

Patrick Wruck
Commission Secretary

Commission.Secretary@bcuc.com bcuc.com

Suite 410, 900 Howe Street Vancouver, BC Canada V6Z 2N3

P: 604.660.4700 **TF:** 1.800.663.1385 **F:** 604.660.1102

June 28, 2017

Via email Letter L-15-17

Ms. Diane Roy Vice President, Regulatory Affairs FortisBC Energy Inc. 16705 Fraser Highway Surrey, BC V4N 0E8 gas.regulatory.affairs@fortisbc.com

Dear Ms. Roy:

Re: FortisBC Energy Inc. - 2017/2018 Annual Contracting Plan for the period November 1, 2017 to October 31, 2018

On May 1, 2017, FortisBC Energy Inc. (FEI) filed with the British Columbia Utilities Commission (Commission), on a confidential basis, its 2017/18 Annual Contracting Plan (ACP) for the gas year starting November 1, 2017 and ending October 31, 2018 (2017/18 ACP). The Commission accepts the FEI 2017/18 ACP and items as set out on pages 9 to 11. The major portfolio changes affecting the FEI 2017/18 ACP are as follows:

- 1. <u>Forecast Design Peak Day Demand</u>: FEI recommends a peak day value for 2017/18 of 1,325 terajoules per day (TJ/d), an increase of 9 TJ/d from the amounts accepted in the 2016/17 ACP for the period November 1, 2016 to October 31, 2017.
- 2. <u>Annual Normal Demand</u>: annual normal demand for 2017/18 is projected at approximately 124 petajoules (PJ) resulting in an average daily normal load of 339 TJ/d. In 2016/17, the total annual normal demand was forecast to be 121 PJ that resulted in a daily normal load of 331 TJ/d.
- 3. <u>Commodity Portfolio</u>: Station 2 baseload supply increases by 6 TJ/d and AECO/NIT baseload supply increases by 2 TJ/d.
- 4. <u>Commodity Portfolio</u>: Commodity Providers' fuel requirements for gas delivery on November 1, 2017 will be evaluated and communicated before October 2017. For the period November 1, 2016 to October 31, 2017 the fuel percentages are 4.6% at Station 2 and 1.1% at AECO/NIT.
- 5. <u>Commodity Portfolio</u>: FEI recommends continuing with a balanced mix of daily and monthly priced supply to provide operating flexibility and to mitigate adverse price movements.
- 6. <u>Commodity Portfolio</u>: FEI recommends consideration of longer term supply contracts with BC gas producers, up to ten years in length, in the interest of supply security at the Station 2 market hub.
- 7. <u>Commodity and Midstream Portfolio</u>: FEI recommends term purchases at Station 2 out to the 2020/21 gas year in the interest of pricing diversity and supply security at Station 2.

- 8. <u>Midstream Portfolio</u>: Maintain existing physical resources for the 2017/18 gas year, which includes storage, and transportation capacity on Westcoast's T-South and T-North, TransCanada's NGTL and FoothillsBC system, and Northwest Pipeline's system.
- 9. <u>Midstream Portfolio</u>: FEI recommends continuing to hold more T-South Huntingdon Delivery pipeline capacity than Core customers require for the 2017/18 gas year, and release a portion of this capacity to customers currently under the Transportation service model for the 2017/18 gas year.
- 10. <u>Midstream Portfolio</u>: Given the potential recall of Mist supply in the future, FEI recommends renewing Mist contracts earlier than normal. FEI will begin renewing Mist Contract D which expires on May 31, 2018.
- 11. <u>Midstream Portfolio</u>: Renew FortisBC Huntingdon Inc. (HIPCO) transportation capacity that expires October 31, 2017.

