

FEI Annual Review of 2023 Delivery Rates

Workshop

October 14, 2022



Agenda

Topic	Presenter(s)
Approvals Sought and Fort Nelson Common Rates Decision	Sarah Walsh <i>Senior Manager, Regulatory Affairs</i>
Revenue Requirements & Rates	Anthony Ho <i>Manager, Cost of Service</i>
Updated Sustainment Capital Forecasts for 2023 & 2024	Karen Coldham <i>Manager, Gas System Assets</i>
Gibsons Capacity Upgrade Project	Karen Coldham <i>Manager, Gas System Assets</i>
Kelowna Facilities Space Project	Becky Richardson <i>Facilities Planning Manager</i>
Clean Growth Innovation Fund	Mark Warren <i>Director, Business Innovation</i>
BC Low Carbon Fuel Standard (BC-LCFS) and Emissions Regulations Deferral Account	Jamie King <i>Senior Manager, Business Development</i>
Service Quality Indicators (SQIs)	James Wong <i>Director, Budgeting & Strategic Initiatives</i> Amar Mangat <i>Manager, Customer Experience & Billing Services</i>
Open Question Period	All

Revised and New Approvals Sought

- Interim 2023 delivery rate increase of 7.69%
- A one-year amortization period for the FEFN Common Rates and 2022 RRA Costs deferral account, commencing January 1, 2023
- FEFN Residential Common Rate Phase-in Rate Rider for 2023

Fort Nelson Common Rates Decision

Exhibit A-6, Question 1 (a)

- a. By Order G-278-22 dated October 6, 2022, the BCUC issued its final decision on the FEI Application for Common Rates and 2022 Revenue Requirements for the Fort Nelson Service Area (FEFN) proceeding approving, among other things, common delivery rates for FEFN and FEI, effective January 1, 2023 (FEFN Common Rates Decision). Please provide, based on an evidentiary update approach, an estimate of the anticipated length of time needed to incorporate the impacts of the FEFN Common Rates Decision into FEI's 2023 permanent delivery rates for review by the BCUC and interveners, including (i) preparation of an evidentiary update; and (ii) responding to information requests on that evidentiary update.

Evidentiary Update

- Updated interim 2023 delivery rate of 7.69%.

	Deficiency (\$millions)	% Delivery Rate Increase
As-Filed	\$ 71.717	7.42%
Impact from FEFN Common Rates Decision (G-278-22)	(0.190)	(0.04%)
Update to Emissions Regulation Deferral Account	3.008	0.31%
Update AWE-BC to I-Factor Calculation	0.003	0.00%
Leasehold Improvement Correction (BCUC IR1 18.4)	0.088	0.01%
Removal of McRae CNG Station Capital (G-279-22)	(0.050)	(0.01%)
Evidentiary Update	\$ 74.576	7.69%

Implementation of Common Delivery Rates

- 2022 Closing Balances
 - ▣ Transfer closing December 31, 2022 balances of FEFN's gross plant in service, accumulated depreciation, CIAC, and accumulated amortization of CIAC, to FEI's rate base as January 1, 2023 opening balance adjustments
 - ▣ Transfer capital work in progress, working capital, and unamortized deferred charges

Implementation of Common Delivery Rates

- 2023 Forecasts
 - ❑ Add FEFN load forecast
 - ❑ Add FEFN's forecast 2023 customer count to FEI's forecast 2023 customer count to incorporate FEFN into Formula O&M
 - ❑ No adjustment to Growth Capital
 - ❑ 2023 and 2024 Forecast FEFN Sustainment and Other Capital added to FEI's Updated Sustainment and Other Capital Forecasts

Implementation of Common Delivery Rates

- Other
 - ❑ 5-year Phase-in rate rider for FEFN residential customers
 - ❑ Amortization of FEFN Common Rates and 2022 RRA Costs deferral account over 1 year

