

FEI Annual Review of 2022 Delivery Rates

Workshop

October 15, 2021



Agenda

Topic	Presenter(s)
Overview & Approvals Sought	Diane Roy, <i>Vice President, Regulatory Affairs</i>
Revenue Requirements & Rates	Anthony Ho, <i>Manager, Cost of Service</i>
Customer Growth and Retention	Jason Wolfe, <i>Director, Energy Solutions</i>
Low Carbon Transportation	Jamie King, <i>Senior Manager, Business Development</i> Christopher Bystrom, <i>Counsel for FEI</i>
Regional Gas Supply Diversity (RGSD) Project Development Costs Deferral Account	Jamie King, <i>Senior Manager, Business Development</i> Sarah Walsh, <i>Senior Manager, Regulatory Affairs</i>
Service Quality Indicators (SQIs)	James Wong, <i>Director, Budgeting & Strategic Initiatives</i> Philip Murphy, <i>Manager, Occupational Health & Safety</i> Michelle Carman, <i>Director, Customer Service</i>
Clean Growth Innovation Fund	Mark Warren, <i>Director, Business Innovation</i>
Open Question Period	All



Approved Multi-Year Rate Plan (MRP)

MRP Term from 2020 to 2024

Rate Increase
for 2022

Service Quality
Indicators

Formula-
Driven Items
(O&M and
Growth
Capital)

Forecast Items
(Approved
Capital and
Flow-through)

Customer

Safety

Approvals Sought

- Delivery rate increase of 8.07 percent
- Three new regulatory proceeding deferral accounts, with amortization to be determined in a future proceeding
 - ❑ Transportation Service Report
 - ❑ 2021 Generic Cost of Capital
 - ❑ 2021 Renewable Gas Program Comprehensive Review
- Regional Gas Supply Diversity Project Development Costs Deferral Account
- Change in frequency of COVID-19 Customer Recovery Fund Deferral Account reporting to quarterly from monthly
- Biomethane Variance Account (BVA) and Revenue Stabilization Adjustment Mechanism (RSAM) rate riders for 2022
- 2022 Core Market Administration Expense (CMAE) budget and allocation

Annual Bill Impact of Delivery Rate Increase Combined with October 1 2021 Commodity Rate Increase

Rate Schedule	Average UPC (GJ)	Annual Bill @ Jan 1, 2021 Approved Delivery and Commodity Rate			Annual Bill Impact of Oct 1, 2021 Commodity Rates		Total Annual Bill Impact of Proposed 2022 Delivery Rate and Oct 1, 2021 Commodity Rates					
		Proposed 2022 Delivery Rate	Annual Bill Impact of Proposed 2022 Delivery Rate	Annual Bill Impact of Oct 1, 2021 Commodity Rates	Annual Bill Impact of Oct 1, 2021 Commodity Rates	Delivery Rate and Oct 1, 2021 Commodity Rates	Annual Bill Impact due to Proposed 2022 Delivery Rate Only (%)	Annual Bill Impact due to Oct 1, 2021 Commodity Rates (%)	Total Annual Bill Impact (%)			
Residential												
Rate Schedule 1	90	\$	988	\$	45	\$	90	\$	135	4.57%	9.11%	13.68%
Commercial												
Rate Schedule 2	340	\$	3,121	\$	120	\$	340	\$	460	3.86%	10.89%	14.75%
Rate Schedule 3	3,770	\$	29,728	\$	999	\$	3,770	\$	4,769	3.36%	12.68%	16.04%
Industrial												
Rate Schedule 4	7,450	\$	42,284	\$	1,669	\$	7,450	\$	9,119	3.95%	17.62%	21.57%
Rate Schedule 5	15,040	\$	98,739	\$	3,902	\$	15,040	\$	18,942	3.95%	15.23%	19.18%
Rate Schedule 6	2,930	\$	19,794	\$	812	\$	2,930	\$	3,742	4.10%	14.80%	18.90%
Rate Schedule 7	128,790	\$	681,818	\$	21,379	\$	128,790	\$	150,169	3.14%	18.89%	22.02%