The Commission requests FEI to file its 2018/19 ACP by May 1, 2018. In addition, the Commission requests FEI to include the following information in the 2018/19 ACP:

- An update to the Northeastern BC market study with the scope and detail of the update to be determined by FEI.
- An update on the efforts to establish key relationships with producers who plan to develop supply in the Horn River, Montney and other producing regions of British Columbia over the long term.
- A review and analysis of the operational experience with Mt. Hayes and Tilbury liquefied natural gas (LNG) peaking resources for the 2017/18 contract year, including an analysis of the potential impact of LNG service under Rate Schedule 46 service on the availability of these peaking resources for the core natural gas customers for the 2018/19 and future years.
- A load forecast for Rate Schedule 46 customers, the supply arrangements for meeting these customer's load requirements and FEI's plan for integrating this demand into the overall supply portfolio.
- A review of the storage and transport requirements and alternatives for the 2018/19 and future contract
 years, including an analysis to optimize the amounts of transportation and storage to be contracted in future
 years taking into account the regional infrastructure and market developments currently in place and
 anticipated to be in place in the future.

FEI is requested to file, for information purposes, a report summarizing the process and the outcome of its plans to release a portion of its Spectra T-South pipeline capacity to transportation service customers for the 2017/18 gas year within 30 days of completing the release.

Exclusive of the non-confidential Executive Summary, the Commission will hold the 2017/18 ACP confidential as it contains commercially sensitive information. A copy of FEI's non-confidential Executive Summary of the FEI 2017/18 ACP is attached and is available for public review.

Sincerely,

Original signed by:

Patrick Wruck Commission Secretary

LC/kn Enclosure



EXECUTIVE SUMMARY

2 1 INTRODUCTION

- 3 The Annual Contracting Plan (ACP) is a gas supply planning document filed with the British
- 4 Columbia Utilities Commission (the Commission) in the spring of each year. The ACP sets out
- 5 the forecast requirements for all FEI natural gas service areas and the proposed contracting of
- 6 resources that are planned to meet these requirements for the upcoming gas contract year.
- 7 The ACP also includes a review of regional marketplace developments that provides context for
- 8 the overall portfolio strategy. This review is essential because it helps to plan the ACP beyond
- 9 just the immediate gas year to look out over a three to five year time frame. Longer-term
- 10 planning is important because the resources available for inclusion in the ACP are limited and
- 11 may require long lead times to adjust into the portfolio, and are subject to changing market
- 12 dynamics.

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- 13 This ACP includes content that is consistent with previous years' filings, including topics of
- 14 special interest as directed by the Commission in the acceptance letter of the 2016/17 ACP.²
- 15 This ACP applies to the next gas year that commences on November 1, 2017 and ends on
- 16 October 31, 2018.

1.1 Objectives of the FEI 2017/18 ACP

- 18 The objectives for the 2017/18 ACP remain consistent with past recent Annual Contracting
- 19 Plans that were accepted by the Commission and are as follows:
 - To contract for resources that ensure a balance of security, diversity and reliability of gas supply in order to meet the core customer design peak day and annual requirements, while minimizing the overall cost of the portfolio.
 - 2. To develop a mix of resources in the portfolio that provides flexibility in the contracting of resources based on short term and long term planning considerations, and evolving market dynamics.

2 THE 2017/18 ACP

27 This section provides an overview of significant topics that are discussed in detail in the 2017/18

- 28 ACP, including the forecast design peak day and annual normal loads, changes in contracting
- 29 for resources from the previous year, operational, and long term planning considerations. The
- 30 portfolio of resources included in the ACP is grouped into two components. The first is the
- 31 baseload supply that is required for the full gas year, and which is included in the Commodity
- 32 portfolio. The second component includes seasonal supply, storage, and LNG that is required
- during the winter period and transportation capacity that is required year-round, and is included

¹ Service areas include Mainland, Fort Nelson, Whistler, and Vancouver Island.

² Commission Letter L-20-16 dated August 4, 2016.



- 1 in the Midstream portfolio. FEI gas supply manages these two components on an integrated
- 2 basis, however for the purpose of this ACP the two are identified separately as FEI Commodity
- 3 and FEI Midstream.

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4 Forecast Design Peak Day Demand for 2017/18

 Forecast of 1,325 terajoules per day (TJ/d)³ for 2017/18 Core Market peak day, which represents a 9 TJ/d increase from 2016/17.