Proposed 1-Year Amortization Period for FEFN Common Rates and 2022 RRA Costs Deferral Account

- FEI considered one to five year amortization periods
- Factors considered in selecting amortization period:
 - ❑ Forecast deferral account balance
 - ❑ Rate impact (rate smoothing)
 - ❑ Alignment with common rates phase-in period

	Amortization Period				
	1 Year	2 Years	3 Years	4 Years	5 Years
Changes to Proposed 2023 Delivery Rate Increase (%)	0.000%	-0.012%	-0.016%	-0.018%	-0.020%
Proposed 2023 Delivery Rate Increase (%)	7.69%	7.68%	7.68%	7.67%	7.67%

Recap of Question 1(a)

- a. By Order G-278-22 dated October 6, 2022, the BCUC issued its final decision on the FEI Application for Common Rates and 2022 Revenue Requirements for the Fort Nelson Service Area (FEFN) proceeding approving, among other things, common delivery rates for FEFN and FEI, effective January 1, 2023 (FEFN Common Rates Decision). Please provide, based on an evidentiary update approach, an estimate of the anticipated length of time needed to incorporate the impacts of the FEFN Common Rates Decision into FEI's 2023 permanent delivery rates for review by the BCUC and interveners, including (i) preparation of an evidentiary update; and (ii) responding to information requests on that evidentiary update.

Interim Rates

Exhibit A-6, Question 1(b)

- b. Given the number of other concurrent FEI applications before the BCUC, specifically, the BCUC Generic Cost of Capital (GCOC) proceeding; FEI 2023 Demand Side Management (DSM) Expenditures Plan application; and FEI Rates and Agreement for Constructing and Operating a CNG Fueling Station under GGRR for McRae's Environmental Services Ltd. in Richmond proceeding, please discuss the timing and process for incorporating the impacts, if any, of the BCUC decisions on those applications into FEI's 2023 permanent delivery rates, including the following:
- (i) FEI's proposal, and any alternatives considered, for incorporating the impact of the BCUC's decision on FEI's 2023 Delivery Rates following completion of Stage 1 of the BCUC GCOC proceeding, in the event that this decision is not rendered until 2023 or possibly, 2024.

Decisions and Impact on 2023 Permanent Delivery Rate Timing

- FEI Rates and Agreement for Constructing and Operating a CNG Fueling Station under the GGRR for McRae's Environmental Services Ltd. in Richmond – No Impact
- 2023 DSM Expenditures Plan Application – Decision Anticipated February/March 2023
- BCUC Generic Cost of Capital (GCOC) Stage 1 Proceeding – Decision expected in Q2 2023 or later

Rationale for Maintaining 2023 Interim Delivery Rates until the GCOC Decision is Issued

- Proposed approach to implementing permanent delivery rates is dependent on the timing of the GCOC decision, the quantum of any changes to FEI cost of capital resulting from the GCOC decision, and the effective date of those changes
- Maintaining interim 2023 delivery rates until the GCOC decision is issued provides the most optionality for implementing permanent 2023 rates
- Options for recovering the difference between interim and permanent delivery rates include (i) retroactive adjustment, (ii) forward-looking adjustment, and (iii) deferral account

Questions?



