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July 20, 2026

Movement of United Professionals
c/o Allevato Quail & Associates
1943 E. Hastings Street
Vancouver, BC
V5L 1T5

Attention: Jim Quail

Dear Jim Quail:

Re: FortisBC Energy Inc. (FEI)
2026 Long Term Gas Resource Plan (LTGRP)
Response to the Canadian Office and Professional Employees Union, Local 378
(known as Movement of United Professionals or MoveUP) Information Request
(IR) No. 1

On March 27, 2026, FEI filed the 2026 LTGRP referenced above. In accordance with the regulatory timetable established in BCUC Order G-84-26 for the review of the 2026 LTGRP, FEI respectfully submits the attached response to MoveUP IR No. 1.¹

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Sarah Walsh

Attachments

cc (email only): Registrar
Registered Interveners

¹ For convenience and efficiency, if FEI has provided an internet address for referenced reports instead of attaching the documents to its IR responses, FEI intends for the referenced documents to form part of its IR responses and the evidentiary record in this proceeding.

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1.0 TOPIC: LOAD FORECAST

Reference: Exhibit B-1, Application, at p. 2-1:

The newly-elected federal government in 2025 has shifted toward an economic growth and affordability-focused agenda, emphasizing private sector investment and expanding non-United States of America (US) exports in response to rising tariffs. The shift includes rollback of key federal climate policies, such as the consumer carbon tax and near-term zero-emission vehicle (ZEV) mandates. Provincially, the policy landscape is undergoing similar changes. Following a closely contested provincial election in 2024, priorities are increasingly focused on resource development, cost control and managing the provincial deficit. The Province has also rolled back the consumer carbon tax and deemphasized the ZEV mandate. These shifts underscore the political shift towards affordability, competitiveness and economic growth, creating both opportunities and uncertainties for FEI's long-term planning.

Contextual Comment:

We propose that the following summarizes a plausible general outlook for the coming several years:

- (a) Even if the Persian Gulf War is resolved within a few days, weeks or months, LNG production and transportation from the Persian Gulf region will take an extended period to approach their pre-war levels. Strategic instability will remain a problem in that region for some time, even if a cessation of military hostilities can be negotiated.
- (b) On one hand, this has motivated markets customarily served by that region to look urgently for alternative and lower-risk sources of natural gas, including from North America. In Europe, this comes on top of a shift away from reliance on Russian natural gas following the invasion of Ukraine.
- (c) The British Columbia coast is a long way via LNG tanker to European ports, but in spite of that, disruptive circumstances have opened prospects for a German market for our LNG, for example.
- (d) These pressures have motivated the same markets to accelerate transition from their reliance on fossil fuels to renewable and other electrical resources. On the other hand, they are leading to a degree of de-prioritization of decarbonizing electrical generation in the effort to meet surging demand, which includes heavy incremental demand driven by the massive development of datacentres and artificial intelligence technologies in the advanced economies.
- (e) Meanwhile, in Canada the focus of national policy has shifted to large-scale strategic investment in fossil and renewable energy and other resource development, and in a range of energy-intensive industries, and recently a national AI strategy, in response to the threat posed by the aggressive hegemonic stance of the USA.
- (f) However, amidst this vortex of disruption and change, factors including the disruption of global trade policies and relationships, the metastasizing global

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economic impacts of the Persian Gulf War (accentuating a risk of global stagflation), ballooning global corporate and public debt, and possibly an enormous financial bubble in the American tech sector, all create the risk of a major global economic slowdown which would depress demand for both electrical and hydrocarbon-based energy supply.

(g) And the climate crisis has not gone away, but continues to deepen, undermining agricultural productivity and inhabitability in many parts of the world, and providing an over-arching disruptive signal that will make itself felt through all of the noise regardless of efforts to ignore it.

(h) Geopolitical and geo-economic forces are simultaneously pushing and pulling in an exceptionally complex manner, and are unlikely to find relative stability in the short to medium-term.

Request:

1.1 If FEI considers that this scenario is not plausible, please explain why and to what extent.

Response:

The preamble is not a discrete “scenario” comparable to those used in the 2026 LTGRP. Rather, the preamble reflects MoveUP’s opinion, predictions or high-level characterization of a set of geopolitical, economic, technological, policy and energy market issues that may occur independently, concurrently, or not at all over the planning horizon. Given the breadth and generality of the statements, it is not feasible to meaningfully assess the plausibility of the preamble as a unified outlook, nor to determine its likely net impacts.

