issues or

improvements that may arise from time to time. Adjustments to the execution of the

Supply Plan were discussed in these meetings, and recommendations to these

adjustments were then submitted by ECNG to EPCOR for approval.

Lastly, EPCOR 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.

2. Market Overview

2.1. Description of Gas Supply and Asset Options

As EPCOR begins the development of its franchise, significant distribution investment as well as upstream assets are required for security of supply and for balancing demand with supply. EPCOR 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 EPCOR.

2.1.1. Supply Option

The options related to gas supply require availability at Dawn by suppliers or for EPCOR 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 in the summer and a modest premium in the winter). 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.

¹ "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.

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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 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/MMBtu²;

Gas Daily Dawn Daily Index in \$CAD/GJ converted from \$US/MMBtu;

Canadian Gas Price Reporter (CGPR) AECO Daily Index 5A plus Fixed Basis³ in

CAD/GJ; and

CGPR AECO Monthly Index 7A plus in CAD/GJ Fixed Basis.

For this Supply Plan, EPCOR 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 EPCOR 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);

² 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

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³ 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 data is readily available through subscription by EPCOR; and

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 in the EB-2019-0183 proceeding

under the M17 rate for 10 years. 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.

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2.1.3. Storage Options

An outcome of the EB-2019-0183 proceeding is that EPCOR was not offered cost-based storage and related daily balancing for T3 or M9 services, which are available to other small gas utilities served by Enbridge in Ontario. The option made available to EPCOR 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. EPCOR 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, EPCOR 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.

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2.1.4. Market-Based Commodity Solutions

There can be situations when a unique, often short term need presents itself and the

solution is not readily available through standard offers. These non-standard offers are

made either solicited or unsolicited to solve a unique situation.

A popular example is a winter peaking service, which allows EPCOR to secure additional

availability of gas from a supplier for a reservation fee during the winter, which allows

EPCOR to nominate additional gas (at a discount up to the daily reserved volume) to

meet winter demand when needed. An example of this is if demand on any given day is

higher than the sum of the purchased volume plus the amount of gas available through

storage withdrawal. 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 EPCOR contracts for a storage service where EPCOR buys

gas 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 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. ECNG provided

the market trending analysis (see).

3. Rate Zone Description

The Southern 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 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 "Southern Bruce Municipalities")

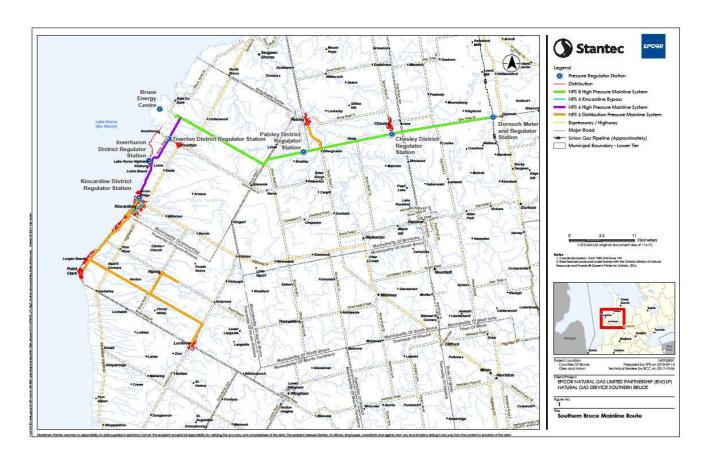


Figure 3-1 – Southern Bruce Distribution System Map

The utility will service two main classes of customers: General Service and Contract Customers. Contract Customers make up 62% of EPCOR's demand profile by volume.

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There are currently two customers under this classification, and both will contract for their

own natural gas supplies and their own storage assets to manage fluctuations in demand.

As such, the consumption profile of these two customers is not included in the demand

forecast and Supply Option Analysis. 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 remaining 38% of EPCOR's natural gas system,

and are comprised of residential, commercial, and agricultural customers.

Residential customers make up 67% of EPCOR'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, which make up 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

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

consumption volumes were based on the level of customer attachments EPCOR

committed to during the CIP process. In June of 2019, EPCOR 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 Southern

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. Table 3-2 shows the changes in customer connection forecast between the three sources.

Table 3-2 – Customer connection forecast comparison by source

	2020	2021	2022	2023	2024
2020 Gas Supply Plan Forecast	2,285	3,677	4,331	4,887	-
Actual Gas-consuming customers	180	-	-	-	-
2021 Gas Supply Plan Update Forecast	-	2,657	3,765	4,869	5,136

In 2020, actual customer connections forecast deviated significantly from the forecast presented in the 2020 Supply Plan due to a later start date for customer conversion, and a slower than forecasted pace of customer conversion. The first Rate 11 seasonal customers converted to natural gas usage mid-August 2020, while Rate 1 and Rate 6 customers started converting to natural gas usage starting early November 2020.

A number of factors contributed to the delay in conversion, namely:

- Construction delays as a result of the evolving health and safety guidance caused by the COVID-19 Pandemic required to ensure employee safety
- Customers having difficulty scheduling HVAC contractors for equipment inspection and conversion.
- Customers with propane equipment filled up their propane tanks over winter and delayed conversion until spring time.

In March 2021, EPCOR contracted Innovate Research Group to survey customers in the franchise area to better understand decision drivers related to conversion. The findings from the survey suggested that almost half of those surveyed intend to convert to natural gas as soon as possible, 2-in-5 said they continue to have difficulty finding an HVAC

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contractor for the inspection and equipment conversion. A summary of the findings can

be found in Appendix E.

3.2. Demand Forecast

To develop a natural gas supply portfolio, EPCOR first constructed a demand forecast

that reflects its expected customer profile throughout the year over a three-year horizon

from 2021 to 2024. This first step ensures that EPCOR procures an efficient volume of

natural gas commodity and storage assets. As EPCOR 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

deviates from the forecast.

South Bruce customers are categorized into four rate classes:

General Firm Service Rate 1

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 and 2021, updated as of April 16, 2021, as well

as revised pace of daily customer conversions as discussed above. The forecasted per-

customer demand for each customer type is based on an annual forecast developed

during the Common Infrastructure Plan ("CIP") process. Monthly consumption profiles for

each customer types are derived from expected annual consumption profile consistent

with the CIP, with the monthly breakdown of this annual volume consistent with the CIP

and methodology applied in the Southern Bruce expansion applications.⁴ For residential and commercial customers, the annual forecast was broken down 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 completed 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.