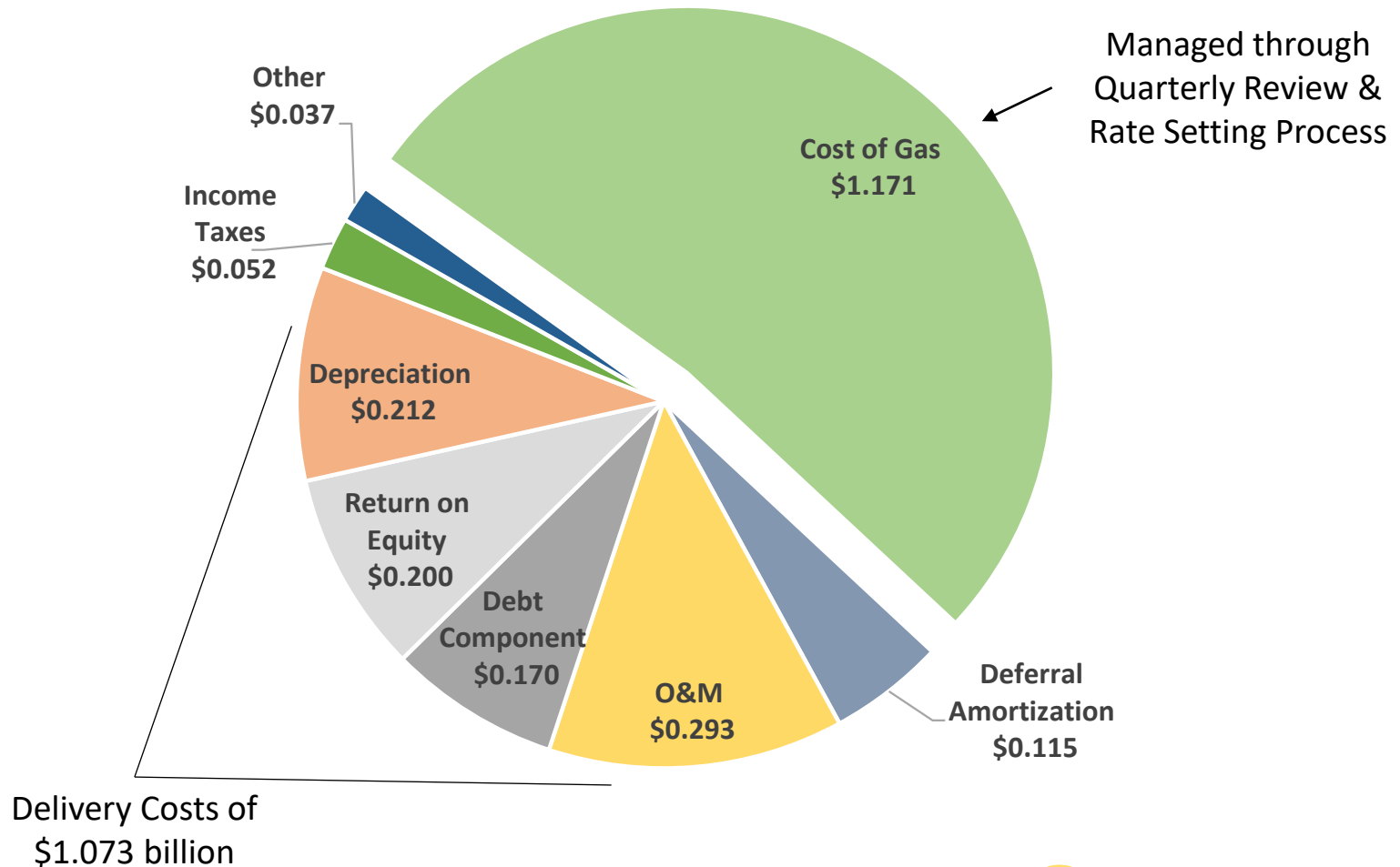
Revenue Requirements & Rates

Anthony Ho, Manager, Cost of Service



2023 Revenue Requirement Summary

Total Revenue Requirement of \$2.249 billion (Evidentiary Update)



Summary of 2023 Deficiency

- Deficiency of \$74.576 million (Evidentiary Update):
 - Total 2023 revenue requirement is \$2.249 billion, less
 - Revenue at existing 2022 approved rates of \$2.175 billion
- Major drivers of deficiency:
 - Expiry of BC Hydro IG Contract: 1.62%
 - Rate base growth: 3.38% (CPCNs 1.55%; FEFN 0.08%)
 - Net O&M: 1.65%