However, when considered directionally, individual components of the outlook described in the preamble may result in both upward and downward impacts on natural gas demand in BC. Factors such as energy security considerations, growing demand for LNG exports and marine applications, increasing demand associated with new industrial development, and the continued role of natural gas in residential, commercial, industrial and transportation sectors would support higher demand for natural gas in BC in the coming 5, 10 and 20 years. However, slower economic growth, accelerated electrification due to cost improvements or government policy, energy efficiency improvements, and unexpected economic shocks could moderate or limit gas demand growth. This range of outcomes is captured within the 2026 LTRGP scenarios.

Some of the individual developments described in the preamble could influence the broader planning environment in BC. Within the current planning environment, natural gas remains an abundant, cost-effective and strategically important energy resource for BC and Canada, supporting economic growth, export opportunities, and energy system reliability. FEI expects that natural gas produced in BC and Alberta will continue to play a significant role in meeting domestic and export energy demand in the coming 5-, 10- and 20-year planning horizons, consistent with

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national initiatives such as Powering Canada Strong¹, which highlights an expanding role for natural gas in supporting economic growth and energy security.

1.2 Directionally, what are the likely net impacts of that scenario (or a modified version of it) on demand for natural gas produced in British Columbia over the coming 5, 10 and 20 years?

Response:

Please refer to the response to MoveUP IR1 1.1.

1.3 How much confidence should the Commission have in economic forecasts (for example, for projecting demand and customer growth) that were formulated before the Persian Gulf War?

Response:

While geopolitical developments such as the Persian Gulf conflict may create short- to medium-term volatility, they do not invalidate FEI's underlying forecasting methodologies. FEI relies on multiple independent sources for its economic forecast data, including the Conference Board of Canada,² and regularly updates its forecasts as part of its planning processes. Further, FEI's approach does not solely rely on economic forecasts, but rather on a range of inputs and planning perspectives that have been refined over multiple planning cycles, including periods of previous geopolitical disruption. This approach provides a reliable foundation for long-term resource planning, recognizing that some divergence between economic forecast data and actual economic conditions over the course of the 2026 LTGRP cycle is expected.

1.4 What are the implications of escalating uncertainty for how FEI should go about resource planning?

¹ Government of Canada, "Powering Canada Strong: A National Strategy for an Electrified Canadian Economy" (March 23, 2026) online at: <https://natural-resources.canada.ca/energy-sources/electricity-infrastructure/powering-canada-strong-national-strategy-electrified-canadian-economy>.

² Conference Board of Canada rebranded as Signal49 Research in January 2026.

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Response:

Uncertainty reinforces the relevance and importance of long-term resource planning. The purpose of scenario planning is not to predict a single future outcome but to evaluate a range of plausible futures and identify actions (e.g., investing in cost-effective DSM) that remain applicable across different conditions. FEI's resource planning approach incorporates uncertainty through alternative scenarios, sensitivity analysis, continuous monitoring of market and policy developments, regular updates to planning assumptions, and most importantly – being prepared for a range of plausible scenarios.

As conditions evolve and unexpected events arise, FEI will adjust its near-term actions, infrastructure planning activities, and resource development priorities to reflect prevailing uncertainties and their relevance to FEI, informed by the most current information available.

1.5 How would FEI modify the roll-out of the initiatives and programs described in its resource plan in response to significant externally-sourced economic shocks?

Response:

Significant externally-sourced economic shocks have the potential to change the timing or prioritization of FEI's initiatives and programs. FEI continuously monitors economic, market, policy, and customer demand developments as part of its regular planning processes, maintaining an approach that prioritizes flexibility and resilience to remain responsive to evolving conditions. The appropriate response to a significant externally-sourced economic shock would depend on the actual impact and duration of the event on FEI and its customers. Potential responses may include:

- Re-evaluating demand projections;
- Adjusting DSM programs;
- Adjusting the timing of resource acquisitions;
- Re-assessing infrastructure investment timelines;
- Modifying procurement timelines; and
- Updating future planning assumptions.

Affordability, reliability, and sustainability will continue to be fundamental interconnected energy priorities for FEI that must be balanced and managed collectively regardless of economic changes.

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1 **2.0 TOPIC: LNG**

2 **Reference: Exhibit B-1, Application, Figure 3-9, at p. 3-24: Total 1 Annual**
3 **Demand – All Sectors**

4 **Request:**

5 2.1. Does this figure indicate that LNG is the only major growth market sector projected
6 by FEI after 2030?