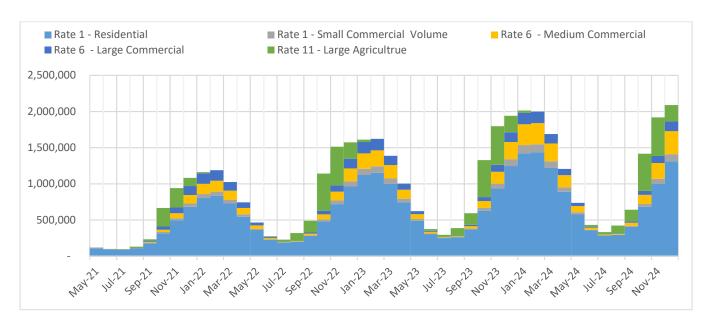


Figure 3-3 - Forecast Monthly General Service Demand, by Customer Type

3.3. Design Day Demand

EPCOR has procured sufficient transportation assets to meet customer demand within the planning period. EPCOR's Contract Demand under the M17 is based on the expected capacity required to meet peak day conditions in EPCOR'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 m³ per day (or 3,377 GJ per day) is currently reserved for Contract Customer that

⁴ EB-2016-0137/EB-2016-0138/EB-2016-0139, Response to Board Staff Interrogatory #2, dated March 2, 2018.

supplies their own gas and manages their own storage). Figure 2-4 below shows the expected average day demand compared against the M17 contract demand, and the portion of that contract demand apportioned to General Service customers.

CD reserved for General Service CD reserved for Contract Customers Forecasted Average Day Consumption •••• Total M17 Contract Demand 250,000 200,000 m3 per day 150,000 M17 Contract demand reserved Highest average-day consumption 100,000 for General Service at 141,072 m³ within planning horizon at 68,929 m³ 50,000 0 Jul-21 May-21 Jul-23 Vov-21 Mar-22 May-22 May-24 Jul-24 Jul-22 Nov-22 Mar-23

Figure 2-4 - Forecast Average Day Consumption vs M17 Contract Demand

Based on the demand forecast shown in Figure 2, EPCOR is not expecting to make full use of the Contract Demand in the three-year planning horizon covered by this Supply Plan Update. For example, peak day demand would need to be twice the forecasted daily demand volume in February 2024 to exceed the contract demand reserved for General Service customers. 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. EPCOR has contracted sufficient transportation capacity to service Southern Bruce within the planning horizon, and will review demand forecasts and utilization of the M17 contract demand on an annual basis to assess where additional capacity is needed and will contract accordingly.

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4. Current Portfolio

4.1. Commodity Portfolio

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

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

of the market outlook analysis. Southern 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,

Southern 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, and Dawn is expected to

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

base supply and balancing supplies.

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

this Update.

4.2. Transportation Portfolio

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

Southern Bruce during the period covered by this Supply Plan. EPCOR has contracted

227,912 m³ 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). EPCOR expects the

transportation capacity to be more than enough to reliability meet gas demand to all

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

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

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

for this Update.

4.3. Storage Portfolio

EPCOR 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, EPCOR 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, EPCOR entered into a 5-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, EPCOR 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, EPCOR will use this stored supply to service

the deficiency. Storage also enables EPCOR 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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EPCOR 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 EPCOR'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 EPCOR 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. EPCOR

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 last year's Gas Supply Plan assume 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 pay-

per-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

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on 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 EPCOR to manage

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

No changes were made to EPCOR'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, EPCOR does not expect all M17

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

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

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

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

period. In its rates application (EB2018-0264) EPCOR 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 EPCOR the ability to defer the recovery of the additional

capacity EPCOR 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 2020, EPCOR procured gas at Dawn, with a mix of fixed price and spot

purchases, to fill storage to 99.84% full by the end of firm injection season.

Due to the delayed start and slower than expected pace of customer conversion, winter

natural gas demand for system gas customers were much lower than anticipated -

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system gas consumption between November 1st to March 31st was approximately 13,000

GJs. As a result, storage capacity for this past winter was not fully utilized as winter

consumption only accounted for 13% of storage gas.

As reported in the latest approved QRAM application for rates effective April 1, 2021 (EB-

2021-0100), EPCOR made the decision in February 2021 to sell off a portion of gas held

in storage at high spot prices, and an equivalent volume of gas (after accounting for fuel

loss) were purchased for redelivery and to be injected back into storage for May and June

2021 at lower fixed prices as monthly strip transactions at fixed daily volumes. The spread

in the high sales value and the lower repurchase value are all tracked as system gas

commodity supply, and are used as a way to mitigate higher market prices forecasted in

April 2021 to March 2022. Deliverability from storage was ensured as forecasted storage

level at March 31, 2021 (last date with firm withdrawal rights) was expected to be over

50% after accounting for the revised consumption forecast. After the sale transactions,

storage maintained at over 69% full by the last day of the withdrawal season.

EPCOR 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

36.6% 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.

5. Updated Gas Supply Plan Outlook

5.1. Design Day Analysis

As described in Sections 3.3 and 4.2, EPCOR has contracted sufficient transportation assets to service Southern Bruce within the planning horizon - The M17 Contract Demand reserved for General Service customers is approximately double the highest average-day demand forecasted in February 2024. While a portion of the transportation capacity from Dawn to Dornoch is reserved for the Rate 16 Contract Customers, EPCOR 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 EPCOR has contemplated and evaluated to meet Southern 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 30th (last day of firm injection right given EPCOR'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). EPCOR elects to start firm injections in May instead of April, as a colder than normal April can increase market prices, resulting in higher weighted average value of gas in storage.

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2) 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.

ECNG worked with EPCOR 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

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.

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Additional consideration include flexibility and burner-tip price competitiveness in order to

address the start- up nature of the utility and to attract new 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 previous Gas

Supply Plan submission, 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 higher⁵. 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 the delay in customer connections and slower than expected rate of conversion,

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

deviated from the 2020 Supply Plan:

1) A late start to customer conversion translated to low system gas consumption this

last winter. With storage heading into winter at over 99% full, EPCOR made the

decision to mainly use storage gas to service system gas demand, and no

purchases were made between December 2020 and April 2022.

2) Given that all but one system gas customer began consuming natural gas starting

in November 2020, it was challenging for EPCOR to evaluate whether baseload

assumptions for customers of different rate classes and types used in the CIP

process will accurately predict non-heat-sensitive natural gas consumptions in the

summer. Consumptions during warm days in March and April, when heating

degree days drop to near zero, suggest that the CIP assumptions may be

overestimating baseload consumption. One reason may be that customers that

most customers who have converted to natural gas only converted heating

equipment (i.e. they have electric stove ranges and water heaters). EPCOR

⁵ OEB Staff Report to the Ontario Energy Board Consultation to Review Natural Gas Supply Plans (EB-2019-0106)

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continues to monitor system gas demand on a daily basis, and is of the opinion

that a seasonal-term gas purchase this summer as planned in 2020 Gas Supply

Plan carry an elevated risk of over-procurement. Compounded with high storage

levels heading into the summer season, EPCOR have decided to procure system

supply this summer (May to September 2020) on either a month-to-month basis or

as spot / cash purchases.