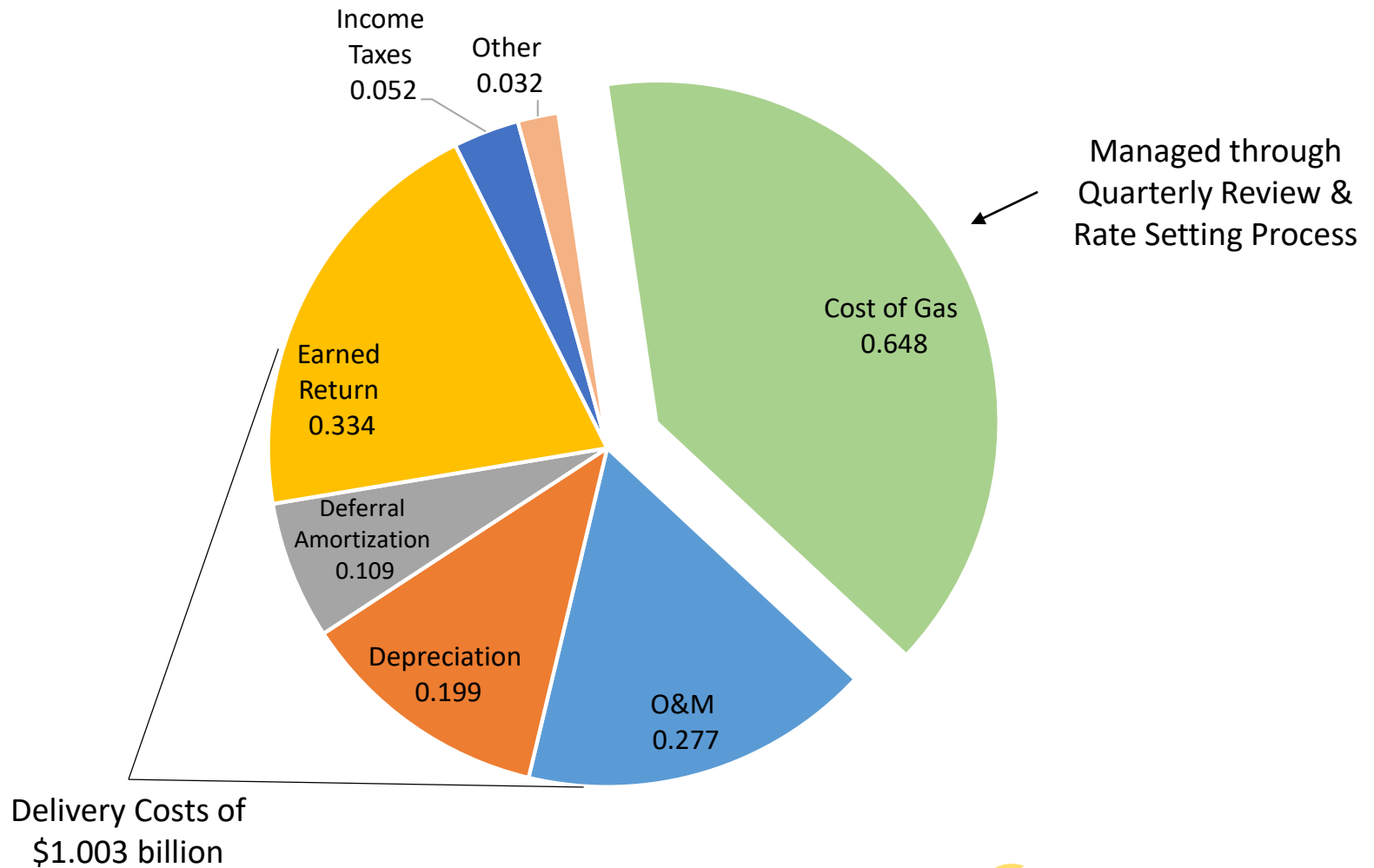
Revenue Requirements & Rates

Anthony Ho, Manager, Cost of Service



2022 Revenue Requirement Summary

Total Revenue Requirement of \$1.651 billion

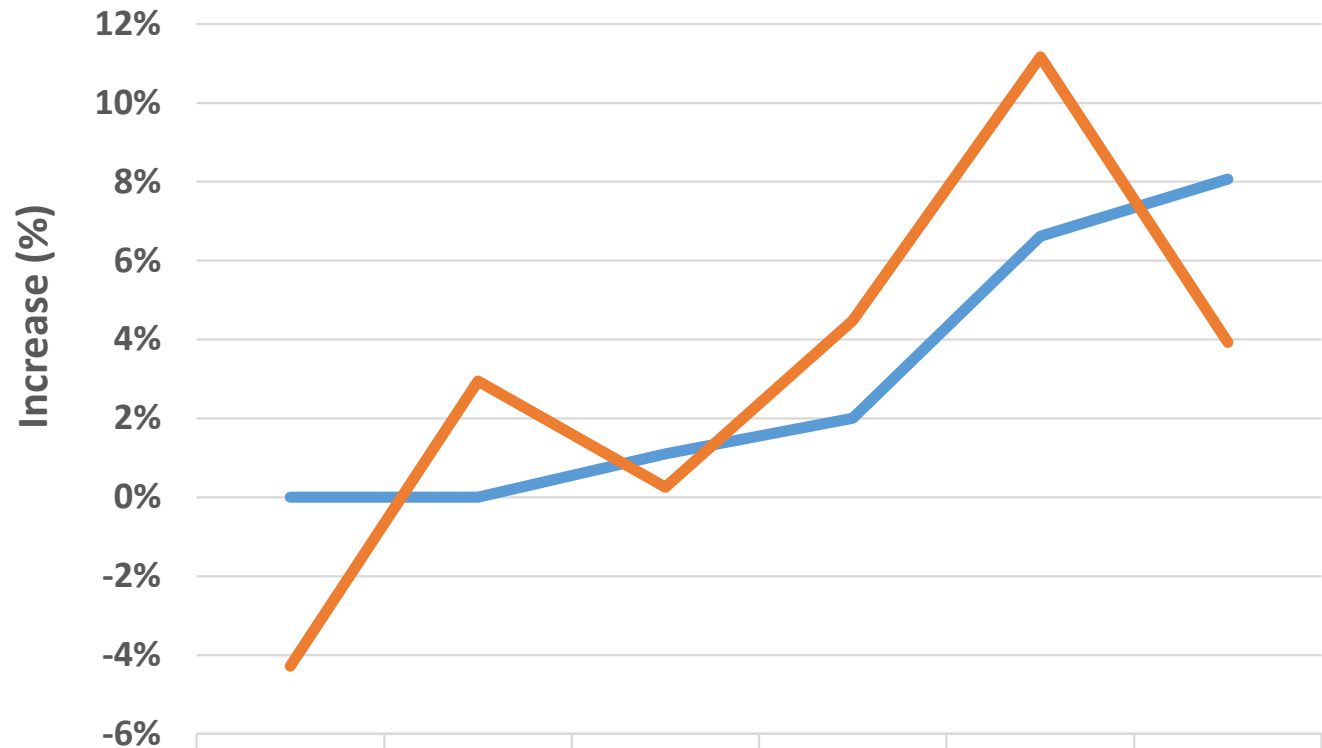


Summary of 2022 Deficiency

- Deficiency of \$71.483 million:
 - Total 2022 revenue requirement is \$1.651 billion, less
 - Revenue at existing 2021 approved rates of \$1.580 billion
- Major drivers of deficiency:
 - Elimination of prior years' revenue surplus (3.98%)
 - Deferral amortization (2.15%)
 - Rate base growth (Depreciation 0.96% & Financing & Return on Equity 1.01%)

Components	\$ millions	%
Demand Forecast	(2.275)	(0.26%)
Other Revenue	0.359	0.04%
Net O&M	1.850	0.21%
Depreciation	8.512	0.96%
Deferral Amortization	19.037	2.15%
Financing and Return on Equity	8.928	1.01%
Taxes	(0.215)	(0.02%)
Elimination of Accumulated Revenue Surplus	35.287	3.98%
Total Deficiency	71.483	8.07%

Driver #1: Elimination of Accumulated Revenue Surplus



	2017	2018	2019	2020	2021	2022
Approved Delivery Rate Increase (%)	0.00%	0.00%	1.10%	2.00%	6.62%	8.07%
Delivery Rate Increase w/o Deferred Deficiency/(Surplus)	-4.28%	2.95%	0.26%	4.48%	11.17%	3.93%

