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May 2, 2022

British Columbia Utilities Commission  
Suite 410, 900 Howe Street  
Vancouver, BC  
V6Z 2N3

Attention: Mr. Patrick Wruck, Commission Secretary

Dear Mr. Wruck:

**Re: FortisBC Energy Inc. (FEI)**

**Application for Common Rates and 2022 Revenue Requirements for the Fort  
Nelson Service Area (Application) ~ Project No. 1599246**

**FEI Rebuttal Evidence**

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In accordance with the Regulatory Timetable established in British Columbia Utilities Commission Order G-86-22, FEI hereby files its Rebuttal Evidence in the above referenced proceeding.

If further information is required, please contact the undersigned.

Sincerely,

**FORTISBC ENERGY INC.**

***Original signed:***

Diane Roy

cc (email only): Registered Interveners

**BRITISH COLUMBIA UTILITIES COMMISSION**

**FORTISBC ENERGY INC.**

**APPLICATION FOR COMMON RATES FOR THE FORT NELSON SERVICE  
AREA**

**REBUTTAL EVIDENCE OF  
FORTISBC ENERGY INC.**

**May 2, 2022**

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**REBUTTAL EVIDENCE OF  
FORTISBC ENERGY INC. (FEI)**

**1.0 INTRODUCTION**

**Q1: What is the purpose of this Rebuttal Evidence?**

**A1:** The purpose of this Rebuttal Evidence is to respond to the evidence of the Fort Nelson and District Chamber of Commerce ("FNDCC")<sup>1</sup> and Northern Rockies Regional Municipality ("NRRM").<sup>2</sup>

**Q2: How is this Rebuttal Evidence organized?**

**A2:** This Rebuttal Evidence is organized under the following main topic headings:

- FEI's Phase-In of Common Rates and Benefits for Commercial Customers
- Rate Stability and Other Benefits of Common Rates
- FEI's Consultation Process was Reasonable and Responsive to Customer Requests
- Common Rates Will Improve Regulatory Efficiency and Service Quality Will Be Maintained
- FEI's Demand Forecast Methodology is Reasonable and Accurate
- The Impact of Economic Development Potential is Limited and Uncertain

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<sup>1</sup> Exhibit C1-6.

<sup>2</sup> Exhibit C2-5.

## 2.0 PHASE-IN OF COMMON RATES AND BENEFITS FOR COMMERCIAL CUSTOMERS

**Q3: On page 4 of its evidence as well as in its response to BCUC IR1 2.1, FNDCC continues to conclude that “FEFN ratepayers still pay lower rates than FEI’s other customers”. Is this accurate?**

**A3:** No. FEI’s rates for the Fort Nelson Service Area (also referred to as FEFN) and the rates for the rest of FEI are made up of three components: delivery, commodity, and midstream charges.

For the delivery rates, although the FEFN residential delivery rates are currently lower than FEI, this does not mean FEFN’s overall delivery rates are lower than FEI, as evidenced by the fact that FEFN’s commercial delivery rates have been higher than FEI since 2014. Furthermore, FEFN’s effective delivery rate for all customers (i.e., total FEFN delivery margin divided by total FEFN demand) is currently higher than FEI’s effective delivery rate for all customers.<sup>3</sup> See FEI’s response to FNDCC-NRRM IR1 8.1.

For the commodity rates, the historical difference between FEI and FEFN is small, and can be positive or negative at any given time. This is mainly driven by the timing difference of when changes in the commodity rates are triggered in accordance with the minimum rate change threshold as per the BCUC’s guidelines,<sup>4</sup> which generally will correct itself over time as the commodity rates are reviewed quarterly. Over a 10-year period between January 1, 2011 and January 1, 2022, the average difference in the commodity rates between FEI and FEFN was \$0.0039 per GJ (i.e., equivalent to 0.098 percent of FEFN’s current commodity rate of \$3.964 per GJ, effective April 1, 2022). See FEI’s response to BCUC IR2 34.1.

For the midstream rates, FEI is not proposing to transition FEFN to a common midstream rate with FEI. FEI’s proposal is to set FEFN’s midstream rate at 5 percent of FEI’s midstream rate which is a level consistent with what FEFN is currently being charged. See Section 5.3.5.1 of the Application.

**Q4: On page 1 of its evidence, FNDCC states that “and at the end of the day FortisBC will collect \$150,000 more annually from rate payers in Fort Nelson based on current usage.” Similarly, NRRM states that FortisBC will collect \$157,000 more annually in Fort Nelson. Are these statements accurate?**

**A4:** These statements are not accurate as they do not consider FEI’s proposed phase-in of common rates for residential customers. Assuming all else being equal, when taking into account FEI’s proposed phase-in, Table 1 shows the incremental revenue collected by FEI from FEFN over the next 10 years. It can be seen that

<sup>3</sup> For FEI, “all customers” excludes bypass customers that have rates set by contract (FEFN does not have any bypass customers).

<sup>4</sup> L-5-01, dated February 5, 2011, and further modified in L-40-11, dated May 19, 2011.

FEI will be recovering in total \$140 thousand (i.e., Line 16) less from FEFN customers in 2023 when the proposed phase-in of common rates for residential customers is considered. Cumulatively, assuming all else being equal, the total incremental revenue collected by FEI from FEFN will be approximately \$43 thousand over a 10-year period, or an average of \$4.3 thousand per year. Comparing to the proposed 2022 FEFN delivery margin of \$2.517 million, an average of \$4.3 thousand per year is equivalent to a small delivery rate impact of approximately 0.17 percent which FEI considers revenue neutral.

**Table 1: Incremental Revenue from FEFN with RS 1 Phase-in over a 10-year period**

Line	Particular	Reference	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
1	<b>FEFN Residential (RS 1)</b>											
2	Incremental Delivery Margin, excl. Phase-in (\$000s)	FNDCC-NRRM IR1 15.2	319	319	319	319	319	319	319	319	319	319
3	Phase-in Rider (\$000s)	Application Table 5-17, Line 10	(298)	(266)	(234)	(202)	(170)	(138)	(106)	(74)	(42)	-
4	Net Incremental Delivery Margin, incl. Phase-in (\$000s)	Line 2 + Line 3	21	53	85	117	149	181	213	245	277	319
5												
6	Cumulative Net Incremental Delivery Margin, incl. Phase-in (\$000s)	Sum of Line 4	1,662									
7												
8	<b>FEFN Small Commercial (RS 2)</b>											
9	Incremental Delivery Margin (\$000s)	FNDCC-NRRM IR1 15.2	(132)	(132)	(132)	(132)	(132)	(132)	(132)	(132)	(132)	(132)
10	Cumulative (10 yrs) Net Incremental Delivery Margin (\$000s)	Sum of Line 9	(1,318)									
11												
12	<b>FEFN Large Commercial (RS 3)</b>											
13	Incremental Delivery Margin (\$000s)	FNDCC-NRRM IR1 15.2	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)
14	Cumulative (10 yrs) Net Incremental Delivery Margin (\$000s)	Sum of Line 13	(302)									
15												
16	<b>Total FEFN Net Incremental Delivery Margin, incl. RS 1 Phase-in (\$000s)</b>	<b>Line 4 + Line 9 + Line 13</b>	<b>(140)</b>	<b>(108)</b>	<b>(77)</b>	<b>(45)</b>	<b>(13)</b>	<b>19</b>	<b>51</b>	<b>83</b>	<b>115</b>	<b>157</b>
17	<b>Total Cumulative (10 yrs) Incremental Delivery Margin, incl. RS 1 Phase-in (\$000s)</b>	<b>Sum of Line 16</b>	<b>43</b>									
18												
19	<b>Average FEFN Incremental Delivery Margin per year (\$000s)</b>	<b>Line 17 / 10 yrs</b>	<b>4.3</b>									
20	Proposed 2022 FEFN Delivery Margin	App E-1, Sch. 15, Line 13, Col 5	2,517									
21	% Impact compared to proposed 2022 FEFN Delivery Margin	Line 19 / Line 20	0.17%									

**Q5: FNDCC claims that FEI “fails to recognize that in Fort Nelson business owners are also residents” and states on page 2 of its evidence that: “The same people will be paying both rates, and any perceived tradeoffs are artificial.” Does FEI agree with FNDCC that the “perceived tradeoffs” between residential and commercial customers are “artificial”?**

**A5:** No. The benefit to commercial customers under common rates is real, as explained in Section 5.3.5.2 of FEI’s Application. For sole proprietor small commercial customers that also happen to be residential customers,<sup>5</sup> Table 2 below shows that there will be net savings due to common rates with or without the proposed phase-in to residential customers. Table 3 below also provides a calculation of the net effect over the 10-year phase-in period for FEFN customers who are both residential and sole proprietor small commercial customers. It can be seen that over the 10-year phase-in period, these customers will experience overall net savings of approximately \$2,762 for their residential and commercial natural gas service.

<sup>5</sup> Assuming a local residential customer who also owns a commercial business as a sole proprietor would be a small commercial customer.