3) EPCOR's expectation of system gas consumptions this upcoming winter will

continue to evolve as customer connections and conversions continue to grow

over the summer months. Since customer conversions will be driven by a number

of factors that are outside of EPCOR's control (HVAC contractor availability,

COVID lockdowns, for example), system gas consumption estimates for the

upcoming winter will be more accurate as winter approaches. EPCOR 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

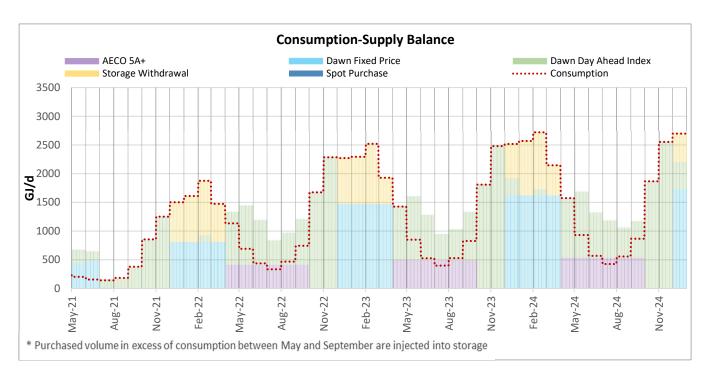
measure, EPCOR will procure 50% of the estimated system demand as fixed

Dawn purchase, down from 65%.

Figure 5-1 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

EPCOR 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. EPCOR and ECNG maintain a number of checks and balances 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. As requested, EPCOR is submitting its Procurement Procedural documentation as part of this Supply Plan Update. Please see Appendix A for the documentation.

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

 2020/2021 – HDDs were lower than planned due to warmer than expected temperatures

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

	2020/2021				
	Planned	Actual	Variance		
TJ	138	15	122		

 2020/2021 – Delay in construction and slower than forecasted pace of conversion lead to lower than forecasted demand

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

	2020/2021		
GJ	Planned	Actual	Variance
Dawn	138	102	36
AECO	0	0	0

 2020/2021 – Delay in construction and slower than forecasted pace of conversion lead to lower than forecasted gas supply deliveries

7.4. Unutilized Transportation Capacity

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

Table 7-4 - Actual vs Plan UDC

 2020/2021 – The actual UDC incurred was 633 GJ lower than planned primarily due to delay in construction and slower than forecasted pace of conversion

8. Public Policy

8.1. Community Expansion

EPCOR has been actively working to bring secure, reliable and affordable natural gas to unserved communities. The Southern Bruce project represents one of the largest community expansion projects awarded to date. EPCOR 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 EPCOR's obligation to serve, to any customers or communities who request natural gas service.

In August of 2020, EPCOR submitted "The Southern Bruce Expansion Project" to the OEB as part of the Phase 2 natural gas expansion program funding. The project intends to connect customers in the Municipality of Kincardine and Township of Huron-Kinloss which were out of reach on the previous Southern Bruce project. Agricultural customers would be connected on 3 segments within the region. Natural gas would be supplied from the Southern Bruce system in order to reach these customers. In addition to serving the agricultural community a number of residential and commercial customers would also be connected.

The final report outlining successful proponents of the program funding has not yet been released.

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

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ability for smaller EITE facilities that emit 10,000 tonnes of CO2e per year or more to

voluntarily opt-in to the system; and,

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

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

As part of ENGLP's compliance requirements with respect to the FCPP, the utility filed its

2019 FCPP application (EB-2019-0101) with the Board on March 8, 2019. The application

was approved on July 18, 2019.

In 2020, ENGLP filed two subsequent applications for 2020 and 2021 FCPP rates,

which were approved in March 2021.6

8.3. Demand Side Management (DSM)

ENGLP is in process of developing a commercial DSM pilot expected to be rolled out in

2021 or 2022 within its Aylmer or South Bruce territories. 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.

⁶ EB-2020-0076 / EB-2020-0231, Decision and Order, dated March 11, 2021.

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9. Performance Measurement

EPCOR has drafted a performance metric scorecard in order to measure the

effectiveness of the Supply Plan. Please see Appendix F for details.

The continuous improvement to the supply planning process undertaken by EPCOR is

an important element of the transparency objective of the Framework. EPCOR continues

to proactively evaluate new supply and transportation options in accordance with the

Framework's guiding principles.

EPCOR will also continue to proactively identify new opportunities to meet its gas supply

obligations while meeting the Framework assessment criteria. EPCOR will also continue

to review and improve the information it receives for market outlook and forecasting

purposes.

EPCOR commenced service to customers in its Southern Bruce customer area in late

2020. There may be opportunities to combine gas supply plans for both the Aylmer and

Southern Bruce areas but EPCOR believes that at this time, this opportunity is beyond

the scope of this gas supply planning period.

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	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.

	the OEB's guiding 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.	EPCOR 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.

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Appendix A - Procurement Procedural Documentation



EPCOR NATURAL GAS LIMITED PARTERSHIP

NATURAL GAS PROCUREMENT PROCEDURAL MANUAL

Version: May 2021

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1. INTRODUCTION

This manual is a summary of key procedures related to Natural Gas Supply Procurement for EPCOR Natural Gas Limited Partnership ("EPCOR"). This includes process checkpoints along with roles and responsibilities for procurement and supply management tasks.

EPCOR completes this process utilizing the services of a Third Party Consultant ("Consultant" or "the Consultant") who facilitate gas supply transactions and nominations on behalf of EPCOR and advises EPCOR of natural gas market updates and procurement strategies.

2. REVIEWS

This section contains details and frequencies of operational review and checkpoints, as well as communication protocols between EPCOR and the Consultant, for the purposes of:

- Procuring natural gas supply to meet system gas demand,
- Balancing seasonal storage,
- Balancing LBA under the M17, and
- Suppliers Review

2.1 Gas Supply Plan Development & Annual Review

Description

Annually in April, EPCOR completes a review and update of the Natural Gas Supply Plan as per Ontario Energy Board ("OEB") requirements. Using historical consumption and customer numbers as the basis for review, EPCOR revises the consumption forecast and adjusts procurement volume forecast for the projected three years. Additional storage requirements and contract demand is considered along with updated natural gas procurement options.

EPCOR populates the gas supply model with updated assumptions on consumption, procurement, storage, and the Load Balancing Agreement ("*LBA*"), ensuring high-level assumptions matching operational arrangements.

Steps

- 1. Review and update gas supply model based on updated customer addition actuals and forecast.
- 2. Adjust per-customer monthly consumption forecast based on updated actual historical data, for each rate class and customer classification.
- 3. Update long-term (3-yr) forecast prices for relevant markets (Dawn, AECO).
- Review existing and planned procurement strategies for system gas supply, and make adjustments as required to ensure cost-effectiveness and reliability and security of system gas supply.
 - a. Review pricing structure of the portfolio (% of portfolio procured as spot / cash transactions vs fixed price transactions of various terms.