Driver #2: Deferral Amortization

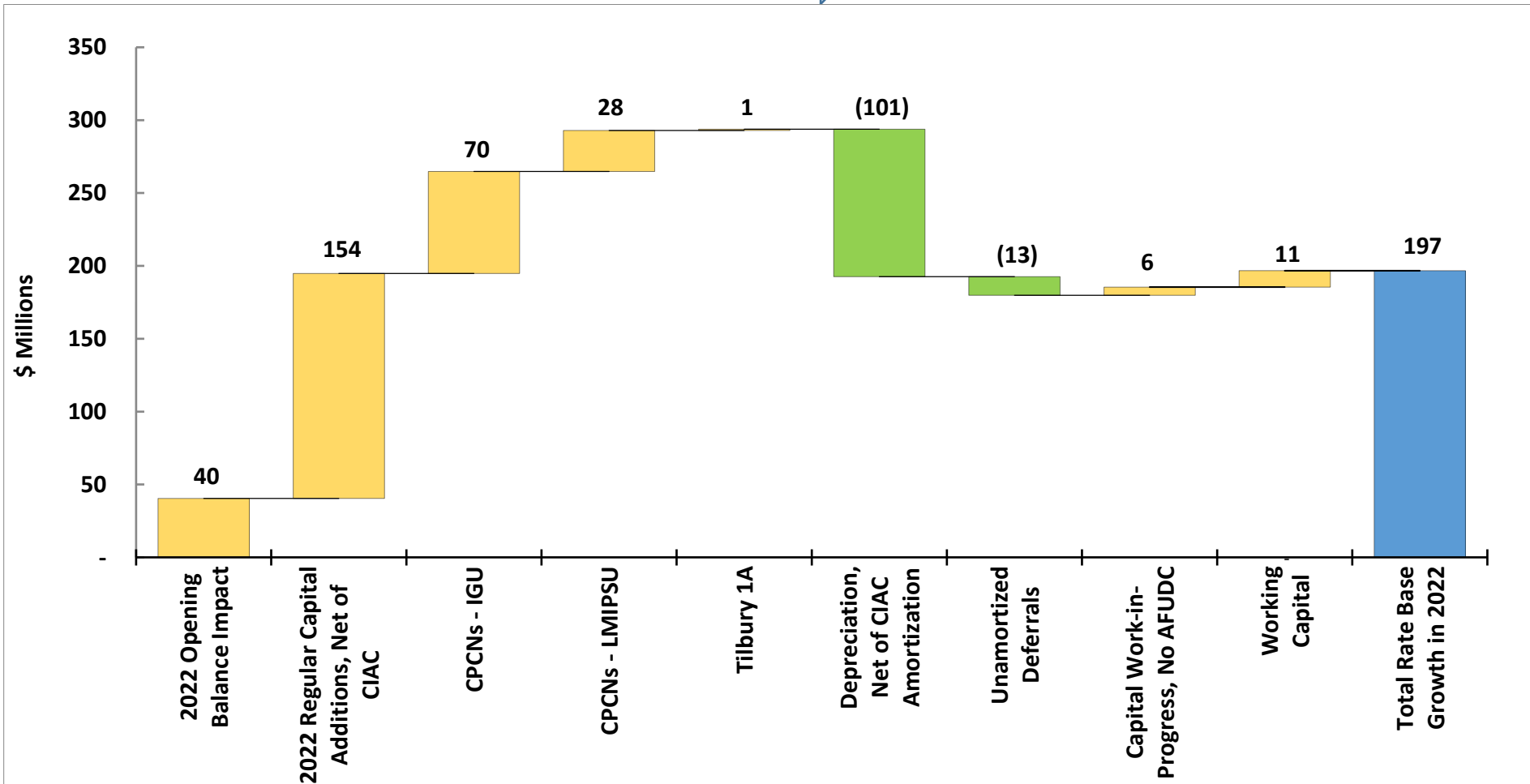
- Total deferral amortization increases by \$19.037 million from 2021 approved:
 - DSM Expenditures Deferral Account: \$6.933 million
 - Flow-through Deferral Account: \$11.417 million
 - Other: \$0.687 million

Driver #3: Rate Base Growth

2021 Approved Rate Base = \$5.212 billion

+ \$197 Million

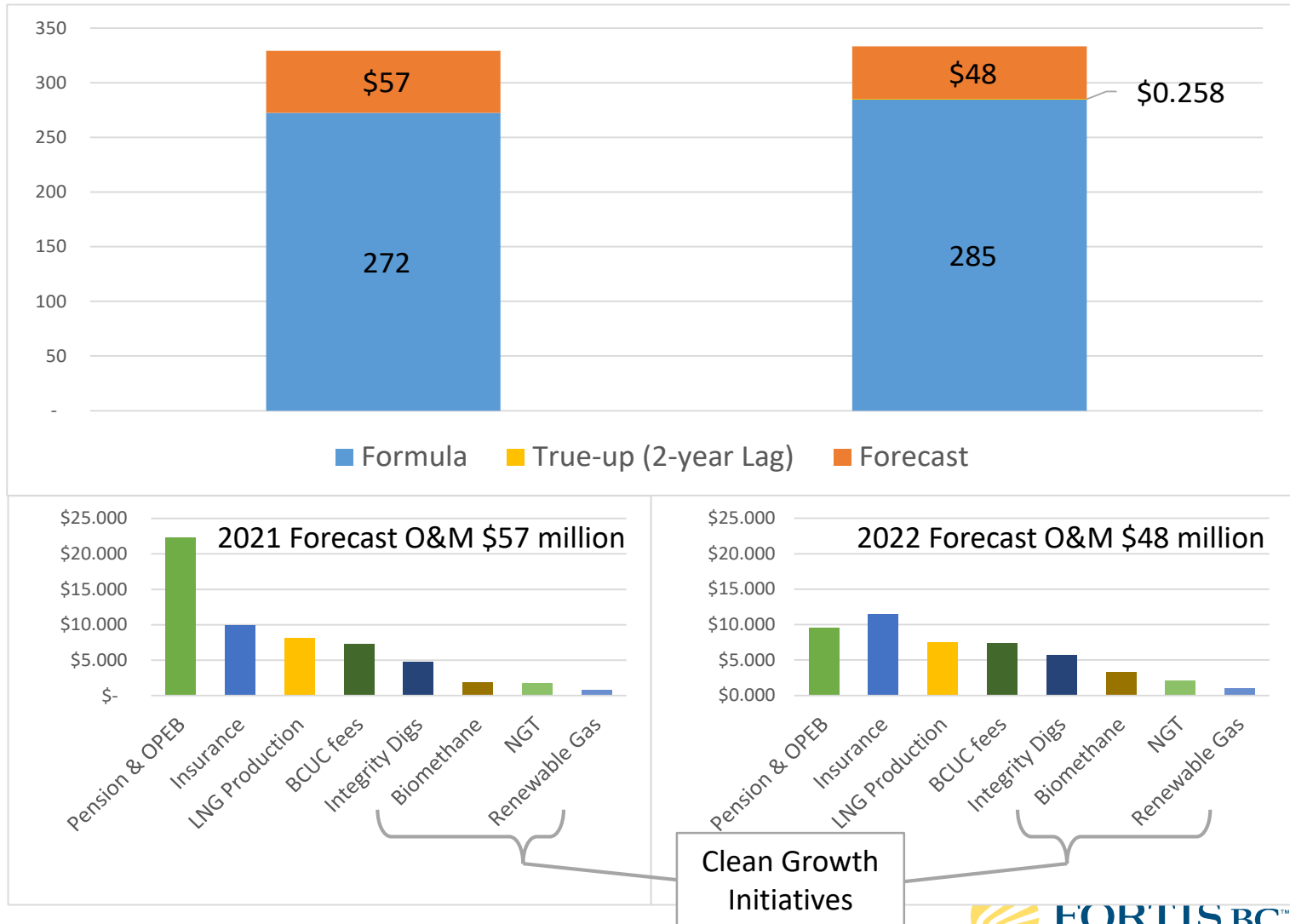
2022 Forecast Rate Base = \$5.409 billion



O&M – 2021 Approved vs. 2022 Forecast

2021 Approved Gross O&M \$329 million
(\$275 million after capitalized overhead)

2022 Forecast Gross O&M \$333 million
(\$277 million after capitalized overhead)



Questions?