			Incremental Bill Impact in 2023 due to Common Rates Only (\$)
Line	Particular	Reference	
1	<b><u>No Phase-in</u></b>		
2	Residential RS 1	Table 5-14	\$ 157
3	Small Commercial RS 2	Table 5-14 of Application	\$ (350)
4	<b>Net Bill Impact in 2023 (Same Residential and Small Commercial Owner)</b>	<b>Line 2 + Line 3</b>	<b>\$ (193)</b>
5			
6	<b><u>With RS 1 Phase-in</u></b>		
7	Residential RS 1	BCUC IR1 11.3, Table 4	\$ (5)
8	Small Commercial RS 2	Table 5-14 of Application	\$ (350)
9	<b>Net Bill Impact in 2023 (Same Residential and Small Commercial Owner)</b>	<b>Line 7 + Line 8</b>	<b>\$ (355)</b>

[illegible]

### 3.0 RATE STABILITY AND OTHER BENEFITS OF COMMON RATES

**Q6: What is FEI's response to FNDCC's claim that Fort Nelson Service Area customers "bear the risk that we will see significantly more volatility and increases moving to common rates than we will if we continue to pay our own way..."?**

**A6:** FEI's evidence as presented in the Application and IR responses shows that Fort Nelson Service Area customers will benefit from increased rate stability under common rates. This is fundamentally due to the small number of customers in the Fort Nelson Service Area compared to the over 1 million customers in the rest of FEI. The large difference in number of customers between FEI and FEFN significantly outweighs other potential factors that may impact rates, such as capital costs or the impact of provincial policies. This is clearly demonstrated by Figure 4-8 of the Application, which showed that a single major capital project in Fort Nelson (i.e., the Muskwa River Crossing CPCN) resulted in an approximately 13 percent delivery rate impact in 2015. As explained in FEI's responses to BCUC IR1 3.2 and FNDCC-NRRM IR2 1.1, risks that may impact rates apply to both FEI and FEFN; however, without a large customer base and no or limited opportunity to attract offsetting revenue within FEFN, the risks of rate volatility and higher rates will certainly be significantly worse for FEFN if FEFN remains separate from FEI.

**Q7: FNDCC and NRRM suggest that common rates would be beneficial only if large capital projects were more likely in the Fort Nelson Service Area than in FEI. Does the benefit of common rates depend on there being relatively more capital spending in FEFN compared to FEI?**

**A7:** No. The rate stability benefits of common rates stem from the larger customer base, not from the level of capital spending in FEFN compared to FEI. See FEI's response to FNDCC-NRRM IR1 8.1.

**Q8: FNDCC queries what the additional risk Fort Nelson customers would be taking on due to the risk of catastrophic events given FEI's infrastructure? Will there be a change in risk under common rates?**

**A8:** There would be no change in risk for Fort Nelson customers under common rates. The risks of increasing capital expenditures given FEI's and FEFN's infrastructure would be similar. Furthermore, the risk of declining demand for natural gas due to electrification as well as other government low carbon policies would be the same and applicable for both FEI and FEFN. FEI agrees that the magnitude of the risks, should they materialize, could be higher for FEI than FEFN; however, given FEFN's small customer base and limited or no opportunity for offsetting revenues, FEI expects the risk of a significant impact to FEFN's delivery rates would be much higher if FEFN remains separate from FEI. See FEI's response to BCUC IR1 3.2 as well as FNDCC-NRRM IR2 1.1 and 1.4.



1 **Q9: In its response to BCUC IR1 2.1 and 2.1.1, FNDCC claims the Muskwa River**  
2 **Crossing Project is already part of FEFN's rate base and the rate impacts**  
3 **associated with this project are declining over time with amortization for a**  
4 **period of 25 years. Are these statements accurate?**  
5

6 A9: No. The assets associated with the Muskwa River Crossing project are expected  
7 to have a service life of 68 years based on the currently approved depreciation  
8 rates for transmission mains at 1.46 percent. Although the rate impact due to the  
9 project will decline over time as the assets continue to depreciate financially, the  
10 project is expected to continue to have an impact on FEFN's delivery rates for 68  
11 years, not 25 years. The 25 years was just an evaluation period used for the  
12 purpose of the Muskwa River Crossing CPCN Application. As explained in BCUC  
13 IR1 18.1 of the Muskwa River Crossing CPCN proceeding<sup>6</sup>, FEI chose a 25-year  
14 evaluation period because it provided an adequately long-term perspective of the  
15 rate impact due to the project. It is not, however, the number of years that the  
16 project will impact FEFN's delivery rates.  
17

18 **Q10: In its response to BCUC IR1 2.1.1, FNDCC stated they do not "see a basis to**  
19 **expect a major infrastructure replacement in the Fort Nelson area every 5 to**  
20 **10 years." What is FEI's response to this statement?**  
21

22 A10: Based on FEI's knowledge and experience as an operator of the natural gas  
23 distribution system, including knowledge of the condition of its assets and the  
24 potential issues that can arise over time due to environmental and other impacts,  
25 there is the potential that a major infrastructure replacement similar in size to the  
26 Muskaw River Crossing will be needed in the future, and could even be required  
27 within the next 10 years. Moreover, even regular capital projects that are not  
28 considered major infrastructure replacements, but are necessary to maintain safe  
29 and reliable service, have a significant impact on Fort Nelson Service Area delivery  
30 rates given the small customer base. The average delivery rate impact for capital  
31 projects in the Fort Nelson Service Area, excluding major capital such as the  
32 Muskwa River Crossing, is 2.30 percent per year between 2011 and 2020. See  
33 FEI's responses to BCUC IR1 4.1 and 4.2. For instance, the currently in-progress  
34 Recreation Centre District Station project has a capital cost of approximately \$655  
35 thousand. While this project is relatively modest in size, the delivery rate impact is  
36 approximately 2.32 percent compared to the proposed 2022 delivery rates. To put  
37 this into perspective, the Fort Nelson Service Area's average delivery rate increase  
38 from 2011 to 2020 is 5.59 percent (Figure 4-9 of Application) and the equivalent  
39 delivery rate impact would be 0.006 percent under common rates with FEI.  
40

41 **Q11: FNDCC indicates that, unlike cities like Vancouver, it does not have policies**  
42 **that restrict the use of natural gas. Is the Fort Nelson Service Area different**  
43 **than any other communities served by FEI in terms of the climate change**  
44 **policies of the municipal government?**  
45

46 A11: No. FEI serves 135 communities across BC representing a variety of municipal  
47 approaches. Many municipalities served by FEI do not have local policies that

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<sup>6</sup> [https://docs.bccuc.com/Documents/Proceedings/2014/DOC\\_40027\\_B-5\\_FEI-BCUC-IR1-Response.pdf](https://docs.bccuc.com/Documents/Proceedings/2014/DOC_40027_B-5_FEI-BCUC-IR1-Response.pdf)

1 restrict natural gas use. However, all communities in BC are subject to provincial  
2 requirements, including the cap on GHG emissions for gas utilities in the CleanBC  
3 Roadmap to 2030.  
4

5 **Q12: Are Fort Nelson Service Area customers paying their “own way” for natural**  
6 **gas service as FNDCC claims?**  
7

8 A12: No. FEI’s analysis is that the cost allocation from FEI to the Fort Nelson Service  
9 Area does not fully reflect the cost to serve Fort Nelson customers, so that Fort  
10 Nelson Service Area rates are already subsidized by other FEI customers. See  
11 FEI’s response to BCUC IR1 10.1.  
12

13 **Q13: Does Fort Nelson have separate electricity rates?**  
14

15 A13: No. Fort Nelson is served by BC Hydro under the same rates as BC Hydro  
16 customers in BC Hydro’s integrated service area.<sup>7</sup> As FNDCC’s Evidence and their  
17 response to FEI IR1 4.1 indicate, Fort Nelson is served by BC Hydro’s local gas  
18 fired generator and back up transmission service from Alberta, which is not  
19 physically connected to the electric system of BC Hydro’s integrated service area.  
20 As evidenced from BC Hydro’s F2023-2025 RRA<sup>8</sup>, the costs to serve Fort Nelson  
21 are borne by all of BC Hydro’s customers in the integrated service area, including  
22 BC Hydro’s capital additions, O&M in the Fort Nelson area as well as the carbon  
23 tax associated with the Fort Nelson generation facilities. Similarly, Fort Nelson  
24 customers are also paying for capital additions, O&M as well as all other costs of  
25 BC Hydro’s integrated service area through their common electricity rates.  
26

27 **Q14: In its response to BCUC IR1 3.7, NRRM highlighted the CleanBC Roadmap**  
28 **would “require BC Hydro to shift from its gas-fired generator that services**  
29 **Fort Nelson to an alternative zero-carbon source.” If the conversion**  
30 **materialized, will Fort Nelson be paying for these conversions themselves?**  
31

32 A14: No. Since Fort Nelson is under the same rates as BC Hydro customers in the  
33 integrated service area, any capital costs required to convert the Fort Nelson  
34 generation system or any incremental power purchased from local generation,  
35 such as the Tu-Deh-Kah Geothermal Project shown in NRRM’s evidence, will be  
36 paid for by all BC Hydro customers under the integrated service area, including  
37 Fort Nelson. This is a clear benefit to Fort Nelson’s customers being under  
38 common rates with the rest of BC Hydro’s customers under the integrated service  
39 area. In contrast, any capital projects, including projects that would be required to  
40 meet the CleanBC Roadmap requirements to decarbonize FEI’s natural gas  
41 distribution system in the FEFN service area, will be paid for by only FEFN’s  
42 customers if FEFN remains separate from FEI.

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<sup>7</sup> BC Hydro Electric Tariff, PDF Page 19: Available online:  
<https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/tariff-filings/electric-tariff/bchydro-electric-tariff.pdf>.

<sup>8</sup> BC Hydro’s Fiscal 2023 to 2025 RRA. Page 4-12 Natural Gas for Thermal Generation; Page 6-52 Thermal Generation Projects – Plan Capital Additions and Expenditures; and Page 5A-11 and 5C-32 Operating Costs.

1

2 **Q15: FNDCC indicated in response to FEI's IR 3.1 that switching to a heat pump**  
3 **would cost Fort Nelson customers \$4,000 more annually for heating by BC**  
4 **Hydro's electricity than by natural gas. After common rates for natural gas**  
5 **are implemented, will it still be less expensive for Fort Nelson Service Area**  
6 **customers to use natural gas to heat their homes compared to BC Hydro's**  
7 **electricity?**

8

9 A15: Yes. Even if common rates are approved, the cost for Fort Nelson residential  
10 customers to use natural gas for heating will still be significantly less than  
11 customers that use BC Hydro's electricity for heating. Under common rates, the  
12 average FEFN residential customer will be paying approximately \$3,843, or 332  
13 percent, less than alternative heating using electric heat pumps based on the  
14 estimate from FNDCC, even without the proposed phase-in of Fort Nelson Service  
15 Area residential delivery rates.