- b. Review supply sources of the portfolio (% of portfolio procured and priced at Dawn, AECO, and other delivery points).
- 5. Reviewing historical peak day demand and compare against existing contract demand, and plan for adjustments as required.
- 6. Reviewing historical storage activities, and compare against planned activities from previous supply plan, and plan for adjustments as required (i.e. procuring additional market based storage).
- 7. Provide recommendation on:
 - a. Additional market storage as required,
 - b. Additional contract demand as required, and
 - c. Adjustments to procurement strategies and supply options.

2.2 Monthly Procurement Review

Description

On a monthly basis, EPCOR reviews gas supply planning assumptions and adjustments internally, including:

- a. Updates on system gas consumption (actual and forecast),
- Adjustments to strategies related to management seasonal storage and the LBA balance.
- c. Identify and address any operational and engineering concerns (i.e. pipeline pressures, construction updates, etc.)
- d. A review and update of the Supply Plan Performance Metric Scorecard.
- e. A summary of the current seasonal weather forecast, customer additions, consumption modeling, LBA balance, storage volume, market rates, and procurement strategy is to generate as reference for the meeting.
- f. Propane market research and user behavior tracking is to update savings for potential new customer additions.

Steps:

- 1. Supply plan performance metric scorecard update and review
- 2. South Bruce natural gas supply plan review:
 - a. Review the seasonal weather forecast, customer additions, consumption modeling, LBA balance, storage volume, market rates,

b. Summarize adjustments procurement strategies to account for updated consumption and weather forecast, market intelligence, and adjust to actual consumptions and the short term forecast on procurement.

- 3. Comparison/Forecast of customer burner tip pricing vis a vis alternate fuels
 - a. Use monthly observation summary of propane customers' user behavior with residential and commercial propane price to forecast customer savings based on price difference in between propane and natural gas.

4. Peak Day Review

 Review customer connections numbers and how that translate to peak day demand forecast.

2.3 Weekly Balancing Review

Description

On a weekly basis, the Consultant is to flag to EPCOR if LBA balancing actions are required, for the purposes of managing LBA balancing and seasonal gas storage balance to ensure deliverability. The Consultant reviews the portfolio consumption, storage management, LBA balance, and market intelligence with EPCOR.

EPCOR is to generate and send the Consultant the daily consumption forecast model based on updated information on customer addition and near-term weather forecast for South Bruce (based on Kincardine weather data).

The Consultant tracks the consumption, storage, LBA, and nomination for large commercial and system customers and sends to EPCOR weekly. This tracking report is used to manage EPCOR's procurement volumes and storage injection/withdrawal volumes to stay within the LBA tolerances and to accumulate a history of gas flows (packing/drafting) for month end reporting and cost calculation. To ensure the LBA balance remains in tolerance, Consultant also sends daily estimate consumption and LBA position to EPCOR.

Steps:

1. Consumption Profile Update

- Review additions for large commercial customers and actual consumption for existing customers.
- b. Review new connections and short term forecasted additions. The consumption forecast for the next two months will be updated based on new and scheduled customer additions for the week, as well as the short term forecasted weather information.

2. Storage Management Review

- a. Review the storage volume
- b. Adjust and propose short term storage injection / withdrawal strategy to manage system gas consumption and LBA balance.
- c. Adjust and propose new summer/winter storage strategy with current end-ofseason storage levels.

3. LBA Management

a. Review updated weekly LBA balance report to identify whether spot purchases are required for LBA balancing

4. System Gas Procurement Review

a. Based on updated actuals and forecasted information on system gas consumption, storage levels, and LBA balance, review whether changes to system gas procurement strategies are required to meet system supply requirements while meeting OEB guiding principles of cost-effectiveness and reliability and security of supply.

5. Market intelligence review

- a. Review North American natural gas market fundamental drivers and news, including updated supply, demand actuals and updated forecasts, seasonal weather forecast, storage reports for different markets, and historical price movements for spot / cash markets and future prices. Particular focus on markets relevant to EPCOR South Bruce.
- 6. Other Issues, including operational issues that may impact gas demand, nominations, etc.

2.4 Annual Supplier Review

Description

Review performance of each supplier on an annual basis, from a credit and market participation perspective. The review will inform EPCOR if action should be taken to increase the number of suppliers in the upcoming planning year

Steps:

EPCOR to review the following:

- 1. Supplier credit rating relative to past review and against credit risk policy
- 2. Supplier's participation track record in RFPs
- 3. Performance of RFP bids from each supplier

3. PROCESSES & PROCEDURES

This section contains operational procedures agreed upon by EPCOR and the Consultant for the purposes of Procuring Natural Gas supply from the market.

3.1 Market Transaction Approval

Description

Once procurement or sale is deemed required by an Annual, Monthly, Storage Balance Review, or LBA Balance Review, the following approval process are required

Steps

- 1. Consultant to issue letter requesting approval to transact to Gas Supply Manager. The letter must include:
 - a. Brief description of why transaction is required
 - b. Recommended transactional steps, including: quantity, term, delivery point, pricing structure, fuel requirements, indicative price range (+/- X%) or target price, and effective date range of the proposed strategy.
- 2. Once Gas Supply Manager Approves Approval process, the Consultant sends letter to Manager, Energy Supply & Procurement, and VP Ontario for approval.
- 3. In the case where transaction window is narrow (for example, gas must be purchased to meet certain deadlines), approval from EPCOR can be provided by email, but approval letter must be issued by consultant after the fact for record keeping purposes.

3.2 RFP procedures

Description

In the event that EPCOR is required to buy or sell gas (term or spot/cash), the following RFP procedure will be initiated.

Steps:

- 1. Consultant provide RFP template with instructions to be followed including:
 - a. The RFP name and reference number
 - b. RFP Closing time /date,
 - c. How to deliver the proposal,
 - d. Contact person,
 - e. Approved delivery methods (fax, email & cc EPCOR),
 - f. Terms & conditions of RFP (volumes, pricing)
- 2. Consultant to inform Suppliers of Posting/Timelines for RFP/RFQ and Conditions of Tendering/Specifications/Term (via email & CC EPCOR)
- 3. Consultant to issue to suppliers RFP including the following components via email: volume, delivery point, term, Pricing structure, and response deadline
- 4. After submission deadline passes:
 - a. Consultant to provide EPCOR summary of results & recommendation based on RFP results, and accept winning bid based on pre-approved criteria
 - b. Consultant to finalize RFP documentation (confirmation, payment to specification, and response to supplier, notification to rejected bidders)

- c. Consultant will keep track of the transacted deals (spreadsheet) and sent to EPCOR to be further used for invoice verification/reconciliation
- d. Consultant to summarize the RFP competition and to explain if lowest offer was not taken and provide copy to EPCOR and to maintain these records.
- 5. Consultant to provide EPCOR with transaction confirm documentation
 - a. Consultant will notify EPCOR of bid responses
 - b. All confirmations will be signed by Consultant, scanned, and sent to EPCOR via email on a routine basis
 - c. Discrepancies (term/vol/pricing) will be verified by Consultant and reported to Manager, Energy Supply & Procurement as soon as possible.
 - d. In the case of discrepancies or errors on the confirm, amendments to the deals require approval from Manager, Energy Supply & Procurement
 - e. Deal confirms and data to be filed as per Section 3.3

In cases where the written RFP process is not possible (for example, gas must be purchased to meet nomination deadline), verbal RFP's will be considered, provided the Consultant documents all bids as per steps outlined for the standard RFP process.