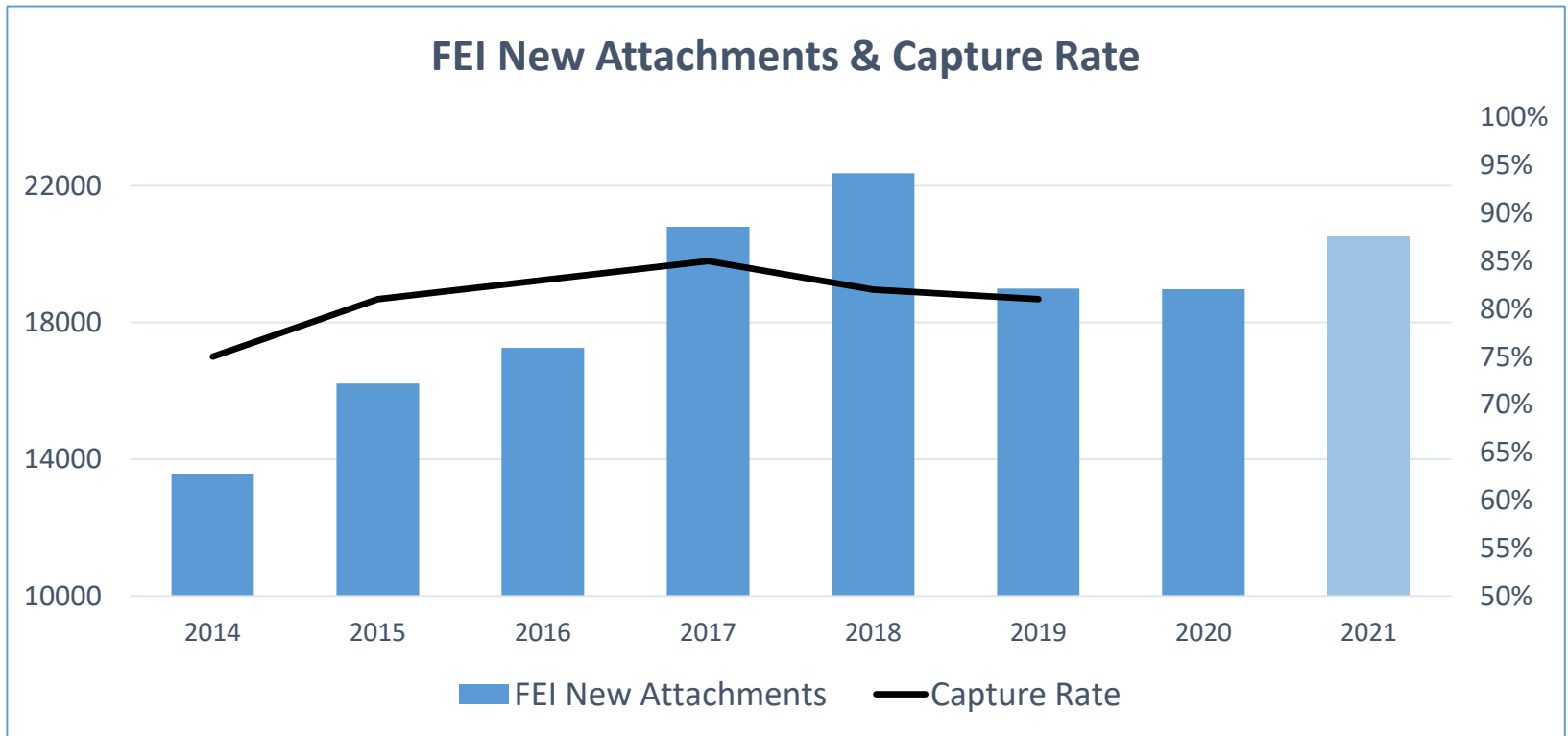


Customer Growth and Retention

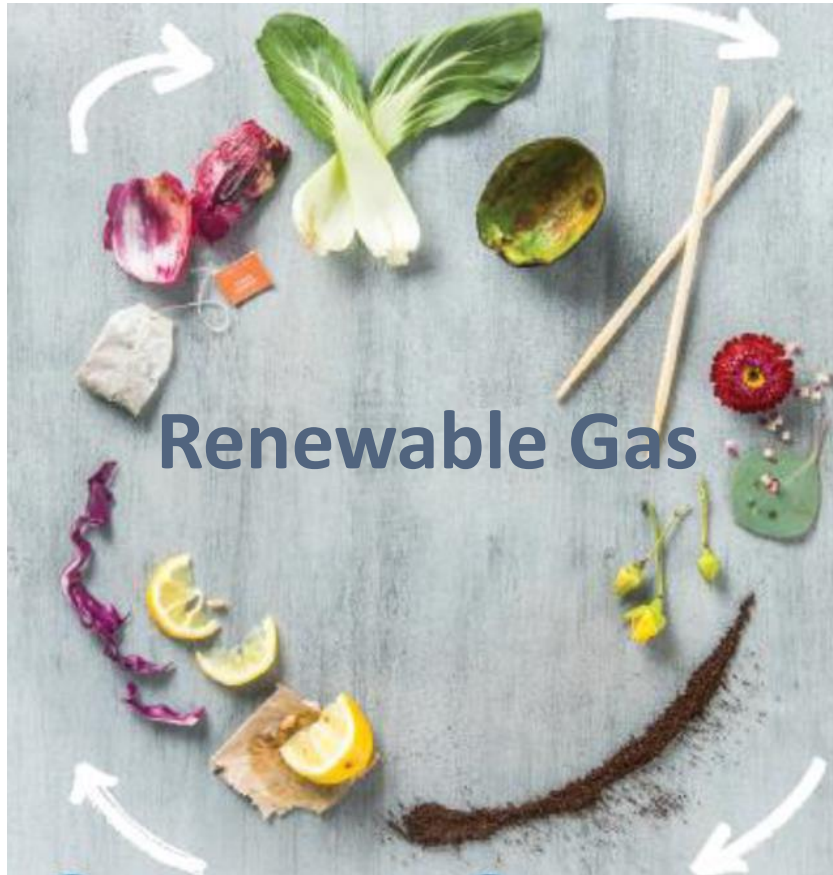
Jason Wolfe, *Director of Energy Solutions*



New Customer Attachments Strong but Headwinds are Present



Renewable Gas and Energy Efficiency Key Solutions to meeting GHG Policies



Customer Growth Benefits All Customers

- New customer additions are higher than originally forecast, resulting in higher capital costs above the formula envelope, but also higher revenues
- Capital cost increases driven by volume (number of attachments) and cost pressures (inflation materials/contractor, types of services, system improvements)*.
- Measures undertaken to manage capital spending include:
 - Work management system, additional contractor resources acquired, joint trenching, and managing timelines of projects
- New customers bring incremental revenue and spread fixed costs over a greater number of customers

Questions?