Components	\$ millions	%
Demand Forecast		
Non-bypass & Bypass (Excl. BC Hydro IG)	(16.226)	(1.67%)
BC Hydro IG	15.735	1.62%
Other Revenue	(0.382)	(0.04%)
Net O&M	16.030	1.65%
Rate Base Growth	32.743	3.38%
Depreciation	12.458	1.28%
Deferral Amortization	6.217	0.64%
Financing and Return on Equity	2.719	0.28%
Taxes	5.282	0.54%
Total Deficiency (Evidentiary Update)	74.576	7.69%

Driver #1: Expiry of BC Hydro IG Contract

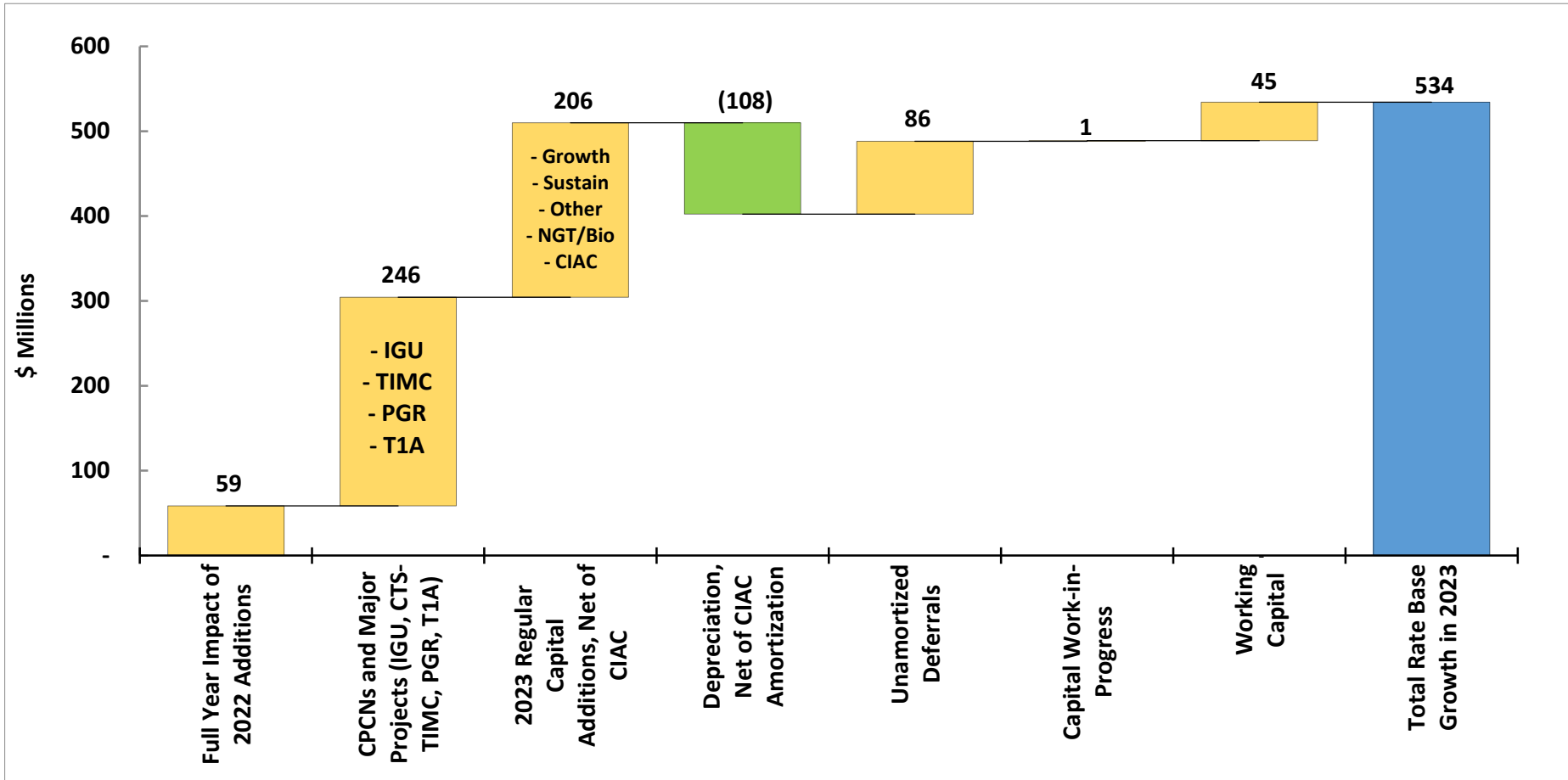
- 2023 Delivery Rate increase if BC Hydro IG Contract were in place: 6.07% vs. 7.69%
- Expired: Contract Demand of approx. 16.4 PJ or revenue of \$15.7 million, effective April 2022
- New: Fully interruptible service under RS 22 (Minimum revenue of approx. \$167 thousand)
- Excluding BC Hydro IG, 2023 demand forecast to increase by approx. 3.6 PJ (approx. 1.5%) compared to 2022
Approved