Forecast Annual Normal Demand for 2017/18

• Forecast of 124 petajoule (PJ)⁴ for 2017/18, resulting in an average daily normal load of 339 TJ/d. In 2016/17 the total annual normal demand was forecast to be 121 PJ, resulting in a daily normal load of 331 TJ/d.

11 Forecast Annual Normal Demand for Rate Schedule 46 (2017/18)

Forecast of 2.6 PJ for Rate Schedule 46 (RS 46) operational demand.⁵

Biomethane Supply and Demand Customer Forecast

- While the Province of British Columbia's issuance of an Order in Council (OIC) number 161 impacts the Biomethane Program, it is still in the early stages and will not have a significant impact on the 2017/18 ACP.
- FEI will continue to develop and monitor a long term plan with respect to biomethane supply and its impact on future ACPs.

Gas Procurement and Pricing Strategy

- FEI recommends continuing with a balanced mix of daily and monthly priced commodity supply in the portfolio to provide operation flexibility and to help mitigate adverse price movements.
- FEI will continue to assess possibilities of pursuing long term supply contracts, up to ten years in length, with BC gas producers and other counterparties to support supply security at the Station 2 market hub. However, at this time FEI believes the long term agreements that are in place are at a reasonable level.
- FEI will continue to pursue contracting term purchases based on securing the basis when favorable between Station 2 and AECO/NIT monthly index beyond the current gas year of 2017/18 (up to 3 years out).

Commodity Portfolio

 Baseload supply receipt point allocation to remain at the same levels as last year which is 75% at Station 2 and 25% at AECO/NIT.

Midstream Portfolio

³ One TJ is equivalent to 1,000 gigajoules (GJ).

⁴ 1 PJ is the equivalent to 1,000 TJ.

⁵ Operational demand refers to the Tilbury 1A required liquefaction rate of 30-35 TJ/d.

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- FEI will continue retain the current level of storage capacity and hold more transportation capacity than the Core customers require within the 2017/18 ACP, until some of the market uncertainties, discussed in Section 2.2 below are better known and have time to play out.
 - Allocate up to 40 TJ/d of T-South Huntingdon Delivery capacity to Marketers on behalf of
 the transportation service customers.⁶ FEI may have to keep a portion of the capacity if
 transportation service customers return to the bundled service, which will be known by
 August 31, 2017. Therefore the allocation of this capacity will not commence until
 September 2017. FEI will provide the Commission a report summarizing the process and
 outcomes after the capacity release.

2.1 Resource Contracting in the 2017/18 ACP

FEI must be prepared to meet a peak day as well as winter design and normal load forecasts for the year commencing November 1, 2017 and ending October 31, 2018. Moreover, FEI contracts for diverse and flexible resources in order to manage load swings during spells of colder or warmer than normal weather and to mitigate interruptions in delivery capacity related to both transportation and storage in the winter months. FEI strives to procure and deliver natural gas in the most reliable manner possible. This responsibility includes the need to identify, monitor, and mitigate potential operational and market-related risks. In addition, the minimization of costs related to the annual portfolio, while ensuring the delivery of gas each day, is an important key objective. Balancing the need for cost minimization while meeting reliability, diversity, and flexibility objectives will not necessarily always result in the selection of the least cost alternative for inclusion in the portfolio.

The recommended portfolio is based on a balance of resources that meets the objectives of the ACP. In planning the recommended portfolio, FEI takes into account market information available at that time. However, it must be recognised that due to the many factors influencing natural gas supply and demand, the market for natural gas is always changing. Not only are there absolute price changes, but also changes in market factors (premiums or discounts) for securing physical supply. These changes are driven by the relationship between pricing points and the availability of resources that impact the different market hubs where FEI secures gas supply.