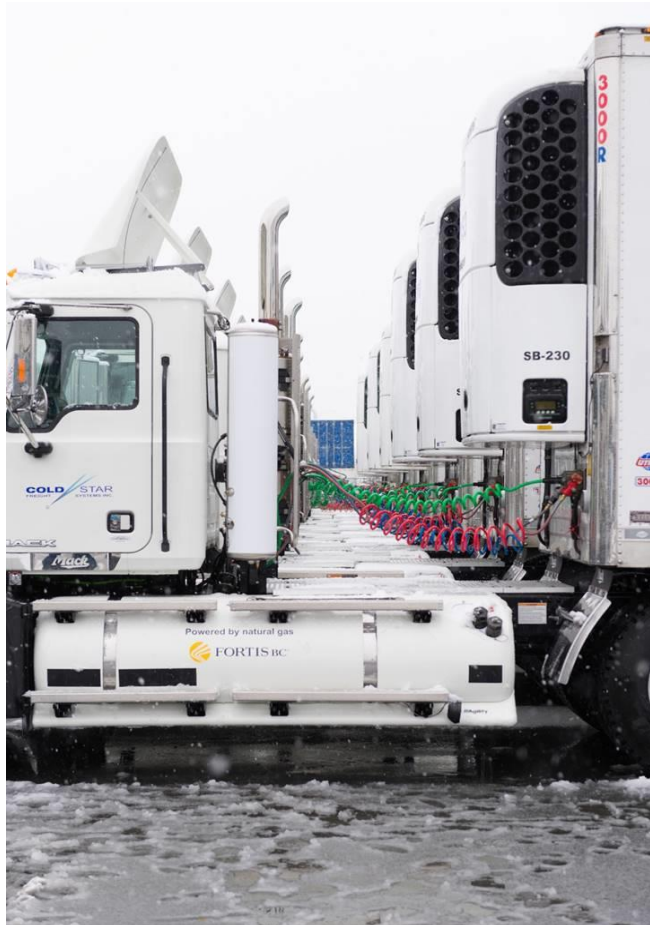


Low Carbon Transportation

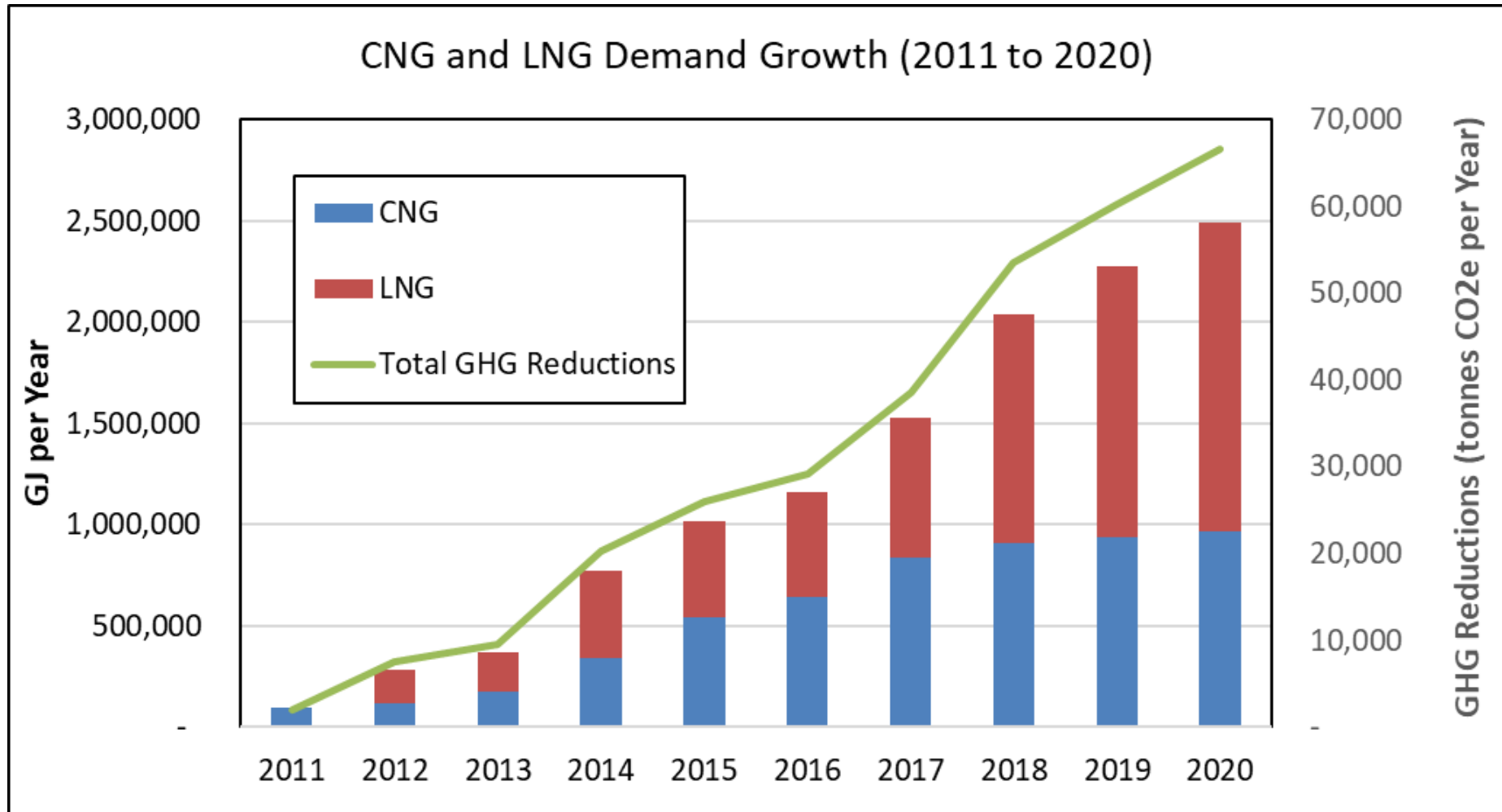
Jamie King, *Senior Manager, Business Development*



Natural Gas for Transportation (NGT)



Growth in Natural Gas for Transportation Demand



Natural Gas for Transportation Demand

**Table 3-2: FEI Total Natural Gas Demand for NGT and Non-NGT LNG
(GJs per year)**

GJ	2021 Approved	2021 Projected	2022 Forecast
CNG	951,388	985,808	1,024,550
LNG	1,784,400	1,381,324	1,566,989
Total NGT Demand	2,735,788	2,367,132	2,591,539
LNG (Non-NGT) Demand	3,685,185	892,151	3,083,297
Total NGT and Non-NGT Demand	6,420,973	3,259,283	5,674,836

NGT Service – Compressed Natural Gas (CNG)

ELECTIVE SERVICE

Rate Schedule 3, 5, 25



Commodity and Delivery

**Fueling Station Service
Compression & Dispensing**



Overhead and Marketing Recovery

**CNG Service Revenues (Capital and
O&M)**



**Customer End
Use**

NGT Service – Liquefied Natural Gas (LNG)

ELECTIVE SERVICES

Rate Schedule 46



**Commodity,
Delivery, LNG
Liquefaction**



**Transportation
Service**



Tanker Revenue



**Fueling Station
Service**



**Overhead and
Marketing Recovery**

**LNG Service Revenues
(Capital and O&M)**



**Customer End
Use**

NGT Service – LNG (Non-NGT)