3.3 Market Transaction and Invoice Filing & Payment

Description

This section discusses roles and responsibilities for how market transactions are tracked and for invoice approval

Steps:

- 1. EPCOR and Consultant maintains deal tracker.
 - Deal tracker maintained by both EPCOR and Consultant, updated as deals are transacted.
 - b. Consultant to provide transactions confirms as they are received.
 - EPCOR uses Tracker to verify invoices for accuracy and approves for payment
- 2. EPCOR receives invoice and reconcile against deal tracker
- 3. Invoice approval: Manager, Energy Supply & Procurement provides approval for transactions above \$500,000 approval from VP Ontario required
- 4. In the case of invoice issues, Manager, Energy Supply & Procurement first escalates to Consultant to follow up with supplier. Invoice issues to be resolved within X hours of flagging issue
- 5. Once invoices are approved, Manager, Energy Supply & Procurement to email Finance for payment

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Appendix B - Key Terms

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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 EPCOR is obligated to deliver in any one day to a customer under all

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 EPCOR 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

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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 1st and continuing until March 31st of the following

year.

Rate 1 – General Firm Service Rate:

Any customer in EPCOR's Southern 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 EPCOR's Southern 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 EPCOR's Southern Bruce Natural Gas High Pressure Steel System and who enters into a contract with EPCOR for firm contract daily demand of at least 2,739m3.

Rate 16 – Contract Firm Service Rate:

Any customer connected directly to EPCOR's Southern Bruce Natural Gas High Pressure Steel System and who enters into a contract with EPCOR 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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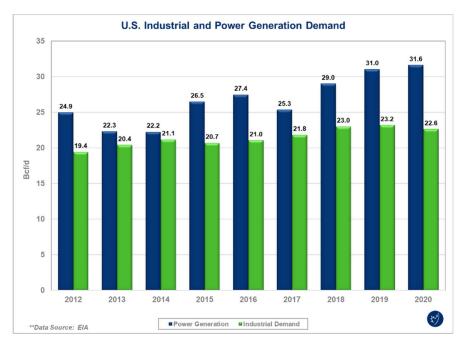
Appendix C - Market Trends Analysis

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.

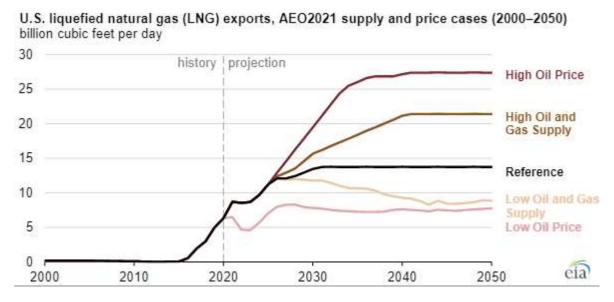
Demand: Impact on pricing – Near-term Mildly Bullish, Mid and Long-term Mildly Bullish

The 2020/2021 Winter weather overall, across most of North America (N.A.) resulted in lower than average demand in the residential, commercial and industrial sectors. Mid-term and Long-term gas demand growth is largely expected by most forecasters post pandemic in the United States (U.S.) in Industrial and gas fired power generation demand sectors. The federal government change in the U.S. with a mandate to battle climate change translates into an expectation to continue having gas fired generation running more baseload hours fueling with natural gas further pushing out coal. The U.S. Energy Information Administration's (EIA) Annual Energy Outlook 2021 (AEO2021) cites an expectation of increasing consumption of natural gas and electricity. The expectation is that modest growth as seen in the graph below will continue in the time horizon of this update.



The LNG export chart below is from the EIA AEO2021. The various scenarios show a dramatic range of outcomes however ECNG's view is that Reference case will prevail in the Mid-term. In the Reference case, LNG exports continue to grow throughout the 2020s, reaching 13.7 Bcf/d by 2030 which requires only one or two (of many projects which already have FERC construction approval) to reach a positive Final Investment Decision later in 2021.

U.S. LNG exports including fuel gas for refrigeration are now operating at near capacity between 11 and 12 Bcf/day in early 2021. This will continue to be a significant contributor to a tight supply-demand balance in N.A.

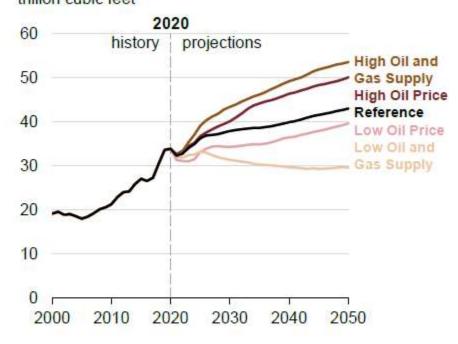


Also increasing demand for U.S. supply is Mexico. Expectations for exports to Mexico during this outlook's horizon could see average exports to Mexico well exceed 7 Bcf/d from the current flows of 5-6 Bcf/d. This increased demand is mostly for power generation and growth would require increased pipeline infrastructure. Mexico has the capability to receive LNG cargoes, and this will bolster increased demand from the U.S. Finally, in the Long-term, Mexico may become a conduit for U.S. pipeline access (increased exports) to Mexico's Pacific coast to shorten LNG routes to Asia.

Supply: Impact on pricing – Near-term Mildly Bullish (NYMEX) and Mildly Bullish (AECO); Mid and Long-term Mildly Bearish (NYMEX) and Bearish (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. The EIA's Reference case is forecasting a slow return to 2019 levels by 2023 in its reference case, see below. The EIA also expects supply to be able to satisfy growing demand at current prices.