7
8 **Response:**

9 Figure 3-9 identifies opportunities for growth beyond 2030 across several sectors. In particular,
10 the Lower-Carbon Transportation and LNG Future scenario includes growth in the marine sector,
11 primarily driven by demand for LNG as a marine fuel, as further detailed in Figure 3-1 of the 2026
12 LTGRP. Growth is also expected from new large load demand, including the Woodfibre LNG
13 Project (110 PJ starting in 2028) and a second generic large industrial customer, also assumed
14 at 110 PJ per year beginning in 2033. Additionally, growth in demand for the transportation sector,
15 specifically from on-road vehicle fuel switching, is detailed in Figure 3-2 of the 2026 LTGRP.

16 The identification of additional growth from the transportation sector, LNG and other large
17 industrial customers, if realized, has implications for resource planning and related
18 considerations. From a resource planning perspective, the inclusion of large, discrete loads –
19 such as an additional generic industrial customer – as well as growing transportation demand and
20 potential opportunities in the marine sector, could increase system demand and alter demand
21 patterns that would need to be accounted for in system planning, should these loads materialize.
22 These loads have the potential to influence peak demand, annual throughput, and infrastructure
23 requirements, and may require timely investments in upstream supply, gas supply resources, as
24 well as transmission and distribution capacity, to maintain reliable service. These considerations
25 are addressed in Sections 6 and 7 of the 2026 LTGRP, which outline the implications of large
26 load developments for energy supply and system planning.

27 To the extent that such loads materialize and contribute to increased system utilization, additional
28 growth in transportation demand, LNG demand and demand from other large industrial customers
29 may also provide benefits from a rate perspective. Specifically, these customers can contribute
30 steady, high-volume demand, which supports the recovery of fixed system costs across a larger
31 throughput base, thereby helping to moderate upward pressure on rates. Where these loads are
32 served under interruptible rate structures, they may also provide operational flexibility by
33 improving system utilization outside of peak periods and supporting more efficient management
34 of peak demand.

35 More broadly, potential growth in transportation demand, LNG demand and demand from other
36 large industrial customers reinforces the importance of maintaining a flexible, scenario-based
37 planning framework. This approach enables FEI to assess a range of outcomes, including
38 variations in project timing, load realization, transportation fuel adoption rates, and market
39 conditions, and to evaluate the associated implications for supply portfolios, DSM planning, and
40 overall risk management.

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2.2 What are the larger-scale consequences of this for resource planning and other purposes?

Response:

Please refer to the response to MoveUP IR1 2.1.

2.3 What is the potential for increasing exports of LNG from North America to expose our continental natural gas commodity supply to global prices?

2.3.1 Is there a tipping-point where this effect would be felt?

Response:

There are many factors that can influence North American and Western Canadian natural gas prices and increasing LNG exports from North America could be one of them. Other market drivers include natural gas production levels, production shut-ins, and weather-related demand (including colder-than-normal winters). The interaction of these factors makes it difficult to isolate the impact of any single driver on natural gas prices. As a result, there is no clear way to determine the degree to which LNG exports materially impact North American natural gas prices in comparison to global commodity prices.

FEI's gas procurement activities are primarily influenced by regional natural gas market conditions in Western Canada, rather than broader North American pricing dynamics. Accordingly, FEI's assessment of supply adequacy and price impacts is focused on the availability and development of natural gas resources within the Western Canadian Sedimentary Basin (WCSB), specifically in northeast BC.

Based on publicly available information, the natural gas resource base in the WCSB is more than able to support the long-term demand requirements of existing domestic markets, as well as incremental demand from LNG exports. This was detailed in Section 5.2 of the 2026 LTGRP.

For example, recent data indicates that remaining marketable natural gas reserves in BC increased to approximately 99.6 Tcf as of 2024.³ For context, the annual natural gas demand on FEI's system in 2025 was 0.2 Tcf. This comparison illustrates the significant scale of the provincial

³ BC Energy Regulator, "British Columbia's 2024 Oil and Gas Reserves and Production Report" (October 2025), online at: <https://www.bc-er.ca/files/reports/Reserves-and-Production-Reports/2024-Oil-and-Gas-Reserves-and-Production-Report.pdf>.

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1 resource base relative to in-province demand, and its ability to support long-term production for
2 both domestic end use and LNG export development. The substantial resource base in the WCSB
3 also provides producers with the ability to increase production in response to additional demand
4 from LNG export facilities, which may help mitigate upward pressure on prices over time.