The contracting strategy for FEI's Commodity and Midstream portfolios includes a combination of monthly and daily priced supply for price diversification, in addition to contracting at multiple storage facilities and associated transportation resources. Daily priced supply can be resold in the market at the same price as it is bought, therefore removing any price exposure of surplus resources when compared to monthly priced supply. This strategy helps FEI to remain cost neutral when reselling gas on the day. Monthly priced supply helps reduce exposure to market price volatility during the winter months.

FEI takes a longer term outlook when contracting for some resources, like transportation and storage assets, and may be restricted to some degree in changing these resources in the

⁶ 'Transportation service customers' are RS 22, 23, 25 and 27.

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portfolio in a particular year. However, customers realize any benefit associated with these resources because they provide security of supply and increased portfolio diversity. Gas from various storage facilities in the winter provides the portfolio with diversity and intraday flexibility, as well as lower cost summer-priced supply.

2.2 Regional Developments That Could Impact Future ACP Resource Contracting

Key developments in the region have created uncertainty in the marketplace. While none of these developments have a significant impact on FEI's portfolio for 2017/18, they could affect the planning horizon for 2020 and beyond. At a high level, the five market factors that may affect the planning horizon for 2020 and beyond include:

- 1. Large scale industrial projects potentially in service by 2020, could impact regional flow dynamics for all customers in the region. For instance, customers that are currently under the transportation service model may be at risk for their gas supply requirements as they rely on the Sumas/Huntingdon market. This may impact FEI as a supplier of last resort because these customers could potentially come back to the bundled service.
- 2. Increasing demand forecasts within FEI's natural gas service areas.
- 3. Increasing demand forecasts within regional local distributions utilities in the Pacific Northwest Region.⁷
- 4. Risk of FEI's shorter duration market storage assets being recalled by early next decade.
- 5. On April 25, 2017, Westcoast Energy Inc. dba Spectra Energy Transmission, an Enbridge Company (Westcoast)⁸ released a notice about conducting an open season to provide interested parties an opportunity to contract for 190 million cubic feet per day (MMcf/d) of firm 365-day Huntingdon Delivery Area (T-South Huntingdon Delivery) transportation capacity.⁹ It is anticipated that this contracted capacity will be in service November 1, 2020. This will be the last firm contractible pipeline capacity available to secure until a pipeline expansion, which would likely be in service no earlier than 2023.

Given these market factors, FEI will continue to hold more resources than the Core customers require within the ACP until some of the uncertainties are better known. This approach is reasonable because the costs and ability to manage contract renewals within the ACP's portfolio of resources have less risks to Core customers than the alternative option of trying to contract for resources if needed, after the market factors unfold. Holding excess resources in the ACP portfolio has also been consistent over the years, as FEI picked up additional T-South

Northwest Natural's 2016 Integrated Resource Plan indicates future load growth within its service area (Western Oregon and Southwest Washington).

https://www.nwnatural.com/aboutnwnatural/ratesandregulations/regulatoryactivities/integratedresourceplanning

On February 27, 2017 Enbridge Inc and Spectra Energy Inc finalized their merger.

⁹ 90 MMcf/d of the remaining portion of T-South Huntingdon Delivery transportation capacity and a small 100 MMcf/d expansion. Huntingdon Delivery Area (T-South Huntingdon Delivery) is defined in Westcoast's tariff as the area comprised of the Export Delivery Area and the Lower Mainland Area.

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to Huntingdon Delivery transportation capacity in October 2014 when the first market factor discussed above became apparent. Since the 2016/17 ACP filing, FEI began to understand additional market uncertainties in the region, which are discussed above (Market Factors 2-5). FEI will continue to focus on evaluating the resource options in the region to ensure Core customer's gas supply requirements will be in place for not only the short term but long term as

7 2.3 Demand Forecast (Design Peak Day and Normal Load)

Table ES-1 sets out the forecasted design and normal loads during the winter and summer season projected for the next five years. This forecast excludes RS 46, and Biomethane demand.¹⁰