U.S. dry natural gas production AEO2021 oil and gas supply and price cases trillion cubic feet





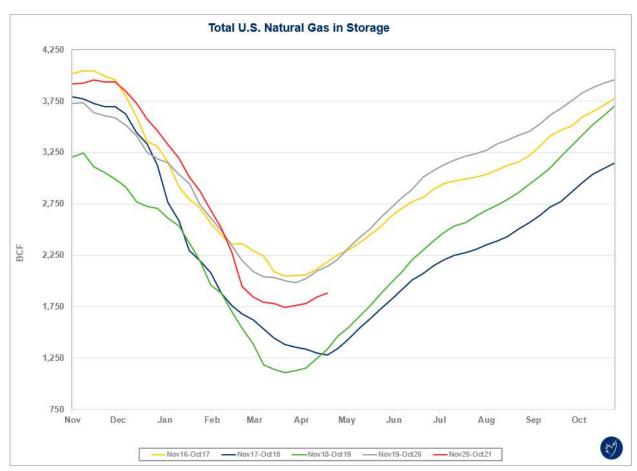
The Western Canadian Sedimentary Basin (WCSB) production is expected to grow modestly with timing dependent on market access being provided to the remote shale deposits in NE BC and NW AB. Early 2021 saw an increase in US exports to help meet the unexpected cold weather in mid-continental U.S. which was largely met by Western Canadian storage withdrawals and not by production growth. Nova Gas Transmission Ltd. (NGTL) is nearing its completion of its \$6.7 billion renovation and expansion program however not likely until late in 2022 or early 2023 due to COVID-19 protocols and some regulatory approvals that have not yet been fully granted (however still expected). WCSB continues to be poised to

grow however transportation to markets outside of BC and AB are key to that growth and are dependent on contract renewals and possible toll negotiations to maintain and/or grow current flows.

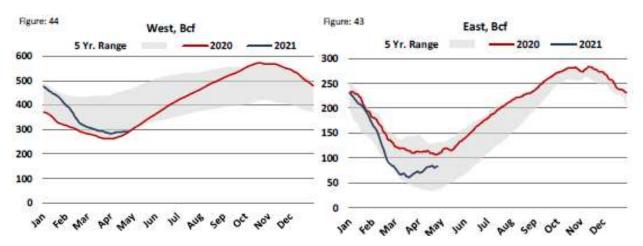
At current elevated prices relative to last year, the supply response has been slow in U.S. and in Canada which may show that producers are less willing to grow production with financial leveraging and more through cashflow. This sentiment is driving the bullish sentiment in the short run. Mid and Long-term 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), Bullish (AECO); Mid and Longerterm No Impact on price

Total U.S. working inventories on March 31, 2021 fell just below the five-year average of 1.8 Tcf. Most industry forecasters see end of injection season ending significantly less than 2020's value of nearly 4.0 Tcf. The likely outcome has storage filling 0.4 to 0.5 Tcf less than last year or about 2 to 3 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.



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

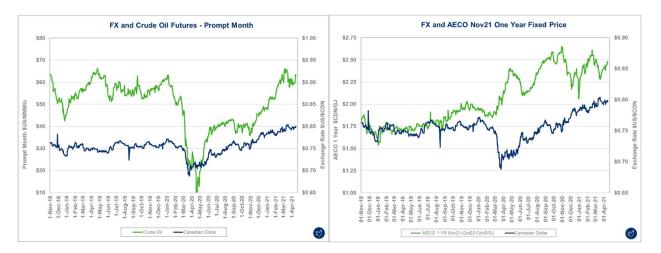


Storage graphs from RBN Energy LLC 2021 at April 28, 2021.

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

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 2021 has remained supported in the \$50-60 USD/barrel price range with supply being managed by OPEC and Russia during most of the pandemic after a crash landing and restart in April 2020. Associated transportation fuels demand around the globe has seen the largest decline due to stay-at-home mandates instituted to fight the spread of COVID-19. ECNG's view is oil pricing will remain at these price levels supported by pent up travel demand as the pandemic subsides which will continue to return associated gas supply to pre-pandemic levels. 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). 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 strength in FX since mid-2020 has not contributed much to a lower AECO price which is good news for the Canadian producer and good news for the gas buyer at Dawn.



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

In the U.S., strong LNG exports, lower inventories (in the U.S. and at Dawn) at winter's end, with only similar supplies to 2019 supplies make for a tight supply-demand market. As a result, NYMEX and Dawn price outlooks in the short term are at risk especially to a warmer than average summer or a colder than average winter. The forward Dawn price for 2022 has similar volatility risk to the forward 2021 price shown in the graph below. AECO pricing is expected to stay strong and move with or go narrower to NYMEX with a larger year over year regional storage deficit supporting its pricing. Current forward pricing history is found below.



Mid to Long-term Summary – NEUTRAL (NYMEX and Dawn), Mildly Bearish (AECO)

In the U.S. the expectation of continued strong LNG exports, post pandemic return to 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 landed cost of gas at Dawn is between approximately \$2.90 and \$3.10 CAD/GJ for the next 4 gas years. This is good value and in a couple of years we do expect prices to move higher if U.S. natural gas production is unable to respond in 2021 at

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current forward price levels. Conversely forward pricing at AECO is at recent historic highs which in our view should lead to future supply exploration and development to certainly fill up the increased delivery infrastructure in progress for completion sometime in 2022. As a result, we are looking for AECO prices to have the potential to weaken heading into early 2023.

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.

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Appendix D - 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 www.ecng.com.

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

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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.

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Appendix E - Southern Bruce County Lagging Conversion Survey





EPCOR Utilities Inc | March 2021 Lagging Conversion Survey



Key Findings

01

Individuals' current status on natural gas conversion varies

Almost half (47%) have already been in contact with an HVAC contractor or met with them online; 19% have not yet contacted an HVAC contractor. However, 72% of those who have not contacted HVAC contractors were aware of the next steps to convert.

02

Difficulties in getting an HVAC contractor to come has been a barrier moving forward

2-in-5 (40%) say that they have not yet taken the next steps for moving forward with the conversion process because they are trying to get an HVAC contractor to come out.

03

Intention to switch to natural gas

Almost half (46%) say they intend to switch as soon as possible, which is higher among propane users (58%).

04

COVID-19's impact on the decision to convert to natural gas

COVID-19 has not affected the majority (83%) of consumers on their plan to switch to natural gas. Among those who are impacted by the pandemic, half (50%) mention health concerns and safety restrictions which prohibit contractors form entering their home.

05

Time frame for those delaying conversion to natural gas due to the COVID-19 outbreak

The plurality of respondents (30%) say they will switch within the next 3 to 6 months; 19% say it depends on COVID-19 outbreak status.



Survey Objectives and Methodology

These are the results of an online survey conducted between March 6th, 2021 and March 24th, 2021.

Method: This online survey was conducted using a list of 1,064 Kincardine area residents/property owners who had registered on EPCOR's website to have natural gas brought to their homes. Each individual on the list was sent (via email) an invitation containing a unique URL for them to access the survey. In order to boost response rates, those who completed the survey were entered into a prize draw for a \$500 Visa gift card.

A total of 474 households completed the survey.

Weighting: Because we don't know the demographic profile or regional distribution of the target population, no statistical weights were applied to the data.

Margin of Error: Unlike most online surveys, we can apply a margin of error to this data because everyone who was qualified to participate in the survey (ie, they had registered online to convert to natural gas) had an equal opportunity to do so, resulting in a random probability sample. The margin of error for a sample of 474, from a total population of 1,064 is \pm 3.35%, 19 times out of 20. Due to the small population size, a finite population adjustment is made when calculating the margin of error.