5

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1 **3.0 TOPIC: RNG**

2 **Reference: Exhibit B-1, Application, Table 5-3, at p. 5-8, Potential RNG –**
3 **Breakdown by Within Province and Out-of-Province Sources**
4 **(PJ/Year), and associated discussion.**

5 **And reference: Exhibit B-1, Application, section 5.3.3, Longer-Term**
6 **View on the Range of RNG Options:**

6 There is a significant potential for RNG across North America and globally. With respect to the
7 global potential, a study published by the IEA estimates that there is the potential for about 38,000
8 PJ.¹³⁵ More recently, the Inner City Fund (ICF) published a report estimating about 275 PJ of
9 expected RNG supply by 2030 within North America based on existing projects.¹³⁶ The available
10 future supply of RNG remains underdeveloped.
11 However, all of that potential may not be realized as the viability and scalability of the RNG supply
12 forecast hinges upon three interconnected factors: (1) feedstock limitations; (2) technology
13 challenges and opportunities; and (3) policy dependence.

8 **Request:**

9 3.1 What assumptions are FEI making about the potential rate of growth of competing
10 demand for RNG within the USA (and in other Canadian jurisdictions) through
11 2050?

13 **Response:**

14 FEI has relied on third-party reports for estimates of the growth in demand for RNG within the US
15 and in Canada, including the November 2025 report by ICF Resources LLC,⁴ which estimates
16 that by 2030 the total demand for RNG could reach between 572 and 612 Btu/year or
17 approximately 600 to 645 PJ annually across North America. This demand is expected to
18 materialize from several market segments, including the on-road transportation sector, non-road
19 transportation sector (e.g., feedstocks for Sustainable Aviation Fuel, or SAF), commercial and
20 industrial sectors (including other utilities), electricity generation, and potentially other users
21 connected to the natural gas system.

22 FEI continuously monitors the RNG market within North America and participates in various RNG
23 industry associations that have current insight into both the supply and demand for RNG across
24 North America. This monitoring supports FEI's procurement planning by helping assess supply
25 competition and price pressure.

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28

⁴ ICF, Near-Term Renewable Natural Gas Demand Assessment Final Report (November 2025), prepared for RNG Coalition, online at:
<https://static1.squarespace.com/static/53a09c47e4b050b5ad5bf4f5/t/69402f2534cfa82887307413/1765814054283/RNG+Near-Term+Demand+Study+FINAL+Report+251124.pdf>.

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1 3.2 Does FEI anticipate that RNG (or some version of its environmental attributes)
2 produced outside of North America will become available to the utility?

3
4 **Response:**

5 FEI is seeing growing interest in the delivery and transport of RNG in the form of Bio-LNG between
6 continents. This indicates that RNG produced outside North America, or the associated
7 environmental attributes, could be available in the future.

8
9
10
11 3.3 What is FEI's estimation of the impact of growing competing demand for RNG in
12 jurisdictions beyond BC on the availability and cost of economically-exploitable
13 RNG through 2050?

14
15 **Response:**

16 FEI does not currently have any concerns with future demand impacting its ability to compete for
17 future RNG supply. FEI had been able to procure RNG at a reasonable cost for its customers
18 over the past decade, even though demand has outpaced supply at times. FEI's continuing ability
19 to procure RNG, even during times where demand has outpaced supply, is due to FEI's
20 established presence in the market and its ability to offer longer-term agreements than other
21 competing buyers.

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1 **4.0 TOPIC: DE-PRIORITIZED BC HYDRO LOADS**

2 **Reference: Exhibit B-1, Application, at p. 2-6:**

~~6-The Province also announced changes to how electricity will be allocated to industrial operators.¶~~
~~7-Introduced in fall 2025, Bill 3148 would give priority to natural resource and manufacturing projects¶~~
~~8-connecting to the provincial electrical grid, while AI, data centres and hydrogen for export projects¶~~
~~9>would have to bid for electricity allocations. The Province has also relieved BC Hydro of its¶~~
~~10-obligation to connect certain new cryptocurrency mining projects49, effectively excluding new¶~~
~~11-crypto-mining projects from access to provincial electricity allocations. This could put additional¶~~
~~12-importance on the gas system, as industrial projects that are unable to connect to the electrical¶~~
~~13-grid must now rely on the gas system, while also putting greater scrutiny on green hydrogen¶~~
~~14-projects.¶~~

4 **Request:**

5 4.1 To what extent could this development increase FEI's exposure to more volatile
6 large loads?