Driver #2: Rate Base Growth

2022 Approved Rate Base = \$5.409 billion

+ \$534 Million

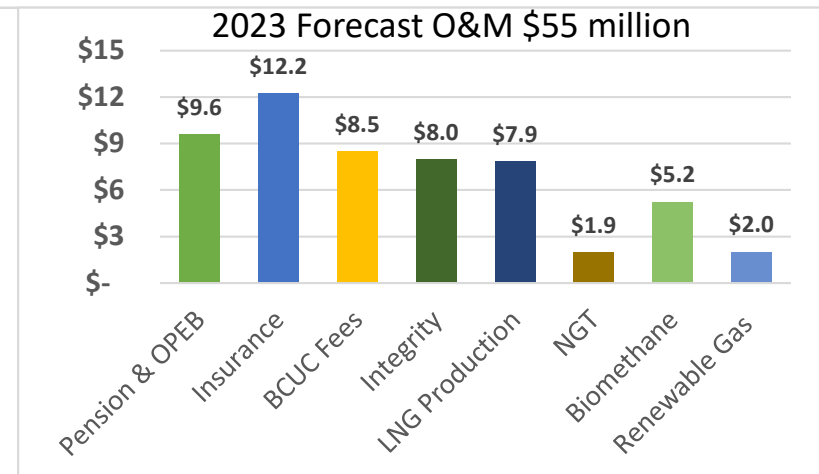
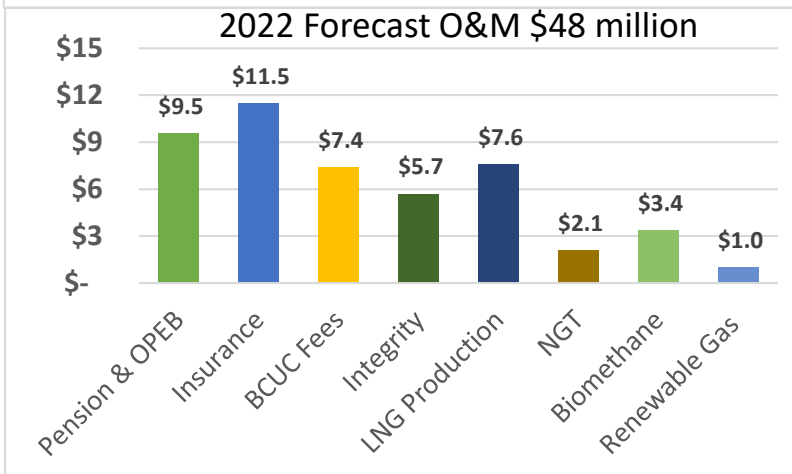
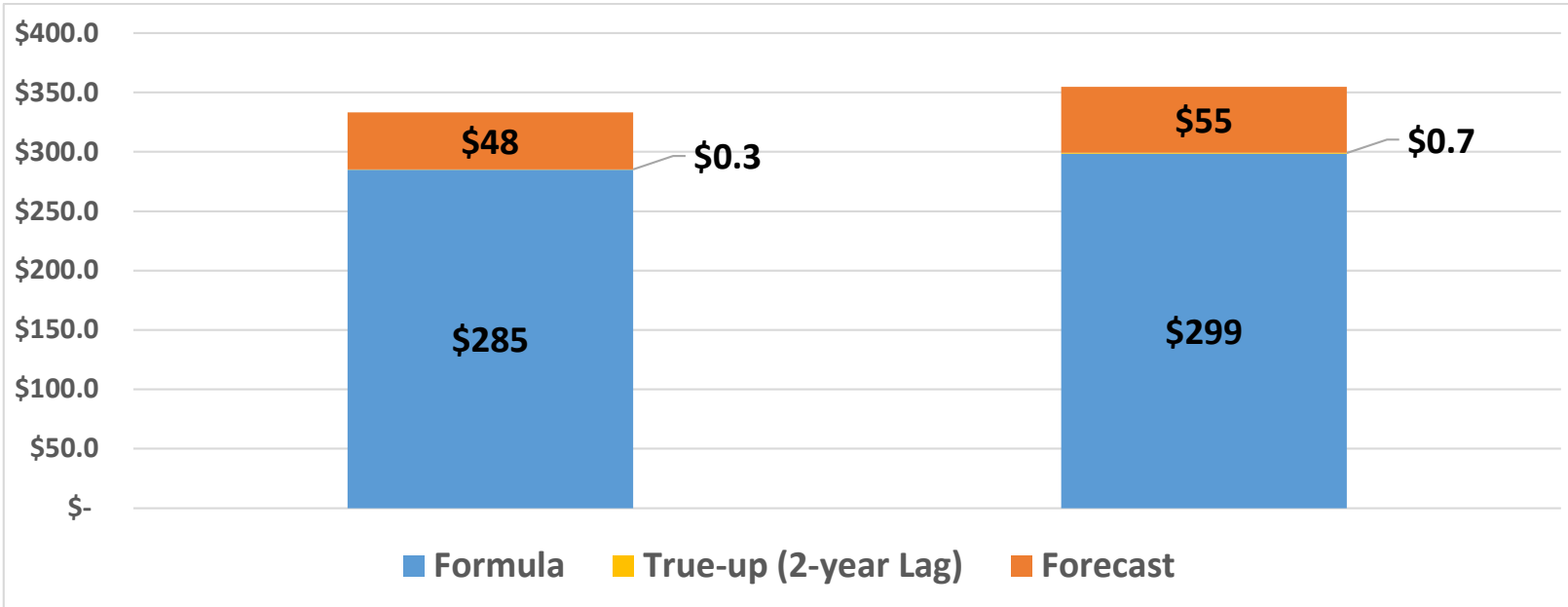
2023 Forecast Rate Base = \$5.943 billion



Driver #3: O&M – 2022 Approved vs. 2023 Forecast

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

2023 Forecast Gross O&M \$355 million
(\$293 million after capitalized overhead)



Questions?