Rate Schedule 46



**Commodity, Delivery, LNG
Liquefaction**

Customer Use

NGT Service – LNG (Non-NGT)



Tilbury 1A Truck Load-out Bays

Table 1: Annual Cost Breakdown by Calendar Year (\$)

	2019	2020	2021	2022	
FEI CapEx Calendar Year	Actual	Actual	Projected	Forecast	Total
Truck Load-out Bay 1	352,911	762,060	6,465,295	1,697,893	9,278,158
Truck Load-out Bay 2	352,911	762,060	6,465,295	1,697,893	9,278,158
Contingency			585,219	258,465	843,684
Total	705,821	1,524,119	13,515,810	3,654,250	19,400,000

Table 2: Annual Cost Breakdown by GGRR Undertaking Year (\$)

	Apr 2019 - Mar 2020	Apr 2020 - Mar 2021	Apr 2021 - Mar 2022	Apr 2022 - Mar 2023	
GGRR Undertaking Year	Actual	Actual	Projected	Forecast	Total
Truck Load-out Bay 1	466,142	2,053,029	6,558,537	200,450	9,278,158
Truck Load-out Bay 2	466,142	2,053,029	6,558,537	200,450	9,278,158
Contingency	-	-	843,684	-	843,684
Total	932,283	4,106,058	13,960,757	400,901	19,400,000

Prescribed Undertakings

LNG Tank Trailers and Tanker Truck Load-Outs

Chris Bystrom, *Counsel for FEI*



Tank Trailers and Tanker Truck Load-Outs

- FEI has forecast expenditures for one LNG tank trailer and two tanker truck load-outs at Tilbury 1A.

Description	GGGR Ref.	Projected 2021	Forecast 2022
LNG Tank Trailer	s. 2(3)(a)(i)	-	2.000
T1A Tanker Truck Load-Outs	s. 2(3)(a)(ii)	12.750	4.420

- No separate application required for FEI to proceed with LNG tank trailers or load-outs.
- As the assets will not enter FEI's rate base until January 1, 2023, there will be no impact to 2022 rates.
- No need for any review or determination in this proceeding.

GGRR Requirements of s. 2(3)(a)

(3) A public utility's undertaking that is in the class defined as follows is a prescribed undertaking for the purposes of section 18 of the Act:

(a) the public utility, before March 31, 2022, enters into a binding commitment to construct and operate, or purchase and operate, one or more of the following:

(i) one or more liquefied natural gas tank trailers or liquefied natural gas fuelling stations for the purposes of providing within British Columbia liquefied natural gas fuel and fuelling services to owners of vehicles that operate on liquefied natural gas;

(ii) one or more tanker truck load-outs for the purposes of providing within British Columbia liquefied natural gas fuel and fuelling services to owners of vehicles that operate on liquefied natural gas or to owners or operators of marine vehicles that operate on liquefied natural gas;

GGRR Requirements of s. 2(3)(a)

Asset	Requirement	Compliance
tank trailers and tanker truck load-outs	the public utility, before March 31, 2022, enters into a binding commitment to construct and operate, or purchase and operate	Yes BCUC IR1 12.7
tank trailers	for the purposes of providing within British Columbia liquefied natural gas fuel and fuelling services to owners of vehicles that operate on liquefied natural gas	Yes BCUC IR1 12.7
tanker truck load-outs	for the purposes of providing within British Columbia liquefied natural gas fuel and fuelling services to owners of vehicles that operate on liquefied natural gas or to owners or operators of marine vehicles that operate on liquefied natural gas	Yes BCUC IR1 12.4 and 12.7

Applicable GGRR Expenditure Limits

GGRR	Requirement	Compliance
2(3)(b.1)	“expenditures, during the undertaking period, on a tanker truck load-out do not exceed \$10 million...”	Cost is \$9,278,158 plus contingency of \$421,842 for each load-out. (BCUC IR1 12.4.1)
2(3)(b.1)	expenditures, during the undertaking period, ...on administration and marketing do not exceed \$250 000;	FEI has so far spent \$0 on administration and marketing for s.2(3) undertakings.
2(3.01)	The amount determined by adding the following must not exceed \$62.5 million: [total expenditures on undertakings described in s. 2(2) and (3)]	FEI’s total expenditures to end of September 2021 are \$39,698,123.

Expenditures can occur after “Undertaking Period”

- The GGRR does not require the assets to be operational, or all expenditures to be made, before March 31, 2022.
- Section 2(4) of the GGRR defines “expenditures” as including “binding commitments to incur expenditures in the future”.
- Therefore, the limits on “expenditures” during the undertaking period include binding commitments to incur expenditures beyond the undertaking period.

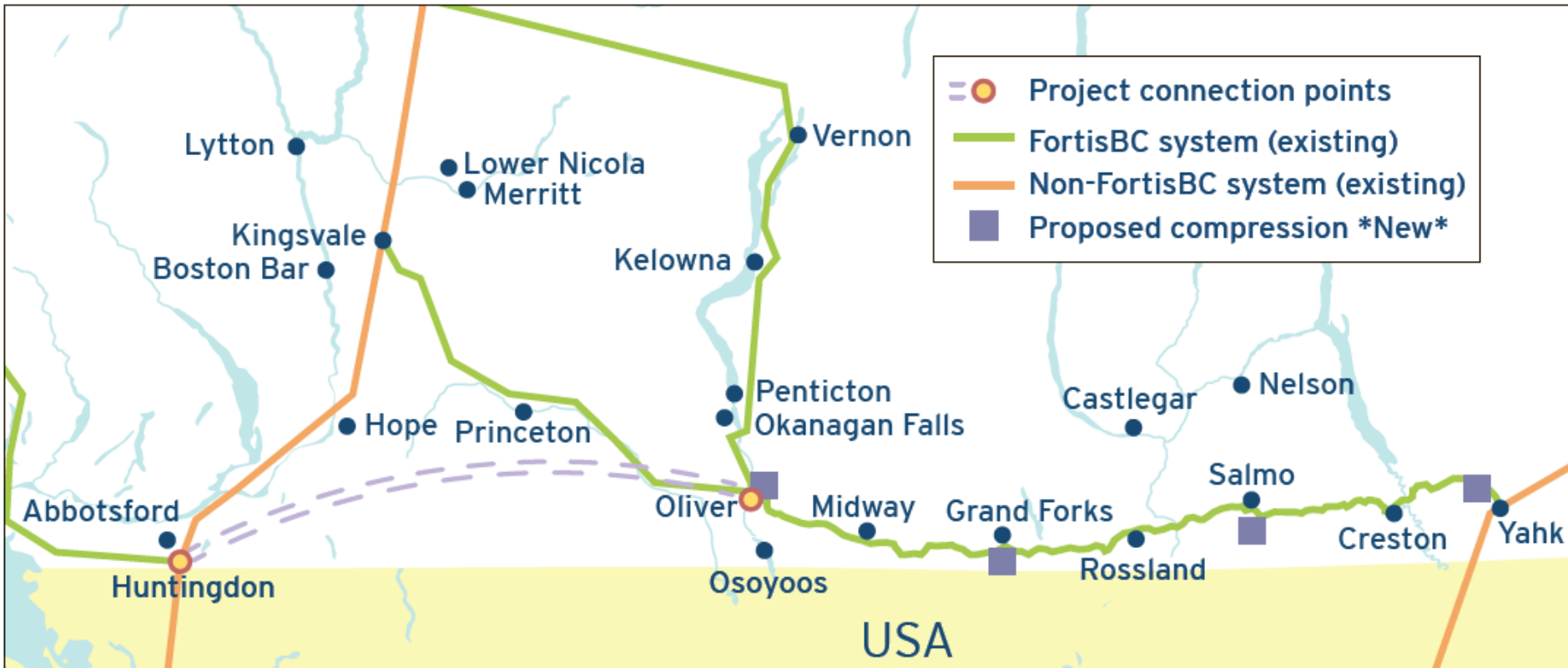
Questions?