8 **Response:**

9 FEI has recently observed increased interest from potential customers exploring natural gas
10 solutions both as a primary source of energy but also in cases where access to electricity is
11 constrained. This could result in additional large industrial load requests, but this ultimately
12 depends on multiple factors including the industrial end use applications and associated load
13 shapes.

14 As discussed in Section 3.3.3 of the 2026 LTGRP, at the time the customer account forecast was
15 prepared for the 2026 LTGRP, there were no firm commitments from new industrial customers to
16 take gas service, nor any firm commitments from existing industrial customers to discontinue
17 service. As such, FEI has not forecast growth or decline in the industrial base customer forecast
18 through 2050.

19 FEI notes, however, that large loads are not indicative of volatility. Some large loads, such as
20 gas-fired power generation for data centers, exhibit stable, high-utilization (baseload) demand
21 profiles. Such a load could improve the utilization of the gas system. Other examples include
22 industrial applications such as smelters & pulp and paper mills, which typically exhibit relatively
23 stable, high-utilization (baseload) demand profiles.

24

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1 **5.0 TOPIC: COST ADVANTAGE OF NATURAL GAS OVER ELECTRICITY**

2 **Reference: Exhibit B-1, Application, at p. 2-15, Figure 2-1: Figure 2-1: Electric**
3 **and Gas Residential Rates (Nominal \$/kWh) in BC**

4 5.1 Please revise this chart to take account of the relative energy efficiency of new
5 residential space-heating loads (i.e., electric heat pumps vs. gas furnaces), or if
6 this is not feasible, please describe its impact.

7
8 **Response:**

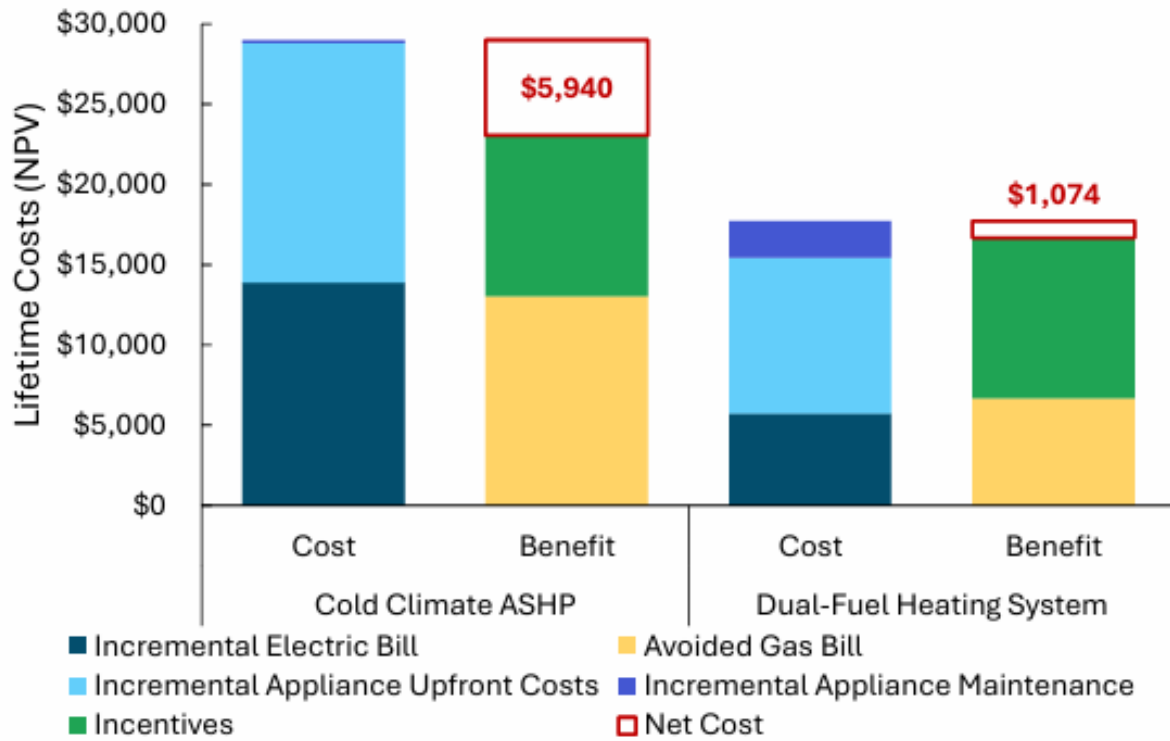
9 FEI has not revised Figure 2-1 in response to this request. The range of energy efficiency
10 conversion factors already presented in the 2026 LTGRP provides an appropriate indication of
11 the potential impact that the differences in equipment efficiency may have on the rate comparison
12 presented in Figure 2-1. For example,