Table ES-1: Forecast Peak Day, Design, and Normal Volumes by Region

Contract Year	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
	(TJ/d)	(TJ/d)	(TJ/d)	(TJ/d)	(TJ/d)	(TJ/d)
Columbia	26	27	27	27	27	28
Lower Mainland	881	887	895	904	913	921
Ft. Nelson	5	5	5	5	5	5
Inland	294	298	301	305	308	312
Whistler	7	7	7	7	6	6
Vancouver Island	103	102	105	108	112	115
Total Peak Day Load	1,316	1,325	1,341	1,356	1,372	1,387
Yr/Yr Change	n/a	9	16	15	16	15
Winter Design Load	652	664	668	680	683	691
Summer Design Load	235	240	242	245	248	251
Average Daily Design Load	408	415	419	426	429	434
Yr/Yr Change	n/a	7	4	7	3	5
Winter Normal Load	534	539	539	542	537	535
Summer Normal Load	188	198	197	197	197	196
Average Daily Normal Load	331	339	339	340	338	337
Yr/Yr Change	n/a	5	0	2	-4	-2
	(PJ/yr)	(PJ/yr)	(PJ/yr)	(PJ/yr)	(PJ/yr)	(PJ/yr)
Annual Normal Load	121	124	124	124	124	123

Notes:

All numbers in terajoules per day except Annual Normal Load, which is in petajoules per year

The forecast of design peak day demand for the 2017/18 contract year is 1,325 TJ/d, which represents a 9 TJ increase from the 2016/17 contract year. For the same contract year, the annual normal load is forecast to increase to 124 PJ from 121 PJ in 2016/17, resulting in an average daily normal load of 339 TJ/d in 2017/18 compared to 331 TJ/d in 2016/17. The 339 TJ/d will be the new daily baseload supply that will be received by FEI Midstream on behalf of the Commodity Providers in accordance with the requirements of the Essential Services Model (ESM).

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Biomethane demand to date has displaced conventional natural gas demand. Therefore, from a supply perspective, it would not add to peak day load. However, FEI may see demand for biomethane that is incremental to natural gas demand in the future.



- 1 As Table ES-1 shows the peak day and design winter load requirements are forecasted to grow,
- 2 which confirms the need for FEI to maintain access to its existing resources for the long term
- 3 and evaluate future resource options should they become available.
- 4 Table ES-1 does not include a forecast of future additional demand from customers seeking
- 5 LNG for transportation (RS 46) or Biomethane purposes. At this time RS 46 customer demand
- 6 and Biomethane demand is not material enough to warrant FEI purchasing baseload supply for
- 7 the 2017/18 contract year. This is mainly because the expected RS 46 customer demand is a
- 8 small volume relative to the total liquefaction capacity and buffer storage available for the
- 9 2017/18 gas year, which gives FEI the flexibility to suspend liquefaction on a peak day to meet
- 10 requirements on the rest of the system. As such, for planning purposes for the 2017/18 gas
- 11 year, FEI has not included a requirement to meet RS 46 load on a design day. As RS 46, and
- 12 Biomethane demand grows in the future, it will be reflected in the forecast and FEI's portfolio will
- 13 be adjusted to accommodate it.
- 14 On March 21, 2017, the Province of British Columbia issued an OIC number 161 which will
- 15 directly impact the Biomethane Program. Specifically, the OIC resulted in an update to the
- 16 Greenhouse Gas Reduction Regulation and it states that FEI may acquire an amount of
- 17 biomethane up to 5% of its 2015 non-bypass load at a price up to \$30.00 Cdn/GJ. This
- 18 regulation increases the total maximum annual amount of biomethane that FEI may purchase to
- approximately 8.9 PJ or about 24 TJ/d. At this time, FEI is still evaluating the potential long term
- 20 impact of this regulation on the ACP.