Regional Gas Supply Diversity (RGSD) Project Development Costs Deferral Account

Jamie King, *Senior Manager, Business Development*

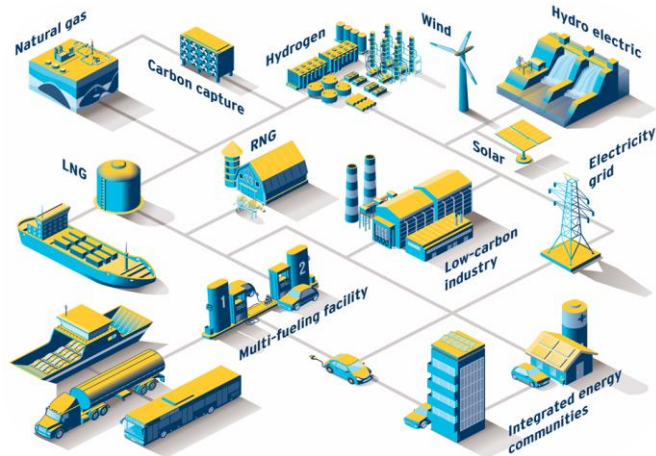


Regional Gas Supply Diversity (RGSD) Project



≈240 km of 30" pipeline
4 new compressor stations

RGSD Potential Benefits



Extended Resiliency



FEI Energy Supply



Indigenous Opportunities



Clean Energy Transformation

RGSD Initial Development Costs

Table 12-1: Estimated RGSD Project Development Costs (\$ millions)

Major Category	Pre-Phase 1	Phase 1	Total
Pipeline Engineering	\$ -	\$ 4.1	\$ 4.1
Compressor Engineering	-	8.9	8.9
Geotechnical Engineering	0.3	2.1	2.4
Environmental Application	-	2.3	2.3
Land and Right-of-Way	-	7.5	7.5
Indigenous & External Relations	1.5	9.5	11.0
Legal	0.3	2.0	2.3
Contingency	-	7.2	7.2
Management Cost	-	3.6	3.6
Total Costs	\$ 2.1	\$ 47.2	\$ 49.3

- FEI expects to file a CPCN by mid-2023

RGSD Project Development Costs Deferral Account Exhibit A-4 Question 3

- a. Clarification on why it is appropriate to begin the Pre-Phase 1 and Phase 1 activities given that it is currently unclear how a project such as the RGSD would align with FEI's long-term plans since FEI's next Long Term Gas Resource Plan has not been filed yet with the BCUC.

RGSD Project Development Costs Deferral Account

Exhibit A-4 Question 3

- b. If the RGSD Project Development Costs Deferral Account is not approved, whether FEI seeks approval in this Application of forecast operating and maintenance (O&M) costs outside of formula O&M expense related to the Pre-Phase 1 and Phase 1 activities. If so, please explain why differences between forecast and actual Pre-Phase 1 and Phase 1 activities should be trued-up annually by way of the Flow-through deferral account given that CPCN development costs are generally within FEI's control.
- i. In addition, if these forecast O&M costs are not approved for recovery, please discuss whether any expenditures related to the Pre-Phase 1 and Phase 1 activities would impact future earnings sharing or Flow-through deferral account additions.

Questions?

Service Quality Indicators

James Wong, Director, Budgeting and Strategic Initiatives

Michelle Carman, Director, Customer Service

Philip Murphy, Manager, Occupational Health & Safety



Customer

Service Quality Indicator	2019 Results	2020 Results	2020 Status (Relative to Benchmark and Threshold)	2021 August YTD Results	2021 Status (Relative to Benchmark and Threshold)	Benchmark	Threshold
Customer SQIs							
First Contact Resolution	81%	81%	Meets	79%	Meets	78%	74%
Billing Index	0.44	0.6	Meets	1.0	Meets	<=3.0	5.0
Meter Reading Accuracy	95%	89%	Below	90%	Below	95%	92%
Telephone Service Factor (Non-Emergency)	71%	70%	Meets	69%	Above threshold	70%	68%
Meter Exchange Appointment	96.0%	98.1%	Meets	98.4%	Meets	95%	93.80%

Informational Indicator	2019 Results	2020 Results		2021 August YTD Results			
Customer Satisfaction Index	8.7	8.7	n/a	8.7	n/a		
Average Speed of Answer	39 sec.	72 sec.	n/a	69 sec.	n/a		