- 13 • Footnote 198 of the 2026 LTGRP states that energy efficiency conversion factors (electric
14 over gas) for residential space heating could range from 1.9 to 2.6 in 2025, depending on
15 the assumptions used and distribution of outdoor air temperatures given that a heat
16 pump's efficiency performance varies per degree.
- 17 • Figure 2-1 of the 2026 LTGRP demonstrates how in 2025, FEI's residential gas rate was
18 2.1 and 2.7 times less than BC Hydro's residential electric rates (Step 1 and Step 2,
19 respectively).

20 Therefore, depending on factors such as the location, the building's thermal envelope, equipment
21 efficiency, installation quality, and maintenance, the relative efficiency of new electric equipment
22 may be sufficient to offset the gas rate advantage compared to BC Hydro's current Step 1 electric
23 rate (2.6 versus 2.1), but may not be sufficient to offset the gas rate advantage compared to Step
24 2 (2.6 versus 2.7). This also does not account for the relative rate changes of FEI gas versus BC
25 Hydro rates into the future.

26 For a comparison of the relative energy efficiency for fuel-switching a gas furnace to a ccASHP
27 in Kelowna (against FBC electric rates), the left side of Figure 4-18 (reproduced below) of the
28 2026 LTGRP demonstrates how the efficiency improvement is not enough to outweigh the rate
29 advantage. This is shown by the dark blue bar (Incremental Electric Bill) being greater than the
30 yellow bar (Avoided Gas Bill). Conversely, on the right side of the figure, dual-fuel heating systems
31 have a lower dark blue bar than the yellow bar – demonstrating that dual-fuel heating systems
32 reduce a customer's overall energy wallet when considering both gas and electric space heating
33 bills.

Figure 4-18: Lifecycle Costs and Benefits from Participant Cost Test Perspective¹²⁵



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1 **6.0 TOPIC: DUAL-FUEL SYSTEMS**

2 **Reference: Exhibit B-1, Application, Figures 4-15 and 4-16, at pages 4-25 & 4-27**

3 **Request:**

4 6.1 Figure 4-16 indicates that the green bars on Figure 4-15 should be higher than the
5 blue bars. If Figure 4-16 is incorrect please provide a corrected version, or
6 otherwise please explain.

7
8 **Response:**

9 Both Figures 4-15 and 4-16 of the 2026 LTGRP are correct:

- 10 • **Electric System Coincident Peak:** Figure 4-15 of the 2026 LTGRP presents the hourly
11 electric demand for FBC's system winter peak day, at which the mean daily temperature
12 in Kelowna is -26°C.
- 13 • **Electric System Non-Coincident Peak:** In contrast, Figure 4-16 of the 2026 LTGRP
14 presents load duration curves based on the full 8,760 hours of the year, with hourly values
15 sorted in descending order of building demand, irrespective of time. Importantly, for the
16 green and blue lines, the hours with the highest building demand are not during FBC's
17 system winter peak day and therefore are not comparable to the values in Figure 4-15.
18 E.g., as indicated in footnote 115 on page 4-26, for the dual-fuel heating system
19 represented by the green line, the hour with the most demand occurs during a non-peak
20 day in January when evening temperatures are at 3°C (shown by the 3.8 in the green line).

21
22

23
24 6.2 Does FEI's discussion of dual-fuel heating systems assume that a customer
25 retains an existing gas furnace and adds an electric heat pump to their premises,
26 or if not, what scenarios are assumed and to what general proportions?

27
28 **Response:**

29 The analysis presented in Figures 4-15 and 4-16 of the 2026 LTGRP shows the electric demand
30 in an average residential single detached building that heats with an existing gas furnace (in blue),
31 or switches their existing gas furnace to a cold climate air source heat pump (in yellow), or,
32 upgrades to a new gas furnace paired with an electric heat pump, i.e., a dual-fuel heating system
33 (in green).

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6.4 Please compare a property owner's/developer's decision-making process for installing a dual-fuel system as between retaining an existing gas furnace system and adding an electric heat pump, replacing an existing gas furnace and adding an electric heat pump, a "greenfield" development where both systems would be installed simultaneously, and any other significant optional configurations, taking into account a desire to provide summer cooling as well as winter heating.