OBJECTIVES:

There were two primary objectives for this survey:

- 1. To identify what has been keeping people who have signed up for natural gas from moving forward with the conversion.
- 2. To remind them of the benefits of converting to natural gas in a timely fashion.

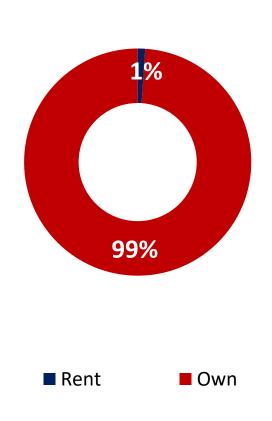
Note: Graphs may not always total 100% due to rounding values rather than any error in data.

Sums are added before rounding numbers.

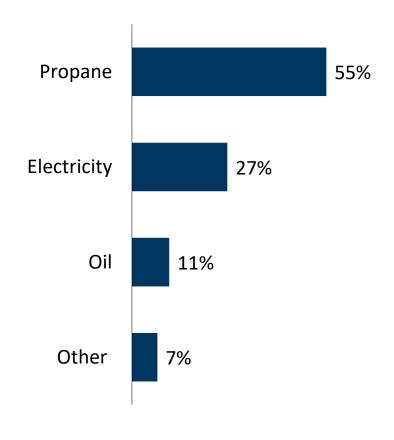


Home Profile

Own or Rent



Primary Energy Source For Heat





Note: 'Don't know' (<1%) not shown

Current Status

Current Status With Conversion: Almost half (47%) have already had an ° HVAC contractor come to their home/met online

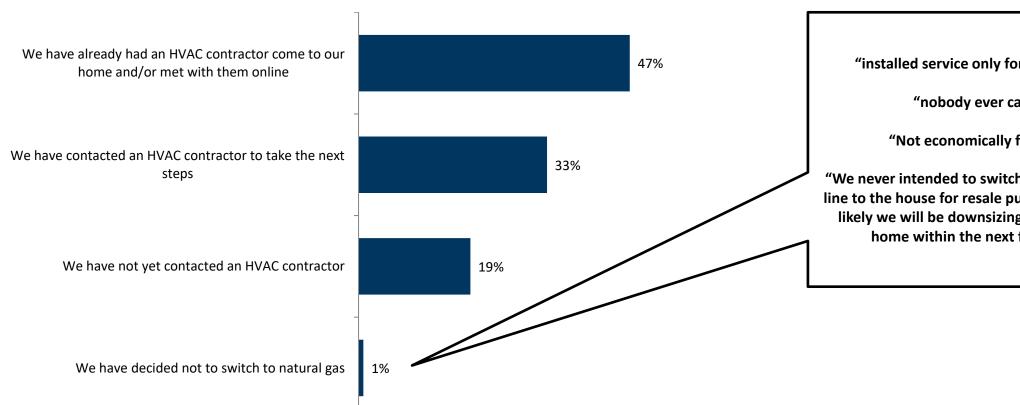


Records show that you signed up to convert to natural gas in [MONTH] of [YEAR]. Which of the following best represents your current status with regard to converting to natural gas?



Why did you decide not to switch to natural gas? [asked of respondents who did not switch; n=4]

[asked of all respondents; n=474]



"installed service only for retail value"

"nobody ever came"

"Not economically feasible"

"We never intended to switch - we brought the line to the house for resale purposes. It is most likely we will be downsizing and selling our home within the next few years."

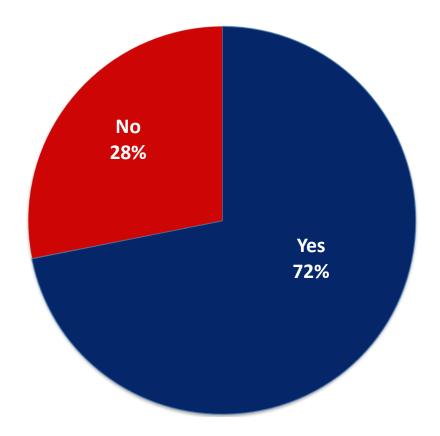


Next Step Awareness: 7-in-10 (72%) of those who have not contacted HVAC contractor were aware of the next steps



The next step is for you to contact an HVAC contractor to assess and address your specific connection requirements. Were you aware of that before this survey?

[asked of those who have not yet contacted an HVAC contractor; n=96]





Barriers To Moving Forward

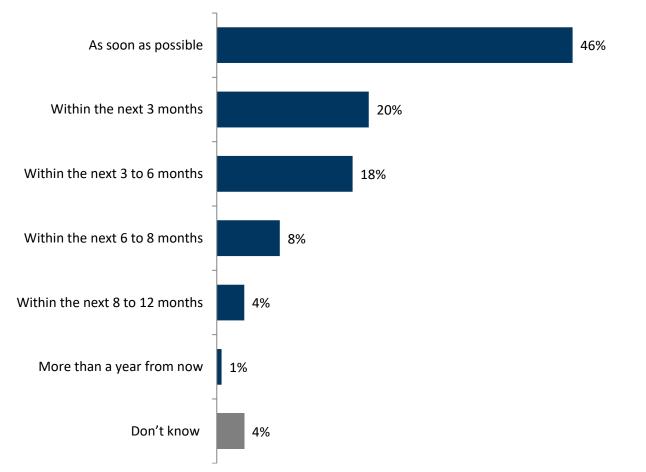
Intention to Switch: Almost half (46%) are intending to switch over to natural gas ASAP; higher among Propane users (58%)

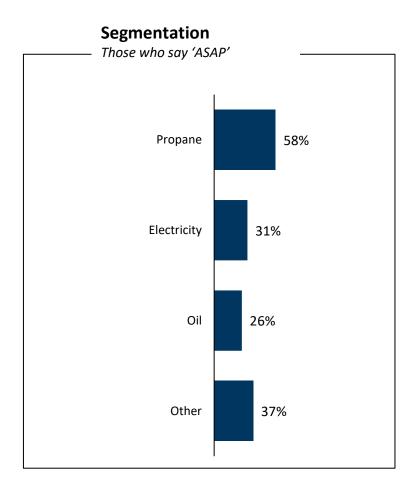


Because you signed up for natural gas in [MONTH] of [YEAR], and EPCOR completed construction on the service line from our main line to your home, you have until [MONTH] of [EXP YEAR] to then convert to natural gas within your household and start using it. Customers who convert to using natural gas in their household before that year is up continue to get this service connection outside their home free. Customers who don't start using natural gas once the year anniversary is up, will have to pay for that service connection which is anywhere between \$400 to \$4500.

Knowing this, which of the following best describes when you intend to switch over to natural gas?