2.1 The 2017/18 Portfolio

- 22 Table ES-2 sets out a summary of the portfolio planned for the 2017/18 gas year. FEI
- 23 performed a review of the supply options available for the upcoming winter period, taking into
- 24 account key market developments that have affected regional pricing and supply sourcing
- 25 dynamics in the US Pacific Northwest (PNW). After evaluation of the new peak, design and
- 26 normal day load forecasts, current portfolio mix, and market developments, FEI recommends
- the following resource portfolio for 2017/18:



Table ES-2: Planned Peak Day Portfolio for 2017/18 vs. 2016/17 Portfolio

Peak Day Portfolio (TJ/d)	2017/18 Portfolio- Planned	2016/17 Portfolio	
Fort Nelson Division	5	5	
Alberta Baseload Supply (CCRA gas & Mktrs)	85	83	
Station 2 Baseload Supply (CCRA gas & Mktrs)	254	248	
Total Commodity Supply	339	331	
Seasonal Supply	172	175	
Seasonal Storage	197	195	
Market Area Storage	210	210	
Peaking Supply	-	-	
Spot Supply	48	46	
Mt. Hayes LNG	163	163	
Tilbury LNG	163	163	
Industrial Curtailment	28	28	
Total Midstream Supply	981	980	
Total Resources (TJ/d)	1,325	1,316	
Peak Day Demand (TJ/d)	1,325	1,316	

2.1.1 COMMODITY PORTFOLIO OVERVIEW: 2016/17

- 4 Under the ESM, Commodity Providers supply the daily baseload volume that is equivalent to the
- 5 normalized annual demand, which is derived from the Core Market normal load forecast.
- 6 Commodity Providers must provide the daily normalized load requirement of 339 TJ, plus fuel,
- 7 effective November 1, 2017. Baseload supply for the 2017/18 gas year is based on the current
- 8 receipt point allocation percentages that are in effect, specifically 75% at Station 2 and 25% at
- 9 AECO/NIT.

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- 10 Natural gas marketers participating in the Customer Choice Program (Gas Marketers) are
- 11 responsible for ensuring a portion of the baseload supply is delivered to FEI at each of the
- 12 receipt points. For 2017/18 the average daily volume that needs to be provided by Gas
- 13 Marketers will is approximately 12 TJ/d while 327 TJ/d will be provided by FEI Commodity. The
- 14 daily volume provided by Gas Marketers remains unchanged compared to the 2016/17 gas
- 15 year. Table ES-3 shows the estimated future Customer Choice marketer volumes and
- enrolments for 2017/18 compared to the estimates provided for the 2016/17 ACP.

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Table ES-3: Year-over-Year Change in the Estimated Customer Choice Marketer Volume and Enrolments¹¹

Contract Year	2017/18	2016/17	Yr/Yr Change	
	(TJ/d)	(TJ/d)	% Change	
Rate 1	6.8	6.4	6%	
Rate 2	3.1	3.1	-	
Rate 3	1.9	2.2	-16%	
Average Daily Volume	11.8	11.7		
Customer Enrolments	33,000	32,000	3%	

FEI will be required to provide the following amounts at the receipt delivery points starting November 1, 2017:

5 Station 2: (339 TJ/day – 12 TJ/day) x 75% plus 4.6% fuel = 256 TJ/day 6 Alberta: (339 TJ/day – 12 TJ/day) x 25% plus 1.1% fuel = 83 TJ/day

The methodology used to calculate the fuel gas percentages that are used above is consistent with the previous year's approach and is described in FEI's letter to the Commission dated February 7, 2008. On September 28, 2016, the Commission approved FEI's application to increase the fuel gas percentage at Station 2 from 4% to 4.6%, and at AECO/NIT from 1% to 1.1%. FEI will continue to monitor the Fuel Gas account and will report the results of its review of the Fuel Gas Percentages to the Commission by the end of the 2017 summer, including a request to modify the fuel rates if necessary.