Response:

The decision to adopt dual-fuel systems in existing homes and new construction is typically driven by cost, performance, the desire to provide both heating and cooling, and/or the ability to utilize the gas furnace as a reliable heating source during colder periods when heat pump efficiency declines.

Existing homes:

- For some homeowners, if their furnace is relatively new, one pathway is to retain an existing gas furnace and add a heat pump, often driven by the opportunity to add summer cooling while maintaining reliable heating.
- When the customer is receptive to replacing their furnace, which is more probable in circumstances where their furnace is older or dysfunctional, they may replace the furnace and add a heat pump, resulting in a more integrated system shifting primary heating to electricity.
- In both cases, the heat pump displaces a portion of gas consumption, while the furnace provides backup heating during colder periods.
- Customers seeking to reduce emissions may view dual-fuel systems as a practical pathway to lower building emissions while maintaining heating reliability. FortisBC's analysis estimated that a dual-fuel system operating at a 2°C switchover temperature in the Southern Interior could reduce GHG emissions for a home by approximately 41 percent,⁵ after accounting for incremental electric emissions, with additional reductions possible through the use of RNG.
- Incentives are often a key factor in customer adoption decisions, as they help address upfront cost barriers and improve the lifecycle economics of dual-fuel systems, making these technologies more accessible to a broader range of customers.
- The FortisBC Dual-Fuel Hybrid Heating Early Adopter Program Participant Survey (July 10, 2024) found that incentives were the primary driver of participation, with 74 percent of surveyed participants citing the program rebate as a reason for installing a dual-fuel heating system and 39 percent identifying it as their main motivation. Secondary drivers included improved cooling comfort (63 percent total; 27 percent primary), reduced home energy costs (52 percent total; 15 percent primary), and reducing greenhouse gas

⁵ Versus a gas furnace base line.

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emissions (40 percent total; 11 percent primary), highlighting the critical role of financial incentives in overcoming adoption barriers and supporting program uptake.

New construction:

- Developers evaluate gas-only, dual-fuel, and all-electric systems at the design stage, taking into account the ZCSC and Energy Step Code compliance levels mandated by the Province and the municipality.
- Dual-fuel systems are often selected to provide integrated heating and cooling, maintaining a gas furnace as a heating source for colder conditions.
- In many cases, a code-compliant gas heating system represents a common baseline, and the addition of a heat pump reduces gas use by shifting primary heating to electricity.
- General qualitative feedback from builders suggests that incentives are a significant factor in both builder and homeowner decision-making, helping to offset incremental construction costs and materially influencing the adoption of performance levels beyond minimum code requirements.
- Energy Advisors play a key role in supporting builders through the design, energy modeling, and certification process, providing valuable insight into market conditions and builder decision-making. The FortisBC New Home Construction Program – Energy Advisor Survey (January 2026) found that financial incentives are a key driver of participation in higher-efficiency new home construction. The \$15,000 Step Code 4 rebate was identified as a valuable program component by 91.5 percent of Energy Advisors, the highest-rated incentive—while cost barriers were cited by 34.0 percent of respondents as a challenge to meeting program requirements, underscoring the importance of incentives in supporting adoption of higher-performance building practices.

Other configurations:

- Fully electric systems may be selected where feasible, particularly to meet GHG emissions requirements.
- Traditional gas heating with separate air conditioning remains an alternative but does not provide the same level of gas displacement as dual-fuel systems, or the same integrated heating and cooling capability.

Across both existing homes and new construction, dual-fuel systems are typically chosen as a cost-effective solution to add cooling and improve performance, while reducing gas consumption relative to a gas-only baseline and maintaining system reliability through gas backup during peak winter conditions.

1 **Reference: Exhibit B-1, Application, Table 4-9, at p. 4-32**

2 **And reference: Exhibit B-1, Application, at p. 4-33:**

3 The higher cost for a ccASHP is due in part to the higher cost of equipment for an electric heat
4 pump sized to provide the home's entire heating load previously served by a gas furnace. Sizing
5 a heat pump for the full heating load can also potentially require other costs, such as ductwork
6 modifications and electric panel upgrades, but these are not reflected in the cost-benefit analysis
7 in Figure 4-18. The higher net cost for switching to a ccASHP is that the ccASHP results in the
8 gas bill reduction being nearly equal to the electric bill increase, whereas the dual-fuel heating
9 system results in the gas bill decreasing more than the electric bill increases.

5 6.5 Does providing sufficient cooling benefit affect the size of an electric heat pump
6 included in a dual-fuel system, or is the sizing solely determined by the heating
7 load?