16

#### **4.0 FEI'S CONSULTATION PROCESS WAS REASONABLE AND RESPONSIVE TO CUSTOMER REQUESTS**

**Q16: In its response to BCUC IR1 3.2 regarding FEI's virtual town hall for FEFN, FNDCC claims that "without an in-person option a large segment of the community would not have been able to or willing to attend." What is FEI past experience of in-person town halls in FEFN?**

**A16:** As part of FEI's 2016 Rate Design Application (RDA), FEI conducted an in-person information session in Fort Nelson. The in-person information session had a total of eight attendees from Fort Nelson, including the Mayor of NRRM at that time and a representative from FNDCC. For this in-person information session in Fort Nelson, five FEI staff from the Lower Mainland attended. The 2016 RDA decision<sup>9</sup> resulted in a bill impact of 6.55 percent to FEFN's residential customers, while small and large commercial customers had a bill savings of 1.1 percent and 6.52 percent, respectively. FEI notes FNDCC was registered as an intervener in FEI's 2016 RDA proceeding but no information requests or argument were submitted by FNDCC. NRRM was not registered as an intervener or interested party during FEI's 2016 RDA proceeding.

In contrast, the virtual town hall conducted by FEI for this Application had 75 registrants and 17 attendees. Based on the number of attendees in FEI's virtual town hall for this Application and the in-person session from the 2016 RDA, FEI believes the virtual town hall was a success and more cost-effective than an in-person event.

**Q17: In its responses to BCUC IR1 4.1 and FEI IR1 5.1, FNDCC highlighted that Fort Nelson News is printed and circulated in Fort Nelson while the Alaska Highway News does not print and circulate in Fort Nelson. What is FEI's response to this?**

**A17:** Fort Nelson News and Alaska Highway News are the only two news media that cover Fort Nelson locally. FEI has always advertised in these two newspapers when notifying Fort Nelson customers of upcoming regulatory applications, and there has never previously been an objection or complaint regarding this approach. As stated in Section 6.3.2 of the Application, FEI bought ads in both newspapers ahead of the originally scheduled virtual town hall on March 30 and the re-scheduled virtual town hall on April 27. As noted in FNDCC response to FEI IR1 5.1, the Alaska Highway News is available to Fort Nelson residents for free online or through mail subscription.

**Q18: In its response to BCUC IR1 4.2, FNDCC discussed the alternatives to the Alaska Highway News that would be appropriate for media outreach in Fort Nelson, including radio (Bounce 102.3 and CFNR), bill inserts and direct emails. What is FEI's response to this?**

---

<sup>9</sup> Order G-135-18.

1  
2 A18: Regarding radio, as indicated in Section 6.3.2 of the Application, FEI ran a 30  
3 second advertisement on CKRX-FM 102.3 (this radio is branded as Bounce  
4 102.3), which is the sole radio station in the Fort Nelson area. The 30 second radio  
5 spot advertised the virtual town hall and invited feedback from Fort Nelson  
6 customers. 204 spots were broadcast during traffic reports, weather and breakfast  
7 news during the campaign period. CFNR is a radio station based in Terrace, BC  
8 which broadcasts to 70 First Nation communities in Northern and Central BC, not  
9 just to Fort Nelson. FEI believes its media outreach was effective. For example,  
10 FNDCC indicates on page 4 of their evidence that they learned of FEI's virtual town  
11 hall from an evening radio ad.  
12

13 Regarding bill inserts, FEI did not use this method to promote the virtual town hall  
14 due to the lead-time required to create the bill inserts. Since not all customers  
15 receive their bills on the same date, in order to ensure all FEFN customers receive  
16 the bill inserts prior to the virtual town hall, the bill inserts would need to be created  
17 two months prior to ensure the inserts were in the bills one month prior to the town  
18 hall. For example, in order to include bill inserts in customers' bills prior to the  
19 original March 30 virtual town hall, the bill inserts would have had to have been  
20 created in January. Such an approach would have been impractical for two  
21 reasons. First, FEI was still developing the Application at that time and had not  
22 yet confirmed the date and time for the virtual town hall, so it would not have been  
23 possible for FEI to confirm the date and time of the virtual town hall as early as  
24 January. Second, including bill inserts over two months prior to the virtual town  
25 hall would have lessened the timeliness of the information as many customers  
26 would likely have forgotten about the virtual town hall by the time the event was  
27 scheduled to occur. Additionally, FEI notes that had it used bill inserts to promote  
28 the original March 30 virtual town hall, FEI would have had very limited ability to  
29 reschedule to April 27 due to low registration since there would not be enough lead  
30 time to redo the bill inserts to inform FEFN customers of the revised date.  
31

32 FNDCC's suggestion that FEI should have directly emailed existing FEFN  
33 customers is not an acceptable consultation approach. FEI's collection, use and  
34 disclosure of personal information of an FEI/FEFN customer, such as an email  
35 address, is governed by FEI's Privacy Policy in compliance with the *Personal*  
36 *Information Protection Act* (PIPA). In accordance with section 8 of PIPA, FEI  
37 obtains consent from customers who agree to provide their email address for the  
38 sole purposes of managing their natural gas account. At this time, FEI does not  
39 have consent from customers to use their personal information to contact them for  
40 any other purpose.  
41

42 **Q19: Please describe FEI's stakeholder consultation for the Application.**  
43

44 A19: FEI has engaged with FEFN stakeholders throughout this Application process and,  
45 in particular, during the Application development process. FEI's Community and  
46 Indigenous Relations Manager contacted stakeholders in Fort Nelson, including  
47 FNDCC, as early as October 2020 to advise that FEI was in the process of  
48 developing a common rates application and to discuss the potential for holding a  
49 town hall. At that time, FEI was considering hosting an in-person town hall in Fort  
50 Nelson; however, due in part to the occurrence of the "second wave" of the COVID-

1 19 pandemic and the resulting increased provincial restrictions, FEI decided to  
2 delay the town hall to provide time to assess virtual options and to continue to  
3 develop the application.  
4

5 For the originally scheduled March 30, 2021 town hall, FEI advertised through  
6 newspaper (Fort Nelson News and Alaska Highway News) and radio (CKRX-FM  
7 102.3). FEI acknowledges that it could have contacted members of the FNDCC  
8 and NRRM earlier to request assistance with getting the word out for the virtual  
9 town hall. However, once it was clear that the March 30 virtual town hall had  
10 received limited registration, FEI rescheduled the town hall to April 27 and  
11 increased its media outreach as well as reaching out to members of the Fort  
12 Nelson community to assist with the outreach. For the re-scheduled town hall, FEI  
13 doubled its radio coverage, re-ran newspaper ads in the Fort Nelson News and  
14 Alaska Highway News, and promoted the town hall over social media. Further,  
15 FEI forwarded the details of the re-scheduled virtual town hall to FNDCC and to  
16 the Fort Nelson First Nation to help get the word out to the community. Fort Nelson  
17 First Nation confirmed via email to FEI on April 21, 2021 that they had received the  
18 information and had posted it on their Facebook page.  
19

20 Leading up to the virtual town hall, FEI responded to a number of requests from  
21 FNDCC for information on FEI and FEFN rates (see Appendix 2 of FNDCC's  
22 evidence, email thread spanning from April 19 to April 22).  
23

24 Subsequent to the town hall, FEI continued to engage with FNDCC through email  
25 and, at the request of FNDCC, members of the FEI regulatory team met with  
26 FNDCC virtually to answer questions about the information presented at the town  
27 hall.  
28

29 FEI also responded directly to a customer question received via email subsequent  
30 to the town hall (see Appendix A to this Rebuttal Evidence), and responded to a  
31 request for information from the Regional Development Officer for NRRM. FEI  
32 notes that this email thread was not included in NRRM's Evidence; therefore, FEI  
33 has included this email thread as Appendix B. FEI also notes, as shown in  
34 Appendix C, that FEI's Community and Indigenous Relations Manager re-iterated  
35 its offer to make a separate presentation to the Regional Council, which the  
36 Regional Council accepted.  
37

38 FEI also presented and responded to questions at a Fort Nelson First Nation Chief  
39 and Council meeting.  
40

41 Throughout this engagement process, FEI has responded with as much  
42 information and detail as possible, recognizing that the common rates application  
43 was still under development and that any information provided in advance of the  
44 application would potentially be subject to modifications (which is why FEI was  
45 unable to provide all of the detailed information requested).  
46

47 FEI acknowledges that it neglected to inform FNDCC immediately when the  
48 Application was filed. However, in recognition of this oversight and in an attempt  
49 to help summarize the Application's content, FEI regulatory staff prepared a one-  
50 page summary of the Application specifically for FNDCC at its request (see  
51 Appendix C2 of NRRM's Evidence).

The email received from NRRM on September 29, 2021 which stated that the information provided by FEI at the Regional Council Meeting did not satisfy the question posed, occurred months after the meeting and, most importantly, subsequent to the regulatory process being established by the BCUC for the Application. At that time, and as stated in FEI's response dated October 7, 2021 (see Appendix C2 of NRRM's Evidence), FEI did not consider it appropriate to provide information of the specificity requested outside of the regulatory process, as such information would not be part of the regulatory proceeding record and thus would not be part of the public record.