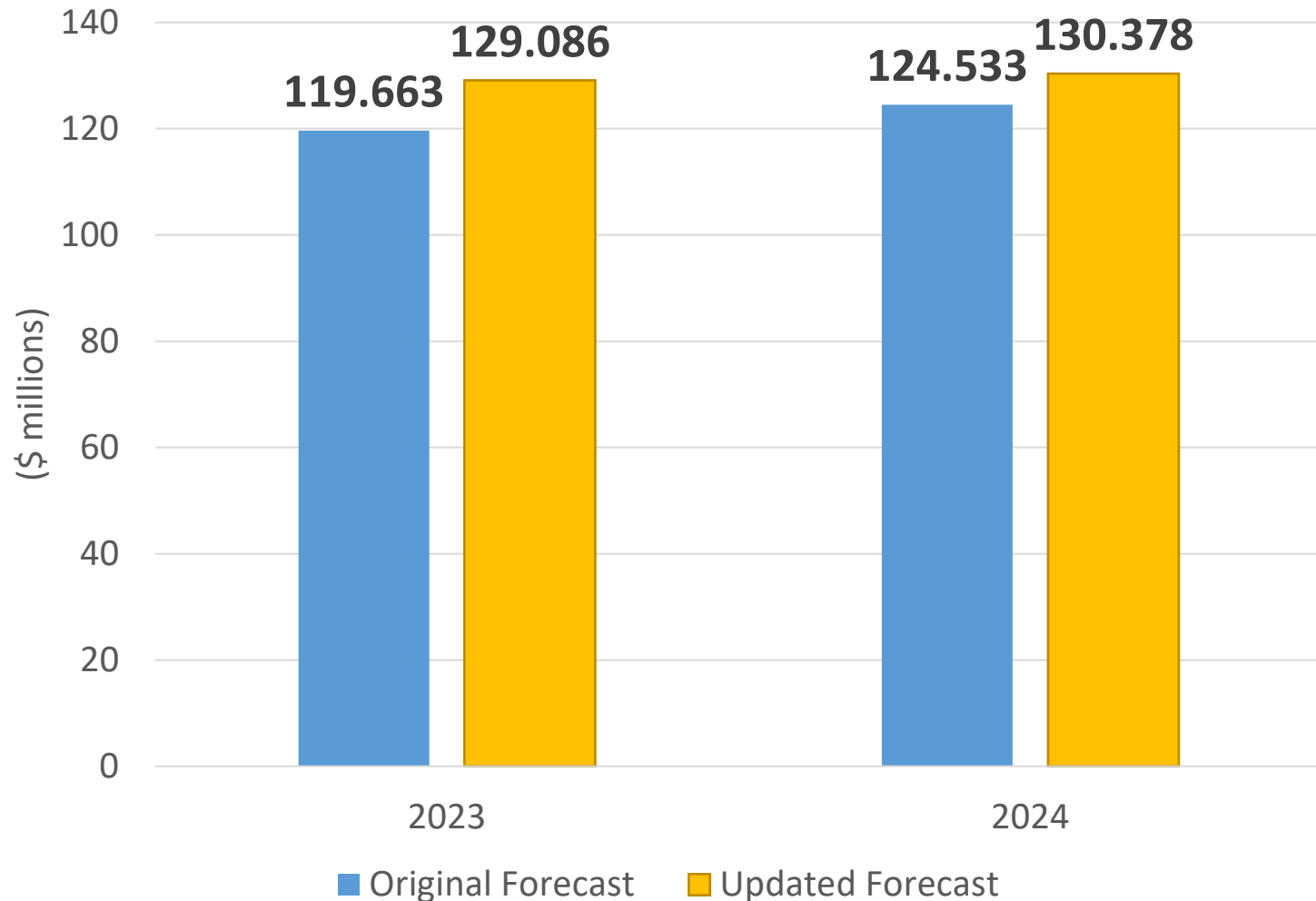


2023 and 2024 Updated Sustainment Capital Forecasts

Karen Coldham, *Manager, Gas System Assets*



2023 and 2024 Updated Sustainment Capital Forecasts



Drivers for Increased Sustainment Forecasts

- Inflationary increases due to unanticipated global events
- Increased alteration activities due to third party infrastructure upgrades
- Additional reliability & integrity driven projects that were not forecast in the MRP application