9 **Response:**

10 In dual-fuel heating systems, the sizing of the electric heat pump is primarily determined by the
11 portion of the building's space heating load that the heat pump is intended to serve.

12 As described in the 2026 LTGRP, a key characteristic of dual-fuel systems is that the heat pump
13 does not need to be sized to meet the full peak heating load of the home, as the gas furnace
14 provides backup heating during colder conditions. This allows for the use of a smaller-capacity
15 heat pump compared to fully electrified systems, where the heat pump must be sized to meet the
16 entire heating demand.

17 Cooling requirements may also be considered in equipment selection, particularly where the heat
18 pump is intended to provide space cooling. However, in typical residential applications, cooling
19 loads are generally lower than peak heating loads. As such, cooling needs do not typically govern
20 the sizing of the heat pump where a dual-fuel configuration is implemented.

21 Accordingly, in dual-fuel systems, the heat pump is generally sized based on a balance of heating
22 performance, cost considerations, and system design objectives, with the gas furnace providing
23 capacity to meet peak heating requirements. This enables a right-sized heat pump that can deliver
24 both heating and cooling, without requiring the larger capacity that would otherwise be needed to
25 meet the full heating load in an all-electric configuration.

26
27
28
29 **Reference: Exhibit B-1, Application, figure 4-22 at p. 4-38: Daily Heating Energy**
30 **Bill by Temperature in 2040 (with 15 percent RNG Blend)**

31 6.6 Please provide the calculations underlying this figure.
32

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1 **Response:**

2 Please refer to the response to BCUC IR1 11.4.

3

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1 **7.0 TOPIC: TRANSPORTATION SECTOR**

2 **Reference: Exhibit B-1, Application, at p. 2-8:**

9 Shifts within the transportation sector have the potential to significantly increase demand for
10 gaseous fuels as fleets move towards lower-carbon options. This is especially true for medium
11 and heavy-duty vehicles, where operational needs such as range and refuelling speed make full
12 electrification challenging. In response, FEI must design and deliver lower-carbon energy
13 programs, deploy supporting infrastructure such as CNG and LNG fuelling facilities, and provide
14 incentives to help customers transition to renewable and lower-carbon technologies. While these
15 policies create opportunities for the transportation sector to support provincial climate action
16 goals, the pace and scale of adoption remain uncertain.

3

4 **Request:**

5 7.1 What is FEI's expectation of the impact of improvements in EV battery storage
6 capacities and recharging technologies⁶ on this analysis?

7

8 **Response:**

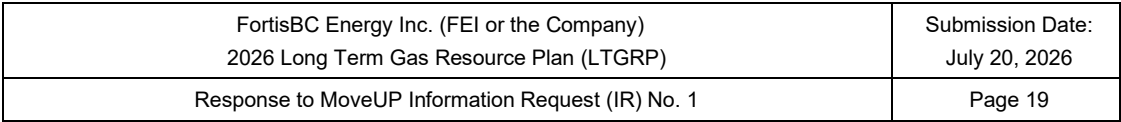
9 FEI expects that advancements in battery chemistry, energy density, and higher-voltage
10 architectures will enable lighter batteries with shorter recharge times, supporting increased
11 adoption in some medium- and heavy-duty vehicles. These improvements may increase the pace
12 of electrification relative to previous or current projections, which would impact electricity demand
13 and peak load requirements.

14 However, FEI expects that increased adoption of electric vehicles will depend on several factors
15 beyond just battery storage capacities and recharging technologies. These factors include upfront
16 vehicle costs, vehicle model availability, vehicle incentive programs, total cost of ownership,
17 charging infrastructure availability, local grid readiness, vehicle duty-cycles and customer
18 preference. While the general trend of electrification in transportation will likely increase over time,
19 the pace and scale of adoption remain uncertain. This is particularly relevant for medium- and
20 heavy-duty vehicles, where range, payload capacity, and refueling requirements are key purchase
21 considerations.

22 Lastly, FEI expects that achieving market scale will depend on electric transportation options
23 meeting or exceeding competitive pricing with the fleet operators' traditional total cost of
24 ownership.

25

⁶ See, for example, <https://www.byd.com/en/news-list/BYD-Unveils-Super-e-Platform-Megawatt-Flash-Charging-Electric-Vehicles-Matching-Refueling-Speeds.html>.



2 **Request:**

5
6 **Response:**

7 Please refer to the response to BCSEA-MS2S IR1 8.1.

8