2.1.2 FEI MIDSTREAM PORTFOLIO OVERVIEW: 2017/18

FEI is responsible for managing gas supply so that it meets the variability in daily customer demand, including requirements on a peak day. It does this by using seasonal and peaking commodity, storage services, and third party pipeline transportation capacity to meet swings in demand. To determine the appropriate portfolio for 2017/18, including the replacement of any expiring resources and/or meet future growth requirements, FEI assessed several alternatives for 2017/18 including:

- Station 2 supply and associated T-South transportation capacity;
- Seasonal storage (Aitken Creek Storage, Alberta Storage);
- Market area storage (Jackson Prairie Storage (JPS) and Mist);
 - Huntingdon and Kingsgate seasonal, spot, and peaking supply; and
- Alberta and Stanfield supply with associated firm transportation capacity.

FEI also has on-system gas supply from resources such as the Tilbury and Mt. Hayes LNG storage facilities. These facilities can provide high volume supply on short demand during periods of cold and extreme winter weather or during emergency situations.

¹¹ The estimate are based on actual and forecasted enrollments in the Customer Choice Program taken in March 2016(for the 2016/17 forecast) and March 2017 (for the 2017/18 forecast).



3 REGIONAL DEVELOPMENTS

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Significant changes are occurring in the natural gas marketplace in western Canada, driven by two main developments that will impact traditional supply and demand dynamics, regional gas flows, and regional market price relationships. The first development relates to the prospect for incremental demand in the Lower Mainland and the Pacific Northwest (PNW) that is expected to arrive as soon as 2020. This includes gas demand for PNW methanol projects and LNG export projects such as Woodfibre. It has driven shippers to contract for firm transportation capacity on Westcoast's T-South system. 12 Historically, Westcoast has offered up to 1,700 MMcf/d of contractible firm 365-day T-South Huntingdon Delivery capacity, based on the winter design capacity of its system. In October 2014, Westcoast reduced contractible firm service to 1,450 MMcf/d based on its expected system capacity in the summer months. The announcement resulted in shippers including FEI to contract the last remaining contractible 365-day Westcoast T-South Huntingdon Delivery capacity at that time. In November 2016, upon receiving NEB approval, Westcoast conducted an open season to contract for 160 MMcf/d of T-South Huntingdon Delivery Capacity for each November to March winter period commencing November 1, 2017 (Winter Firm Service). The Winter Firm Service capacity was 160 MMcf/d of the remaining 250 MMcf/d of T-South Huntingdon Delivery Capacity. Northwest Innovations Works, who are proposing to construct methanol production plants in Washington and Oregon State, were awarded a majority of this capacity, while Painted Pony, a major producer in Northeast BC received a minor portion.

FEI's customers are currently not at risk of a shortfall of firm upstream transportation capacity, but could be in the near future if FEI's loads grow and/or existing resources are re-called (i.e. Mist). Moreover, there is a significant volume of physical gas supply serving Lower Mainland customers on the transportation service model that may be at risk as well. A fully contracted T-South pipeline risks leaving these customers without adequate gas supply or they will need to pay significantly higher commodity prices at Huntingdon. This risk will likely persist if this incremental new demand arrives before any additional infrastructure is completed. FEI may then face the potential that these customers will seek to return to bundled service. These potential changes require FEI to assess its resource requirements and the ability of customers currently on the transportation service model to continue to receive future supply from a different perspective.

Westcoast is currently conducting an open season for the remaining 90 MMcf/d of 365-day contractible portion of T-South to Huntingdon Delivery capacity, and a small 100 MMcf/d expansion. This will present the last potential opportunity for accessing capacity to help serve current and future regional demand until a new pipeline is built. However, there are a number of uncertainties as to when that could occur, such as who underwrites it as well as environmental/regulatory challenges).

¹² Westcoast operates the T-South pipeline system that is the main transportation system for moving natural gas from northeast BC to markets in BC and the US PNW and on which FEI is heavily dependent.



Another regional development relates to the significant supply potential of northeast BC. It has prompted the development of infrastructure initiatives to provide greater access to existing and new markets. With the increasing demand from industrial, power generation and oil sands demand in Alberta, TransCanada is expanding into northeast BC to access the significant new production basins that are being developed there. Numerous LNG export projects have also been announced for the west coast of BC. FEI is actively involved in the National Energy Board (NEB) proceedings that have the potential to affect FEI's access to supply, and is also actively involved in developing solutions with regional stakeholders to help ensure issues related to third party pipeline infrastructure are resolved. These activities are important because they help to ensure that customers in BC will continue to have access to gas supply at fair market prices.