**Q20: NRRM claims that FEI was focused on the benefits of common rates. Did FEI present the negative impacts of common rates?**

A20: FEI presented the rate impacts of common rates as part of its presentations at the virtual town hall, the Regional Council meeting, and at the Fort Nelson First Nation Chief and Council meeting (see Appendices C-1 and C-5 of the Application). These presentations showed that common rates would result in an increased bill impact for FEFN residential customers. The rate impacts to residential customers is the only negative impact of common rates and it was fairly presented.

**Q21: NRRM notes that the preferred common rates options was not presented in FEI's presentation to the municipality. Please explain why not? Is it unusual for information to change between consultation and the application?**

A21: As explained in response to FNDCC IR1 19.1, FEI began developing the Proposed Common Rate Option (Option 4) after the virtual town hall in response to the feedback received at the town hall, and as part of FEI's ongoing efforts at that time to develop a common rate option that achieved the goal of moving to common rates as fully as possible without creating significant negative bill impacts to FEFN customers. In that IR response, FEI also explained that even though it was still developing the specifics of Option 4, FEI representatives were able to confirm at the Regional Council meeting that FEI would not be proposing a full move to common rates as the recommended option.

FEI's Proposed Option 4 in the Application is very similar to Option 2 presented at the town hall and Option 1 presented at the Regional Council meeting (see Slide 24 of Appendix C-1 and Slide 15 of Appendix C-5 of the Application). At the town hall, FEI had presented an option of moving to common delivery and cost of gas rates; however, subsequent to the town hall, based on further information provided by FEI's gas supply team, it became apparent that such an option was not possible due to how FEI accounts for and treats its gas supply costs. In recognition of this, and in recognition that moving to full common rates (and in particular common midstream rates) was not supported by Fort Nelson customers, FEI developed its Proposed Option 4. This evolution of development can be seen when comparing the two aforementioned presentations, as in the presentation to the Regional Council, FEI no longer presented a "common rates for delivery and cost of gas only" option; instead, FEI used the "common rates for delivery only" option since it

1 was expected to be (and ultimately is) a close comparator in terms of bill impact to  
2 the option that FEI was still developing at the time of the Regional Council meeting.

3  
4 It is not unusual for information to change between consultation and the time the  
5 application is filed. Part of the purpose of consultation is to receive input from  
6 stakeholders to inform an application. Ultimately, it is the BCUC's process where  
7 all the information is presented and available for review and comment. All  
8 stakeholders have had the opportunity to participate in the BCUC proceeding to  
9 comment on the proposal.  
10

11 **Q22: NRRM claims that FEI was not open to changing its proposal. What is FEI's**  
12 **response?**  
13

14 A22: FEI has been and remains open to hearing from stakeholders and adjusting its  
15 proposal for common rates. An example of how FEI has changed its proposal in  
16 response to customer concerns is in respect to the midstream rate. FEI is aware  
17 that one of the primary concerns of Fort Nelson Service Area customers with  
18 common rates was recognition of their proximity to the supply of natural gas. FEI's  
19 proposal to set the midstream rate at 5 percent of FEI's midstream rate gives  
20 recognition to this concern.  
21

22 **Q23: FNDCC states on page 5 of its evidence that it is unclear how the online**  
23 **survey was advertised and their questions were not answered. How was the**  
24 **online survey advertised and has FEI responded to the survey questions?**  
25

26 A23: At the virtual townhall presentation, attendees were encouraged to provide  
27 feedback through an online survey which was housed on a specific website<sup>10</sup> with  
28 information specific to this Application for Fort Nelson. As discussed in Section  
29 6.3.3.2 of the Application, the online survey attracted 18 responses, which is one  
30 more than the 17 attendees of the virtual townhall. FEI notes that the  
31 questions/comments posted to the online survey (Appendix C3 of the Application)  
32 were incorporated into FEI's Application and/or included in the FAQ posted on the  
33 same website after the virtual town hall (See Section 6.3.3.1 and Appendix C4 of  
34 the Application).  
35

36 Comments and question were also encouraged to be sent directly to a customer  
37 email specific for this Application ([fortnelson.customers@fortisbc.com](mailto:fortnelson.customers@fortisbc.com)), which is  
38 accessed and replied by FEI's Community and Indigenous Relations Managers.  
39 To date, this email is still active and continue to be available for Fort Nelson  
40 customers on this Application.  
41

42 As FEI explained in A19, FEI has been very responsive to questions and queries  
43 received from FNDCC and NRRM, as well as from customers who reached out via  
44 email to FEI subsequent to the virtual town hall.  
45

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<sup>10</sup> [https://www.fortisbc.com/in-your-community/working-in-your-neighbourhood/bringing-a-common-natural-gas-rate-to-fort-nelson?utm\\_campaign=corporate&utm\\_source=paid&utm\\_content=fortnelson](https://www.fortisbc.com/in-your-community/working-in-your-neighbourhood/bringing-a-common-natural-gas-rate-to-fort-nelson?utm_campaign=corporate&utm_source=paid&utm_content=fortnelson).



1 **Q24: In response to FNDCC's statements about notice of the Application being**  
2 **insufficient, how did FEI notify the community of the filing of the**  
3 **Application?**  
4

5 A24: FEI does not agree that notice of the Application was insufficient. Once the  
6 regulatory timetable was established by the BCUC on September 21, 2021, FEI  
7 undertook the following activities to provide notice to stakeholders:

- 8 • Published the Public Notice in display-ad format in the Fort Nelson News and  
9 Alaska Highway News;
- 10 • Published notice of the Application on FEI's Twitter, LinkedIn and Facebook  
11 social media platforms, including subsequently publishing weekly reminder  
12 notices; and
- 13 • Emailed direct copies of the Application to FNDCC, NRRM, Fort Nelson First  
14 Nation, Prophet River First Nation, and all registered interveners from both  
15 the FEI Annual Review for 2022 Rates and the FEFN 2019-2020 RRA  
16 proceedings.  
17

18 FEI also observes that FNDCC was made aware of the Application even before  
19 the BCUC published its order and regulatory timetable, per FNDCC's email to FEI  
20 dated September 15, 2021 (FNDCC Evidence, Appendix 2). Therefore, the  
21 FNDCC was aware of the Application over a month in advance of the deadline for  
22 intervenor registration.  
23

24 **Q25: Is FEI reluctant to consult with stakeholders and share information as**  
25 **claimed by FNDCC and NRRM?**  
26

27 A25: No. FEI regularly conducts consultation with stakeholders and views it as an  
28 important step in its application development process. FEI has shared extensive  
29 information with stakeholders, including the FNDCC and NRRM as demonstrated  
30 in the email correspondence attached to their evidence (as well as the additional  
31 email correspondence attached as Appendices B and C to this Rebuttal Evidence)  
32 and FEI's responses to information requests in this proceeding.  
33  
34

**5.0 COMMON RATES WILL IMPROVE REGULATORY EFFICIENCY AND SERVICE QUALITY WILL BE MAINTAINED**

**Q26: On page 3 of its evidence, NRRM claims that the regulatory burden of the Fort Nelson Service Area imposes little cost. And, in response to BCUC IR1 2.1, NRRM stated its understanding that the 1.78 percent figure presented in Table 5-1 of the Application represents “the proportion of FEFN’s overall delivery rates from external regulatory costs, not the contribution of these costs to FEFN’s delivery rate increases.” Is this accurate?**

**A26:** No, this is not accurate. The average 1.78 percent shown in Table 5-1 of the Application represents the delivery rate impact to FEFN that resulted from external regulatory costs. It is not 1.78 percent of FEFN’s delivery rates as NRRM suggested. To put this into perspective, FEFN’s average delivery rate increase from 2012 to 2021 was 5.59 percent as shown in Figure 4-9 of the Application, which means that the 1.78 percent delivery rate impact from regulatory costs contributed to approximately 31.8 percent of FEFN’s average delivery rate increase from 2012 to 2021. In comparison, the regulatory costs for FEI’s 2022 Annual Review were approximately \$150 thousand, which is higher than FEFN’s historical regulatory costs shown in Table 5-1; however, these regulatory costs only contributed to approximately 0.011 percent of FEI’s delivery rate impact and is equivalent to 0.14 percent of FEI’s 2022 approved delivery rate increase of 8.07 percent. As such, in the context of FEFN, regulatory costs have a material impact on the delivery rates.

**Q27: Does the Fort Nelson Service Area bear the full costs of the regulatory burden?**

**A27:** No. FEI allocates costs to FEFN based on number of customers, which does not capture the full cost. Please refer to FEI’s response to BCUC IR1 8.3.

**Q28: NRRM claims that being a separate service area with its own rate base gives it an opportunity to raise concerns specific to its circumstances. Would NRRM have the same ability under common rates?**

**A28:** Yes. Under common rates, NRRM would have the same opportunity to participate in BCUC proceedings and raise issues specific to its community. FEI also notes that NRRM (and other FEFN stakeholders and Indigenous groups) would continue to have the opportunity to engage with FEI’s Community and Indigenous Relations Manager designated to the Fort Nelson area.

**Q29: NRRM claims that being a separate service area with its own rate base increases the “level of fairness”. Does FEI agree with this assessment?**

**A29:** No. FEFN is one of 135 communities served by FEI, but is the only one with a separate rate base and rates. FEFN’s existence as a separate service area is due

1 to history, not any particular attributes of Fort Nelson compared to the other  
2 communities served by FEI. Consistent with provincial policy, FEI's view is that it  
3 is fair for all communities to be served under common rates.  
4

5 **Q30: NRRM states that "FEFN users, as residents of the NRRM, are only too**  
6 **familiar with the implications of the amalgamation and centralization of**  
7 **service delivery in the interests of efficiency."**<sup>11</sup> **Is any corporate**  
8 **amalgamation or centralization of service delivery required to implement**  
9 **common rates?**  
10

11 A30: No. FEI is the corporate entity that serves FEFN and all of its other natural gas  
12 customers. Therefore, no corporate amalgamation is required. Service to FEFN  
13 is already fully centralized within FEI as discussed on page 20 of the Application.  
14

15 **Q31: Will common rates change any aspect of service to Fort Nelson?**  
16

17 A31: No. Service to the Fort Nelson Service Area will remain the same under common  
18 rates. As explained in the responses to BCUC IR1 31.2 and RCIA IR1 4.3, Fort  
19 Nelson customers will also benefit in the future from an expansion of service  
20 offerings if common rates are approved, as FEI plans to offer its Renewable Gas  
21 Program to FEFN customers subsequent to the completion of the Comprehensive  
22 Review and Application for a Revised Renewable Gas Program regulatory process  
23 which is currently underway with the BCUC.  
24  
25

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<sup>11</sup> Exhibit C2-5, NRRM Evidence, p. 3.