[asked of all respondents; n=474]

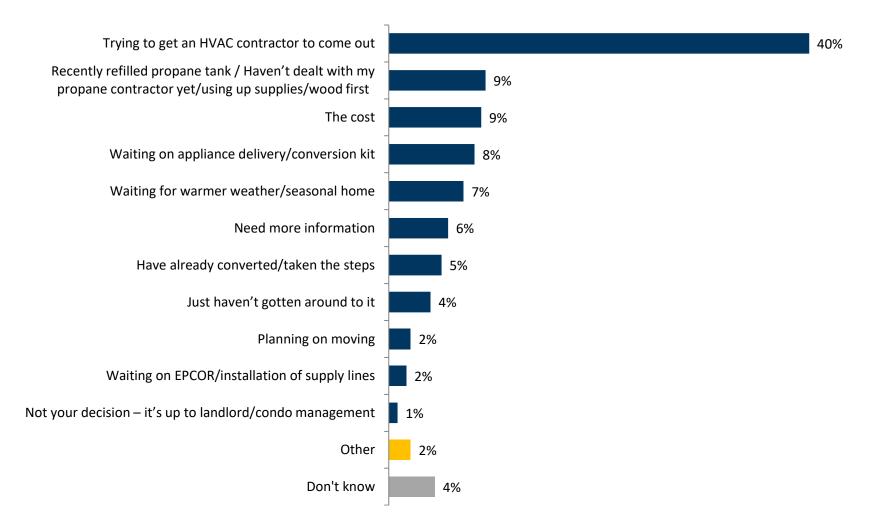




Reasons For Not Taking Next Steps: The most cited reason (40%) for not converting to natural gas is trying to get an HVAC contractor to come out

Q

Which of the following best describes why you have not yet taken the next steps for moving forward with your conversion? [asked of all respondents; n=474]



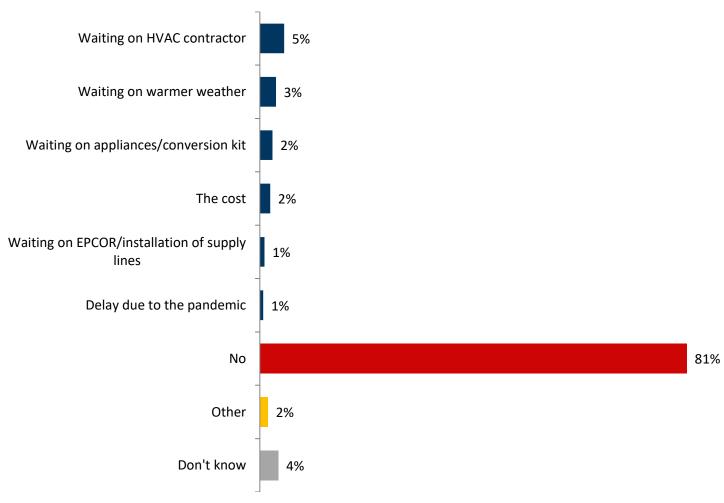


Reasons by Heating Methods: Half (50%) of propane users don't take the next steps because they're 'trying to get an HVAC contactor to come out'

	Heating Methods				
	Propane	Oil	Electricity	Other	
Trying to get an HVAC contractor to come out	50%	34%	27%	30%	
Recently refilled propane tank / Haven't dealt with my propane contractor yet/using up supplies/wood first	11%	8%	6%	7%	
The cost	3%	14%	16%	17%	
Waiting on appliance delivery/conversion kit	6%	12%	11%	10%	
Waiting for warmer weather/seasonal home	7%	10%	7%	7%	
Need more information	4%	10%	9%	0%	
Have already converted/taken the steps	3%	6%	6%	7%	
Just haven't gotten around to it	4%	0%	5%	10%	
Planning on moving	1%	2%	5%	0%	
Waiting on EPCOR/installation of supply lines	2%	0%	1%	3%	
Not your decision – it's up to landlord/condo management	<1%	2%	2%	0%	
Other	2%	2%	2%	3%	
Don't know	5%	0%	4%	7%	

Other Reasons: The majority of respondents did not mention any other ¹² reasons; 5% are waiting on HVAC contractor, 3% on warmer weather





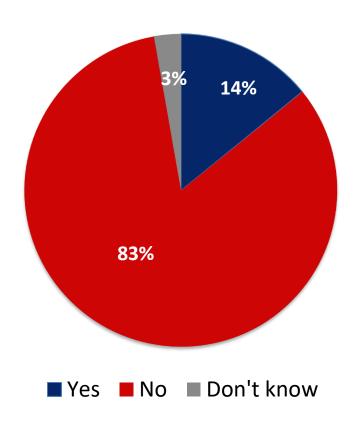


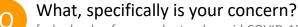
COVID-19 Outbreak Impact: Half (49%) claim health concerns impacted their decision; 30% will switch within 3 to 6 months

Q

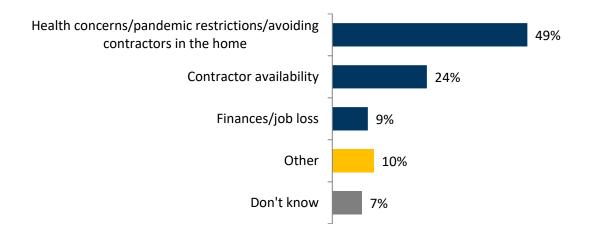
Does the current COVID-19 outbreak have any impact on your decision to switch to natural gas or when you plan on switching?

[asked of all respondents; n=474]



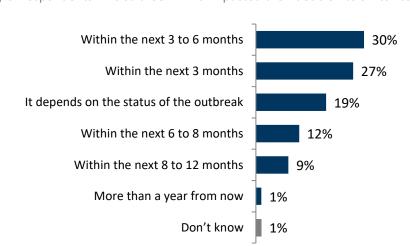


[asked only of respondents who said COVID-19 impacted their decision to switch to natural gas; n=67]



If you are delaying converting to natural gas due to the COVID-19 outbreak, which of the following best describes when you would consider switching to natural gas?

[asked only of respondents who said COVID-19 impacted their decision to switch to natural gas; n=67]





For more information, please contact:

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Building Understanding.



Ar	nnual Update to the 2020-2023 EPCOR (S	South Bruce) Gas Supply Plan Filed: 2021-04-30 EB-2021-0146 Page 85 of 88
Appendix F - EPCOR	South Bruce Performa	ance Scorecard

	Performance Categories	Intent of Measures	Measures	Sample	2020
1. Cost Effectiveness	Policies & Procedures	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
			Transacting counterparties have met appropriate credit requirements	%	100%
	Price Effectiveness	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%
			2. Monthly	%	81.3%
			3. Seasonal	%	0%
			4. Annual	%	0%
			5. Reference Price History	Graph	System Gas Commodity Charge 14.0 13.5 13.0 12.5 11.5 11.0 Apr-21 Ap

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

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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