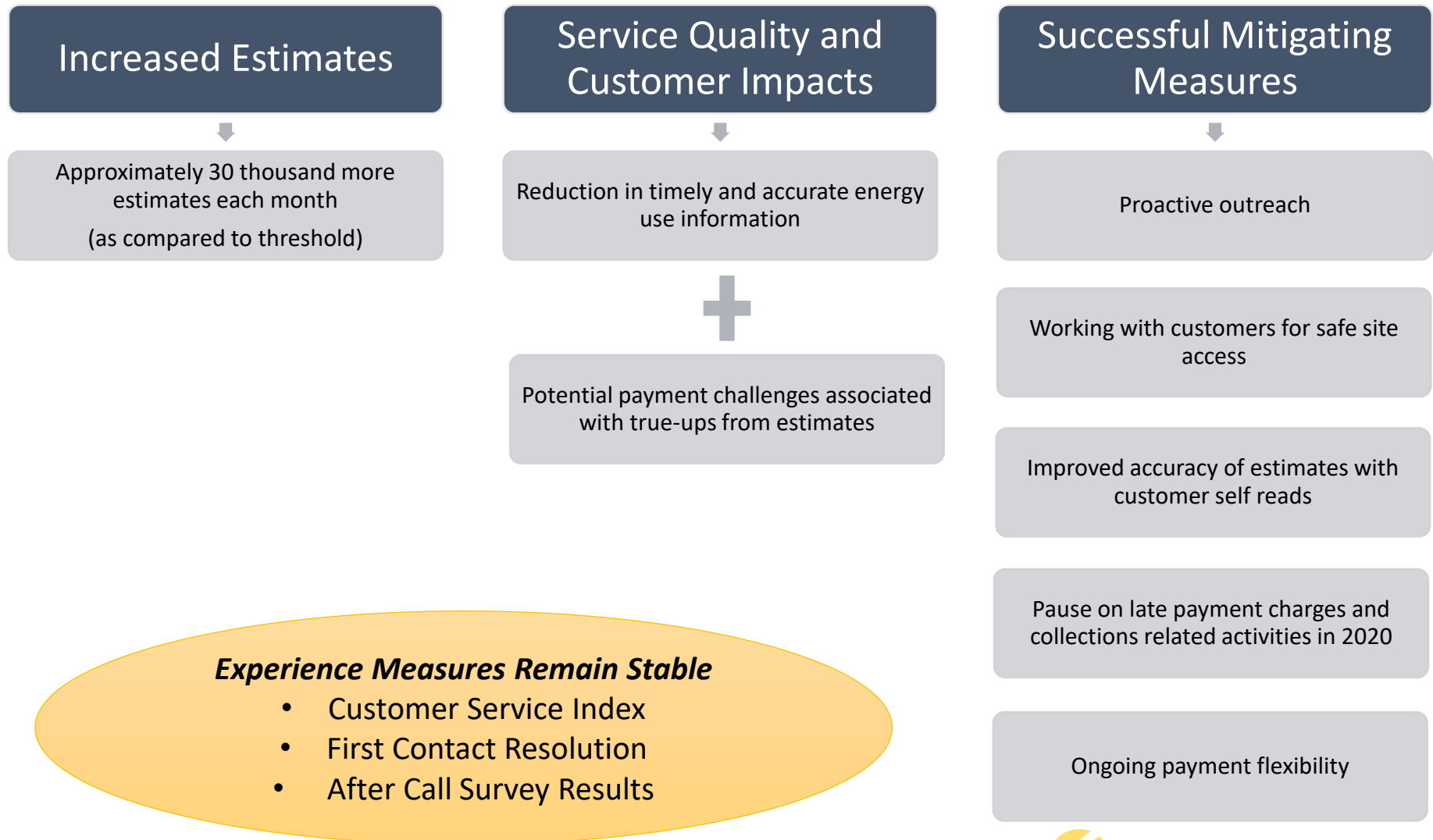
Safety and Reliability

Service Quality Indicator	2019 Results	2020 Results	2020 Status (Relative to Benchmark and Threshold)	2021 August YTD Results	2021 Status (Relative to Benchmark and Threshold)	Benchmark	Threshold
Safety SQIs							
Emergency Response Time	97.9%	97.7%	Meets	97.9%	Meets	97.7%	96.2%
Telephone Service Factor (Emergency)	97.2%	96.9%	Meets	97.3%	Meets	95%	92.8%
All Injury Frequency Rate	1.64	1.66	Meets	1.67	Meets	2.08	2.95
Public Contacts with Gas Lines	8 *	7	Meets	6	Meets	<=8	12

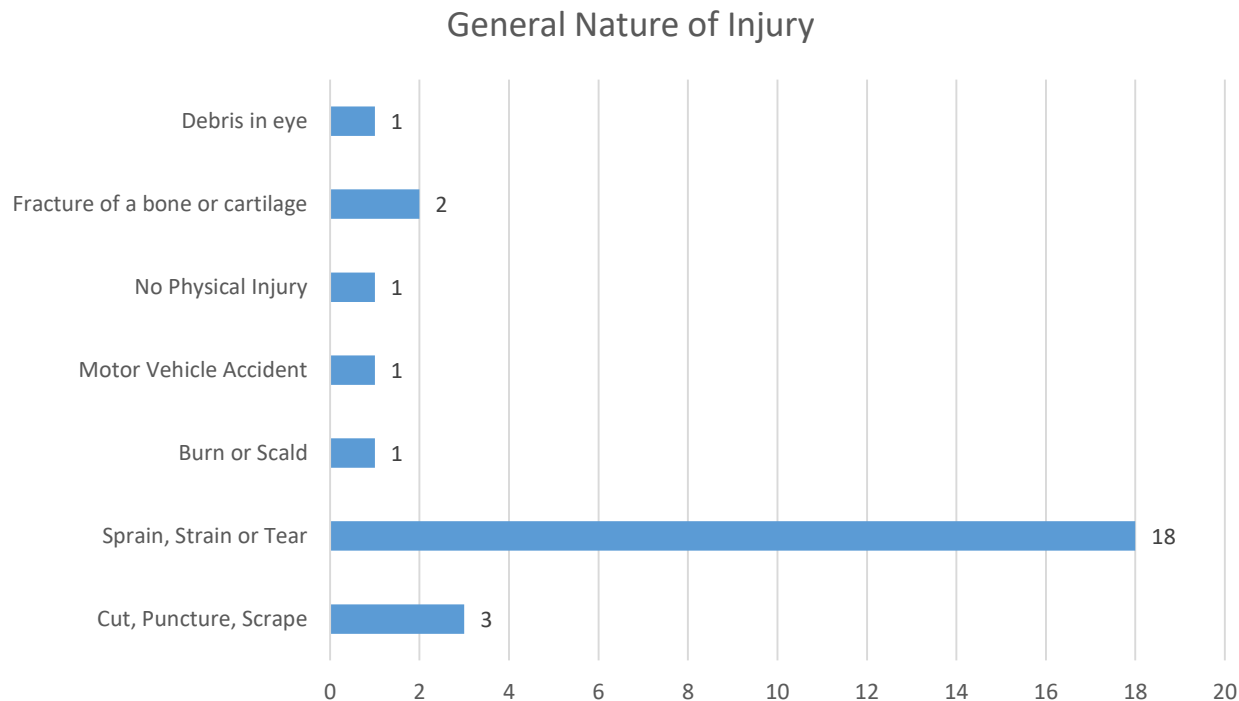
Informational Indicator	2019 Results	2020 Results		2021 August YTD Results			
Reliability SQIs							
Transmission Reportable Incidents	0	1	n/a	2	n/a		
Leaks per KM of Distribution System Mains	0.0060	0.0065	n/a	0.0033	n/a		

* For 2019 – Public Contact with Pipelines was reported on a 3 year average basis.

Meter Reading Accuracy: Impacted by the Pandemic



All Injury Frequency Rate as of August 2021



- 2021 YTD injury rate is trending above previous years
- Primarily driven by short-term absences due to Musculoskeletal Injuries (MSIs) – sprains and strains
- Low severity in nature
- Ergonomic improvement strategy launched – prevention and early intervention
- Seen positive trending since the launch

Questions?



Clean Growth Innovation Fund (CGIF)

Mark Warren, *Director, Business Innovation*



CGIF Key Selection Criteria for Projects

Clean Growth Innovation Fund - Selection Criteria

- CO2e reduction in British Columbia
- Criteria air contaminant reduction (e.g. NOx, SOx) in British Columbia
- ✓ Energy cost reductions for customers
- ✓ Amount of co-funding secured (from applicant and third parties)
- ✓ Relevant experience of the applicant project team

Plus, in the case of the CHP project:

- ✓ Firming renewable electricity generation
- ✓ Help reduce electricity demand peaks

Question Period



**For further information,
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