## **6.0 FEI'S DEMAND FORECAST METHODOLOGY IS REASONABLE AND ACCURATE**

**Q32: In its response to FEI's IR1 7.1, NRRM's expert CSCW notes the Total Demand shown in the table provided in FEI's IR1 7.1 is not the same as the sum of Residential and Commercial totals shown in the same table, and CSCW has concerns with its reliability. Does FEI agree with this assessment?**

**A32:** No. The purpose of the table provided in FEI's IR1 7.1 to NRRM was to demonstrate that 2020 is not anomalous, regardless of whether this is analyzed on FEFN's total demand, residential demand, or commercial demand. The data was directly copied from Table A2-1 of Appendix A2 of the Application which was also included in FEI's IR1 7.1 to NRRM directly above the table in question. The table was never intended to show that the total demand equals to the sum of residential and commercial demand, as it can be seen that FEI did not include the RS 25 industrial customer demand in the table. RS 25 was not included as there was no question about anomalous data for RS 25 and the single RS 25 customer switched to RS 3 large commercial in November 2020 as discussed in Section 4.3.2.1 of the Application.

**Q33: On page 5 of Attachment 1 to NRRM's response to BCUC IR1 5.0, CSCW says they have identified several arithmetic mistakes in Table A2-1 of Appendix A2 of the Application, particularly the total customer count and customer additions for 2012 and 2020. What is FEI's response to this?**

**A33:** For 2012, there is no arithmetic mistake for the total customer count and total customer additions. FEI implemented a new SAP-based Customer Information System (CIS) in 2012 which resulted in a one-time customer count adjustment. This adjustment in customer count has no impact on historical results prior to 2012. This adjustment has existed since 2012 and was already discussed in a letter provided to the BCUC on January 28, 2013 which was included as Appendix E4 to FEI's 2014-2019 Performance Based Rate-making (PBR) Application.

For 2020, the difference between the 2019 and 2020 total customer count shown in Table A2-1 is -24 (i.e., 2,373 - 2,349) while the total customer additions for 2020 is shown as -25. This is due to a rounding error in RS 3 which should have a customer addition of 3 instead of 2. This rounding error of 1 in 2020 is limited to the presentation of Table A2-1, and does not change the forecast for future years.

**Q34: On page 5 of Attachment 1 to NRRM's response to BCUC IR1 5.0, CSCW (NRRM's expert) suggests the decline of total customer count from 2010 to 2020 was only 39 customers. Does FEI agree with this assessment?**

**A34:** No. CSCW's conclusion that FEFN's total customer count declined by 39 customers from 2010 to 2020 fails to consider that FEFN reached a peak of 2,446 customers in 2015. From 2015 to 2020, FEFN's total decline in customers was

98. FEI notes FEFN lost more customers from 2015 to 2020 (i.e., 98) than it had gained from 2010 to 2015 (i.e., 58).

**Q35: In its response to FEI's IR1 7.1, CSCW concludes the decline in demand seen in 2020 is anomalous. Does FEI agree with this assessment?**

**A35:** No. FEFN's demand in 2020 is statistically not anomalous, nor is it a statistical outlier that deviates significantly from the majority of the data. Using the Grubb's Test for outliers<sup>12</sup> (a common statistical test for outliers), the demand as well as customer additions for 2020 is proven to be statistically not an outlier as shown in Tables 5 and 6 below. FEI also included the actual 2021 demand and customer additions in the tables below. Since neither 2020 nor 2021 are statistically outliers, FEI has no reason to exclude or introduce any different treatment for this data than the rest of the data in the forecasts.

**Table 5: Grubb's Test for Outliers on FEFN's Actual Demand (2011 to 2021)**

Total Demand				RS 1				RS 2 & 3 - incl. RS 25			
Year	Demand (TJ)	Grubbs Test (G)	Outliers Y/N (If G > Critical G)	Year	Demand (TJ)	Grubbs Test (G)	Outliers Y/N (If G > Critical G)	Year	Demand (TJ)	Grubbs Test (G)	Outliers Y/N (If G > Critical G)
2011	622	0.807	No	2011	268	0.893	No	2011	354	0.774	No
2012	630	0.966	No	2012	269	1.018	No	2012	361	0.942	No
2013	645	1.251	No	2013	270	1.087	No	2013	375	1.288	No
2014	645	1.246	No	2014	268	0.882	No	2014	377	1.342	No
2015	603	0.445	No	2015	265	0.701	No	2015	337	0.366	No
2016	580	0.014	No	2016	262	0.441	No	2016	318	0.112	No
2017	556	0.451	No	2017	251	0.466	No	2017	304	0.443	No
2018	537	0.818	No	2018	245	0.957	No	2018	291	0.769	No
2019	537	0.806	No	2019	244	1.040	No	2019	293	0.729	No
2020	518	1.173	No	2020	243	1.144	No	2020	275	1.170	No
2021	502	1.483	No	2021	240	1.415	No	2021	262	1.489	No

Mean	579
SD	52
n	11
Alpha	0.05
T-Dist	3.751
Crit. G	2.355

Mean	257
SD	12
n	11
Alpha	0.05
T-Dist	3.751
Crit. G	2.355

Mean	322
SD	41
n	11
Alpha	0.05
T-Dist	3.751
Crit. G	2.355

<sup>12</sup> <https://www.itl.nist.gov/div898/handbook/eda/section3/eda35h1.htm> or <https://www.graphpad.com/quickcalcs/grubbs1/>.

**Table 6: Grubb's Test for Outliers on FEFN's Actual Customer Additions (2011 to 2021)**

Total Customer				RS 1 Customer				RS 2 & 3 - incl. RS 25 Customer			
Year	Adds	Grubbs Test (G)	Outliers Y/N (If G > Critical G)	Year	Adds	Grubbs Test (G)	Outliers Y/N (If G > Critical G)	Year	Adds	Grubbs Test (G)	Outliers Y/N (If G > Critical G)
2011	47	2.233	No	2011	18	1.632	No	2011	29	2.727	Yes
2012	12	0.695	No	2012	8	0.939	No	2012	4	0.227	No
2013	15	0.827	No	2013	12	1.216	No	2013	3	0.127	No
2014	3	0.300	No	2014	3	0.592	No	2014	-	0.173	No
2015	5	0.388	No	2015	1	0.454	No	2015	4	0.227	No
2016	(14)	0.447	No	2016	(18)	0.863	No	2016	4	0.227	No
2017	(22)	0.799	No	2017	(18)	0.863	No	2017	(4)	0.573	No
2018	(13)	0.404	No	2018	(8)	0.170	No	2018	(5)	0.673	No
2019	(24)	0.887	No	2019	(21)	1.071	No	2019	(3)	0.473	No
2020	(25)	0.931	No	2020	(18)	0.863	No	2020	(7)	0.873	No
2021	(26)	0.975	No	2021	(20)	1.002	No	2021	(6)	0.773	No

Mean	(4)
SD	23
n	11
Alpha	0.05
T-Dist	3.751
Crit. G	2.355

Mean	(6)
SD	14
n	11
Alpha	0.05
T-Dist	3.751
Crit. G	2.355

Mean	2
SD	10
n	11
Alpha	0.05
T-Dist	3.751
Crit. G	2.355

FEI notes that, as shown in Table 6 above, only the 2011 customer additions for the commercial customers were statistically an outlier; however, this has no impact on the forecast for commercial customer additions in 2021 or onward since the commercial additions forecast is based on the three-year average of the most recent actual additions from prior years, as discussed in Appendix A3 of the Application.