The proposed LNG export projects in BC and Oregon could impact regional gas flows by the start of the next decade. 19 LNG export projects have been proposed for locations on the west coast of BC. Of these, 13 are located in the Kitimat, Prince Rupert, Stewart and Kitsault region, on the northern coast of BC, and 6 are located outside of this area near Squamish, Delta Campbell River, and Vancouver Island. The projects considered for the north coast of BC will all require substantial new pipeline infrastructure to bring supply from the new production basins in northeast BC. Despite the significant number of LNG projects being proposed in BC, it is expected that only two to three projects will actually move forward and get constructed. Environmental and regulatory hurdles have hampered the development of many of the proposed projects in BC and Oregon. Moreover, the substantial fall in oil prices relative to when these projects were first announced and the glut of LNG supply currently on the market, have led to the delay of many of the LNG projects and the cancellation of some.

BC is also at the forefront of various developments surrounding pipeline, infrastructure and potentially significant volumes of LNG to be exported to Asian markets over the next few years. However, the growth of natural gas production in BC is also subject to various influences such as pricing of the commodity, influence of changing demand dynamics, and cost of production. Continued expansion of gas production should benefit consumers in BC as this provides opportunities for increased supplies to be available to BC markets well into the future. Therefore, FEI will continue to proactively monitor developments and foster relationships with key producers and other counterparties in order to help ensure that accessible supply and competitive pricing are available at Station 2 over the long term. By continuing to monitor and actively participate in issues and developments affecting the BC and regional gas marketplace, FEI should be in a position to identify if and when it needs to adjust its gas portfolio strategy. This would include for instance, adjusting the use and mix of counterparties or fundamentally altering FEI's physical resources. These activities are critical to helping ensure that FEI remains effective in providing gas supply to customers and so that it is able to continue to meet the security of supply, resource diversity, and cost minimization objectives of the gas portfolio. However, at this time the options to adjust FEI's physical resources are limited given the region's resource constrained environment.



4 CONCLUSION

- 2 The portfolio for 2017/18 has been developed to meet the objectives of the ACP. The key
- 3 objectives of the ACP are for FEI to contract for resources that provide supply security, diversity,
- 4 and flexibility while minimizing overall portfolio costs. In order to meet these objectives, the
- 5 portfolio needs to be planned over a multi-year period given the limited resources available, the
- 6 length of the contractual terms many resources in the portfolio are subject to, and changing
- 7 market dynamics.
- 8 This ACP combines the forecast load requirements for all of FEI natural gas service areas
- 9 including operational demand for RS 46 customers. These requirements are used to determine
- 10 the optimal mix of commodity, storage, and transportation resources required to meet this
- 11 forecast demand. The ACP takes into consideration changes in the forecast customer load
- 12 requirements as well as relevant market developments.
- 13 Key developments in the region continue to take place in terms of supply and demand, which
- 14 has created uncertainty in the marketplace. While none of these developments have a
- significant impact on FEI's portfolio for 2017/18, they could affect the planning horizon for 2020
- and beyond. Over the longer term, incremental demand in the region will drive the need for a
- 17 pipeline expansion. The challenge this creates is the need to match the timing of when the new
- demand materializes with the construction of new pipeline capacity. A potential mismatch of
- 19 these developments has caused existing resources to have more value, especially T-South
- capacity to Huntingdon. Given the risk and the value of these regional assets, FEI continues to
- 21 pursue the strategy to hold more resources in its portfolio than the Core customer require for
- 22 2017/18. Consistent with the objectives of the ACP, this approach provides supply security,
- 23 optionality and flexibility for FEI if certain market conditions unfold. The alternative option of
- 24 trying to contract for resources if needed after market conditions unfold puts FEI's customers at
- 25 higher risk and potential costs than the approach outlined in this ACP.