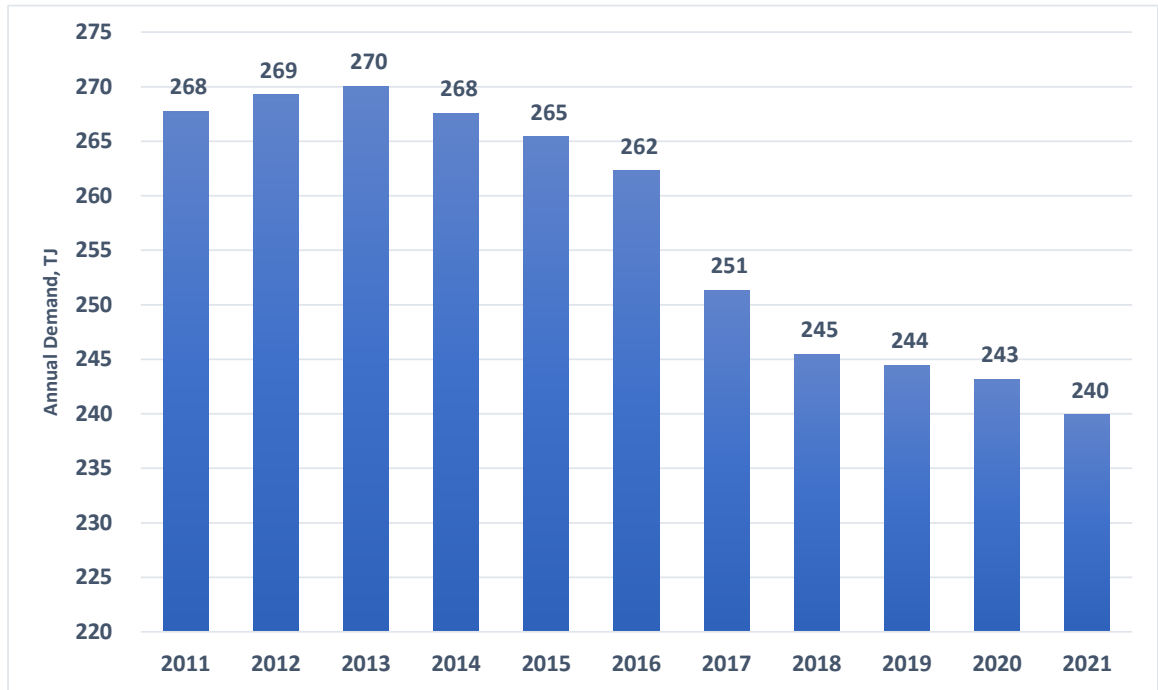
**Q36: In its response to FEI's IR1 7.1, NRRM referred to FEI's Okanagan Capacity Upgrade (OCU) CPCN Application and highlighted FEI's assessment of COVID-19 impacts on FEI's demand forecast for the areas that are applicable to the OCU Project, including commercial loads declining due to business closures and expected offsetting increases in residential heating loads due to individuals working from home or spending more time at home. Does FEI believe its assessment of COVID-19 impacts in the OCU CPCN also applies to the Fort Nelson Service Area?**

**A36:** No. FEI's assessment of the impact of the COVID-19 pandemic on the demand forecast in the OCU CPCN Application cannot be applied to the Fort Nelson Service Area. The OCU Project area covers large urban cities such as Kelowna with populations close to 130 thousand compared to the Fort Nelson population of approximately 5 thousand. It is therefore expected that COVID-19 would have a much larger impact due to individuals working from home, leading to an increase in residential demand.

Figure 1 below shows FEFN's residential demand since 2011 and it can be seen that it has been on a continuous decline since 2013. The decline in demand from 2018 to 2021 is relatively consistent, ranging from 1 to 3 TJ per year. FEI also

1 notes that there does not appear to be an uptick in residential demand in 2020 or  
2 2021 that might be associated with working from home due to the COVID-19  
3 pandemic.  
4

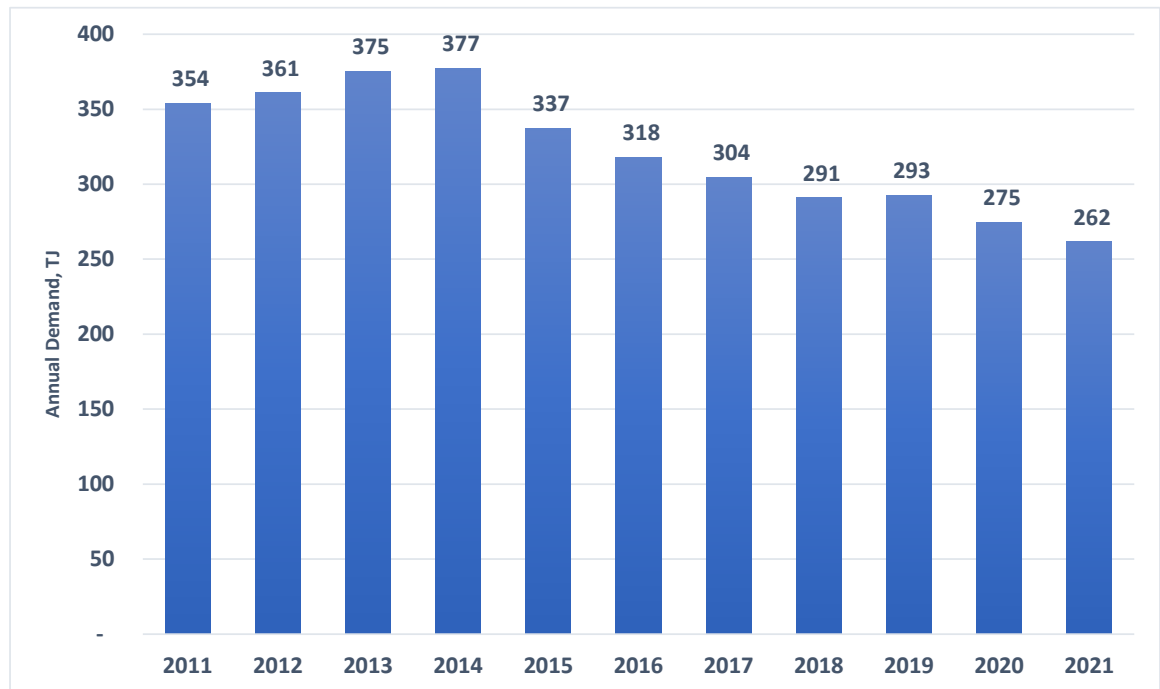
5 **Figure 1: FEFN's Actual Residential Demand (2011 to 2021)**



6  
7  
8 Furthermore, as shown in Figure 2 below for the commercial demand since 2011,  
9 except for the small increase of 2 TJ in 2019, the average decline from 2014 to  
10 2021 was approximately 17 TJ, which is comparable to the decline in 2020 and  
11 2021, which was 18 TJ and 13 TJ, respectively.  
12

1

**Figure 2: FEFN's Actual Commercial Demand (2011 to 2021)**



2  
3

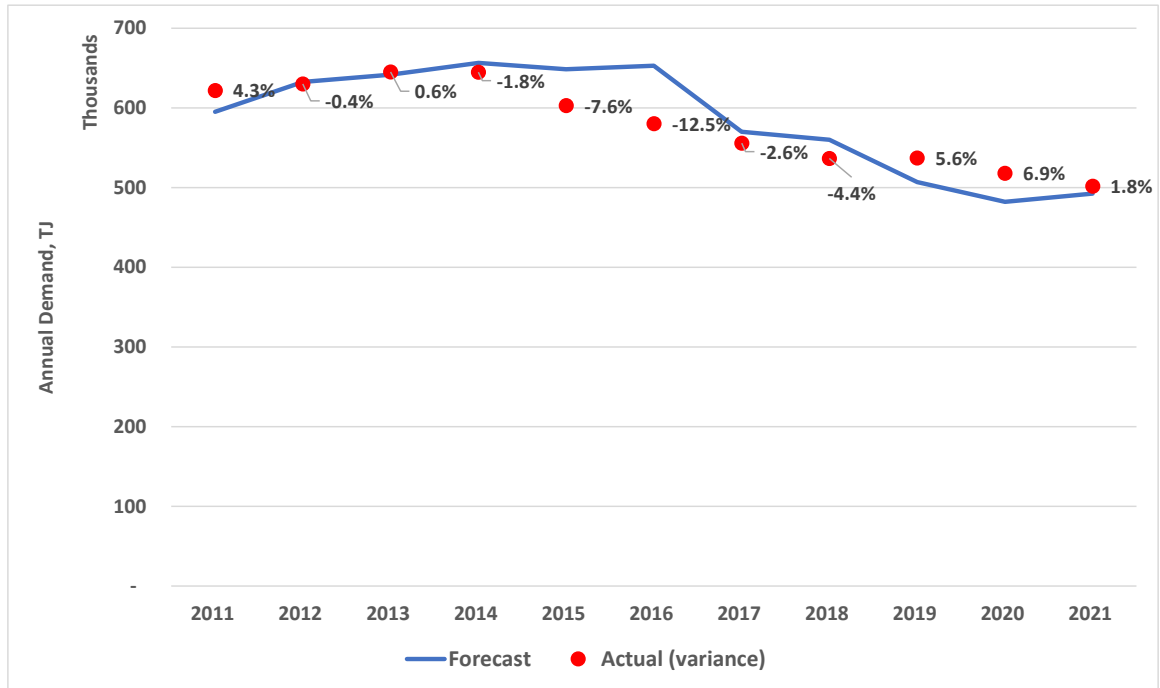
**Q37: Please describe the extent to which FEI has relied on its demand forecast method in the past and its performance.**

**A37:** FEI has been using largely the same demand forecast method, including the use of the CBOC forecast for residential customer additions, since 2012. FEI's demand forecast method is reviewed by the BCUC during each of FEI's revenue requirement applications (RRAs) for the Fort Nelson Service Area and the RRAs for the rest of FEI's service area. Figure 3 below shows the Fort Nelson Service Area's actual and forecast total demand from 2011 to 2021 with the variance shown in percentage. The Mean Absolute Percentage Error (MAPE) for the total demand forecast is 4.4 percent over the period from 2011 to 2021. This level of MAPE is acceptable and comparable to other utilities. For example, the 10 gas utilities that responded to the most recent (2021) annual ITRON survey reported an average variance of 4.5 percent for 2020. The eight-year average variance from this survey (ranging from eight to 16 participants each year) was 4.7 percent. FEI believes that the 4.4 percent 2011-2021 MAPE currently experienced for the Fort Nelson Service Area is very good considering the relatively small customer base of approximately 2,400 customers, compared to the rest of FEI which has over 1 million customers. FEI notes the relatively higher variances shown in 2015 and 2016 were due to a large number of customers switching between small and large customer classes at that time. Please see FEI's response to BCUC IR1 3.5.

25



**Figure 3: FEFN's Variance between Actual and Forecast Demand (2011 to 2021)**



**Q38: In its response to RCIA IR1 3.5, NRRM was asked to calculate expected numbers of residential customers in Fort Nelson using the LHA growth rate based on the methods described in Section 3.3.1.2 of FEI's OCU CPCN Application. Did FEI actually use the LHA growth rate to forecast the number of residential customers in the OCU CPCN Application?**

**A38:** No. The LHA growth rates from the BC Stats Household Formation (HHF) forecast were not the basis of the forecast residential customer count, or an alternative to using the CBOC forecast, in the OCU CPCN Application. As explained in FEI's response to BCUC IR2 45.1 in the OCU CPCN Application,<sup>13</sup> the HHF forecast was simply used to divide the customer additions forecast based on the CBOC forecast into different local health areas and further to individual municipalities served by FEI that would be impacted by the OCU Project. In order words, the customer additions forecast completed in the OCU CPCN Application was the same method that was used for the Fort Nelson Service Area in this Application. The LHA growth rates from the HHF were only used as a proxy to further break down FEI's forecasts into the different municipalities. As there is only one LHA within the Fort Nelson Service Area, the HHF forecast from BC Stats cannot be used to further break down the Fort Nelson Service Area customer additions.

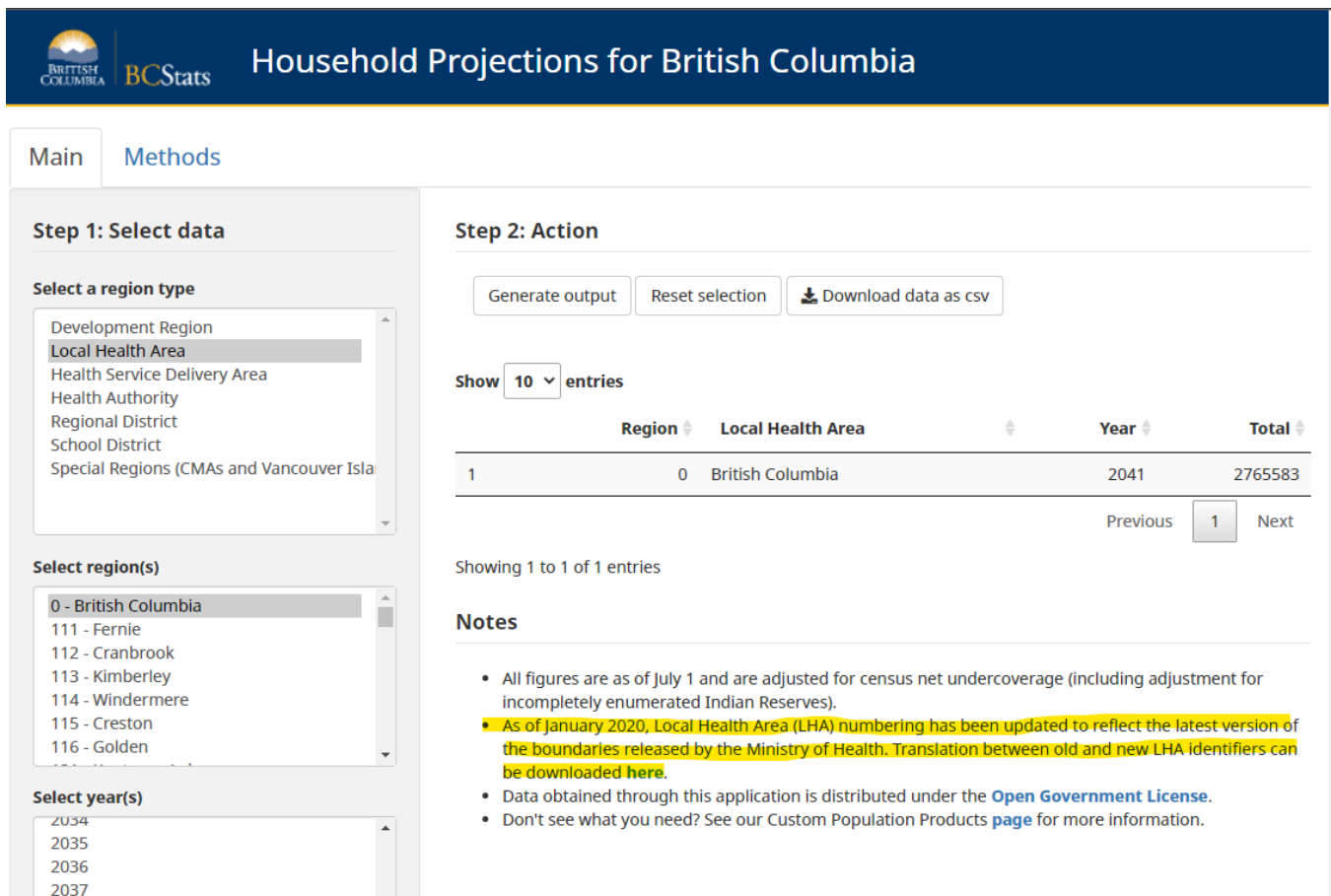
**Q39: In its response to RCIA IR1 7.1, NRRM made a comment that there is no LHA #23 in BC which FEI had used in Section 3.3.1.2 of the OCU CPCN Application**

<sup>13</sup> [https://docs.bcuc.com/Documents/Proceedings/2021/DOC\\_62610\\_B-14-FEI-Response-to-BCUC-IR2.pdf](https://docs.bcuc.com/Documents/Proceedings/2021/DOC_62610_B-14-FEI-Response-to-BCUC-IR2.pdf).

for Kelowna: “All LHAs are represented by a 3 digit number. Two digit numbers represent Health Service Delivery Areas (HSDAs). HSDA #23 represents Fraser South within the Fraser Health Authority and Kelowna is no in HSDA #23. Kelowna is in LHA #137 (Central Okanagan).” Is NRRM’s assessment correct?

A39: No. As shown in Figure 4 below which is a screen capture from the BC Stats website<sup>14</sup> for household projections, the LHA numbering was updated by BC Stats as of January 2020 to reflect the latest version of the boundaries released by the Ministry of Health. BC Stats also provided an excel file available online for the translation between the old and new LHA identifiers. In this translation file between the old and new LHA identifiers, it can be seen the old LHA identifier for Central Okanagan is 23 which has been updated to 137. The LHA #23 presented in FEI’s OCU CPCN Application was the correct identifier at that time and it is not an HSDA number.

Figure 4: Screen Capture from BC Stats Household Projections Website



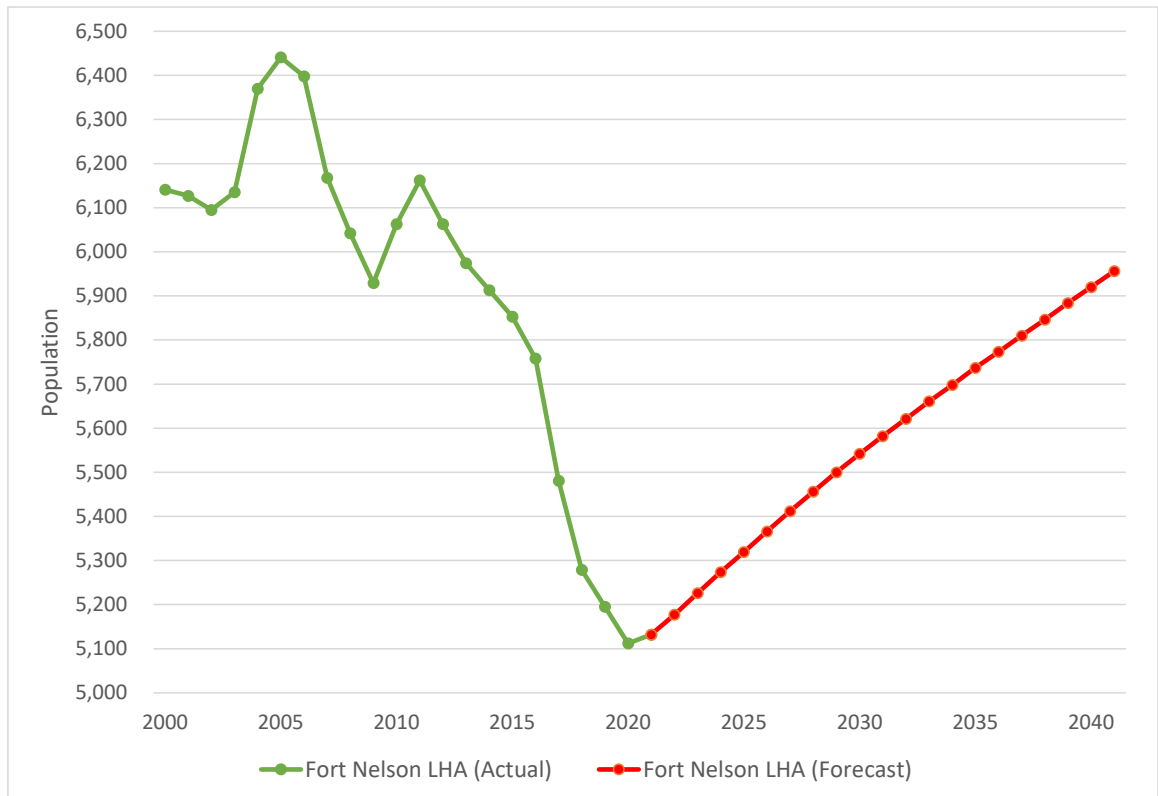
Q40: In its evidence, NRRM and its expert CSCW commented that FEI’s demand prediction takes no notice of population predictions by BC Stats, and in

<sup>14</sup> <https://bcstats.shinyapps.io/hsdProjApp/>.

response to FEI's IR1 8.3, NRRM's expert, CSCW, claims that the CBOC forecast FEI used in its demand forecast method for residential customer additions "does not consider the housing information from the province for the Fort Nelson community". Further, in Appendix D of NRRM's evidence, CSCW made various references to the BC Stats population and household projection forecasts, suggesting the BC Stats forecasts reflect the information from the Fort Nelson community. Does FEI have any comments about the BC Stats forecast for Fort Nelson's population or households?

A40: Yes. Figure 5 below shows the population for the Fort Nelson LHA from the BC Stats website with green showing the actuals from 2000 to 2020, and red showing the forecasts from 2021 to 2041. After reviewing this information, FEI investigated the unusually sharp turnaround from 2020 onwards as FEI could not explain this statistically.

**Figure 5: BC Stats Population Fort Nelson LHA (2000 – 2041)**



FEI reached out to BC Stats for clarification and met virtually with staff from BC Stats on April 27, 2022 to discuss this forecast for Northern Rockies and Fort Nelson. BC Stats explained that the forecast is currently based on the 2016 Census of Population, uses a method that was developed in 1999, and the forecast assumptions may not reflect the current circumstances in Fort Nelson. BC Stats further explained that the forecast method and software were currently under review for potential replacement. BC Stats recommended FEI refrain from using the Fort Nelson forecast until such time as these updates are complete.

1 **Q41: In its response to BCUC IR1 5.4.1, NRRM's expert, CSCW, created a demand**  
2 **forecast for FEFN based on the BC Stats forecast of household from 2021 to**  
3 **2041 using a linear regression between actual BC Stats households and**  
4 **FEFN total demand from 2011 to 2020. What is FEI's assessment of this**  
5 **forecasting method?**  
6

7 A41: FEI notes the forecasting method used by CSCW relies on BC Stats household  
8 data only to project the total demand of FEFN that includes residential, small and  
9 large commercial customers. Using only the household numbers to forecast  
10 different types of customers that have vastly different consumption patterns is  
11 problematic, considering the large commercial rate classes include large facilities  
12 such as hospitals, community centres, schools, hotels, as well as the former  
13 Canfor Polarboard facility that switched from Rate Schedule 25 to Rate Schedule  
14 3 in November 2020. FEI's forecasting method recognizes the differences  
15 between different types of customers and forecasts for residential and commercial  
16 rate classes separately.  
17

18 **Q42: Will the forecasting method used by CSCW be more accurate than FEI's**  
19 **existing forecasting methods?**  
20

21 A42: No. Using the actual BC Stats household numbers and FEFN's total demand from  
22 2001 to 2020, Table 7 below shows the comparison between FEI's original  
23 forecasts and CSCW's BC Stats forecasting methods for the total demand from  
24 2011 to 2020. FEI notes the CSCW forecasting method shown in Table 7 below  
25 is based on a rolling 10-year linear regression between BC Stats actual household  
26 numbers and FEFN's actual total demand. For example, the forecast for 2011  
27 using CSCW's method would be based on the actual BC Stats household numbers  
28 and FEFN total demand from 2001 to 2010, and the forecast for 2012 would be  
29 based on actuals from 2002 to 2011.  
30

31 The MAPE of CSCW's forecasting method, based on the linear regression  
32 between the BC Stats household numbers and FEFN's total demand, is 9.1  
33 percent, which is double the MAPE of FEI's forecast method of 4.5 percent. FEI  
34 also observes that CSCW's forecasting method always over-forecasts FEFN's  
35 total demand from 2011 to 2020, which is a sign that this forecasting method would  
36 be overly optimistic in the relationship between household growth and actual  
37 natural gas demand.  
38

1  
2

**Table 7: Comparison between FEI's Original Forecast and CSCW's Forecasting Methods (2011 to 2020)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BC Stats Households	2433	2543	2489	2460	2377	2338	2235	2165	2139	2116
FEFN Total Demand (Actual)	622	630	645	645	603	580	556	537	537	518
FEFN Total Demand (Estimate - BC Stats Method)	736	649	656	666	720	701	685	608	545	528
Error (Actual - Forecast)	(114)	(19)	(11)	(21)	(117)	(121)	(129)	(71)	(8)	(10)
Percent Error (Abs)	15.5%	2.9%	1.6%	3.1%	16.3%	17.2%	18.8%	11.7%	1.5%	1.9%
MAPE (%) - BC Stats Method	9.1%									
FEFN Total Demand (FEI Original Forecast)	595	633	642	656	648	653	570	560	507	482
Error (Actual - Forecast)	27	(3)	3	(11)	(45)	(73)	(14)	(23)	30	36
Percent Error (Abs)	4.5%	0.4%	0.5%	1.7%	7.0%	11.2%	2.5%	4.1%	5.9%	7.5%
MAPE (%) - FEI Original Forecast	4.5%									

3  
4

1 **7.0 IMPACT OF ECONOMIC DEVELOPMENT POTENTIAL IS**  
2 **LIMITED AND UNCERTAIN**

3 **Q43: In its evidence, NRRM highlighted three potential industrial developments.**  
4 **From FEI's perspective, how will these developments impact FEFN's**  
5 **demand?**  
6

7 A43: FEI's understanding is that none of the three potential industrial developments will  
8 add any industrial gas demand to FEFN's system. This is confirmed by NRRM's  
9 responses to FEI's IR1 2.2, 3.2, and 4.3. As such, the only potential impact due  
10 to these potential industrial developments, if they were to materialize, would be to  
11 the Fort Nelson Service Area's residential demand due to the increase in  
12 employment.  
13  
14

15 **8.0 CONCLUSION**

16 **Q44: Does this conclude FEI's Rebuttal Evidence?**  
17

18 A44: Yes.

## **Appendix A**

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**Subject:** FortisBC - Price increase for Fort Nelson Customers

**From:** Mason, Matt

**Sent:** Thursday, June 3, 2021 9:27 AM

**To:** [REDACTED]

**Subject:** RE: [External Email] - FortisBC - Price increase for Fort Nelson Customers

Hi [REDACTED]

The move to common rates is revenue-neutral for FortisBC which means that FortisBC will not earn more profit as a result of moving Fort Nelson customers to common rates.

Your natural gas bill includes a delivery component and a commodity component. The delivery portion of the natural gas bill is not influenced by Fort Nelson's proximity to natural gas production, it is instead related to FortisBC's recovery of the costs of our operations such as our distribution assets, labour, and facilities in Fort Nelson. This delivery portion of Fort Nelson customer rates has historically been more volatile compared to the larger FortisBC service area and has been steadily increasing in recent years due to the cost of infrastructure upgrades for safety and reliability purposes. The benefit for Fort Nelson customers paying the same rates as everyone else will be the lessened future rate impact since the costs of these upgrades for safety and reliability purposes will be spread over all of FortisBC's million plus customers instead of just Fort Nelson's approximately 2,400 customers. We are exploring a number of common rates options and are looking at potential options which recognize the current differences in Fort Nelson's commodity related charges. Additionally, and depending on the common rate option being considered, commercial customers may experience savings in their bills as a result of moving to common rates.

If you require more information, I would encourage you to visit the British Columbia Utilities Commission (BCUC) website to sign up as an intervener in the application process.

Kind regards,

**Matt Mason**

**Community & Indigenous Relations Manager**

[matt.mason@fortisbc.com](mailto:matt.mason@fortisbc.com)





## **Appendix B**

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**From:** Mason, Matt  
**Sent:** Friday, June 4, 2021 1:26 PM  
**To:** Mike Gilbert  
**Subject:** Re: [External Email] - Fortis Rate Proposal - Fort Nelson

Hi Mike,

Our regulatory department manager has looked at the spreadsheet and confirmed your assumptions are accurate. One thing worth noting is the spreadsheet does not have the savings forecasted for the commercial rates.

Again, FortisBC would be more than happy to present to council if leadership would like.

Kind regards,

Matt

---

**From:** Mike Gilbert <mgilbert@northernrockies.ca>  
**Sent:** Friday, June 4, 2021 9:55 AM  
**To:** Mason, Matt  
**Subject:** [External Email] - Fortis Rate Proposal - Fort Nelson

**CAUTION:** This is an external email.  
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Hi Matt:

I'm attaching a working spreadsheet for comment. As noted, it assumes a move to full 'Postage stamp' rates in 2022.

I'd appreciate any comments, and corrections on any naïve assumptions I may have made. As noted I'm working on a deadline of having a report complete and submitted as of close of business today.

A copy of the presentation slide deck you referred to would be a good reference, please and thanks.

Mike

**Mike Gilbert** – Regional Development Officer  
**Northern Rockies Regional Municipality - BC's First!**  
Tel (250) 774-2541 ext 2043 | Fax (250) 774-6794  
Municipal web page: [www.northernrockies.ca](http://www.northernrockies.ca)  
Tourism web page: [www.tourismnorthernrockies.ca](http://www.tourismnorthernrockies.ca)  
5319 - 50th Avenue South | Bag Service 399 | Fort Nelson, BC | V0C 1R0  
**9-1-1 Emergency Calling Service is now available in the NRRM**

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## **Appendix C**

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**From:** Mason, Matt  
**Sent:** Monday, June 7, 2021 3:56 PM  
**To:** Mike Gilbert  
**Subject:** RE: [External Email] - NRRM following up

Hi Mike,

Thinking if we were to present, it would be good to present to council so it's on record with the public.

We are good with the 14<sup>th</sup>...

Also, we can present at noon on a day that works for everyone as well.

Matt

---

**From:** Mike Gilbert <mgilbert@northernrockies.ca>  
**Sent:** Monday, June 7, 2021 2:54 PM  
**To:** Mason, Matt <Matt.Mason@fortisbc.com>  
**Subject:** [External Email] - NRRM following up

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Hi Matt:

Thanks for the information provided on short notice last week.

I've let the CEO know that there's an offer of a presentation to Regional Council. Were there to be a request to present at the next Council meeting on the evening of the 14<sup>th</sup> (likely at 5:00) could you do so or do you have another date (perhaps over the noon hour) that would work better?

Mike