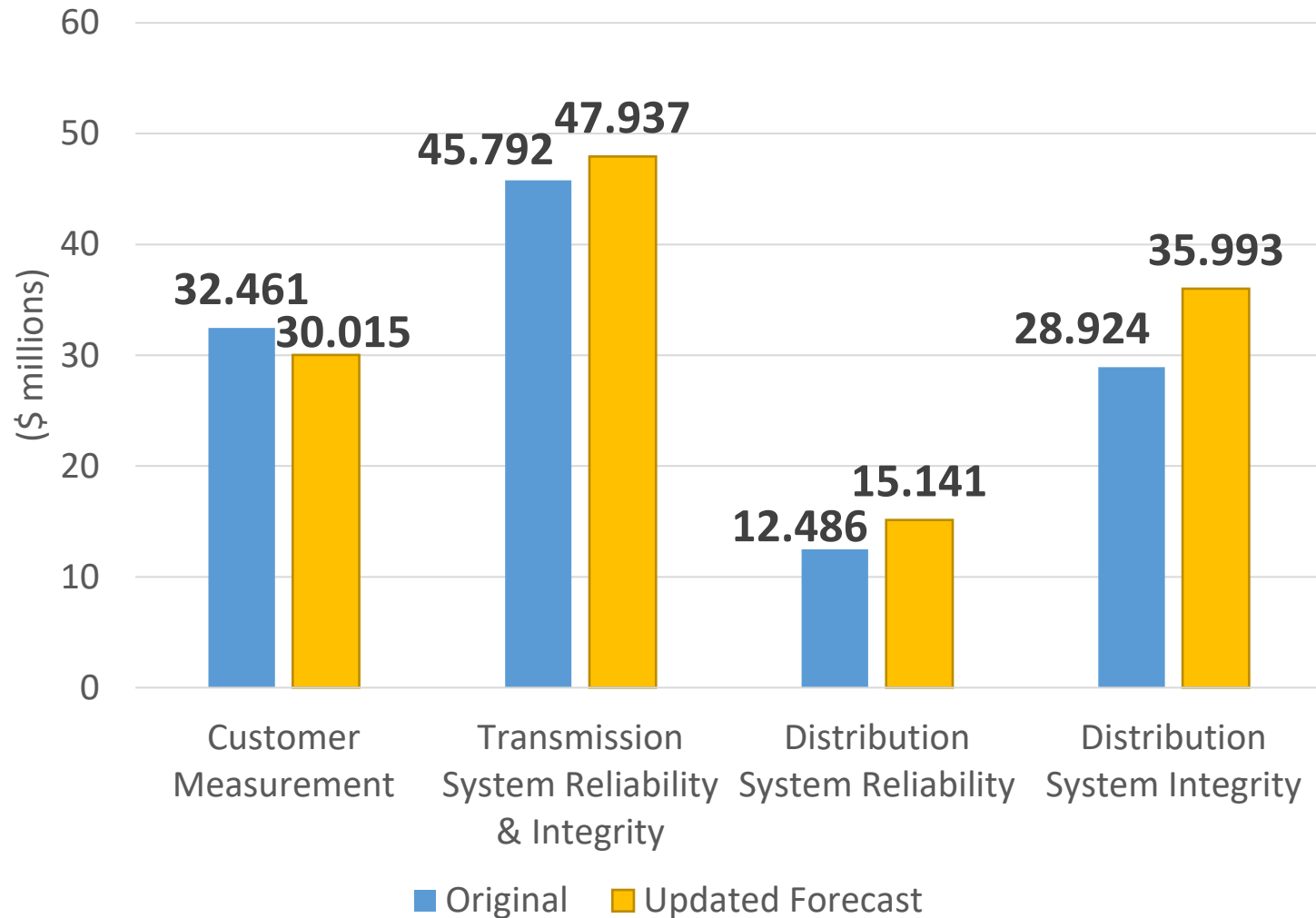
Mitigation Measures

- Reprioritizing projects or components of a project
- Long-term supply contracts for common materials and services
- Competitively tendering large contracts for materials and services

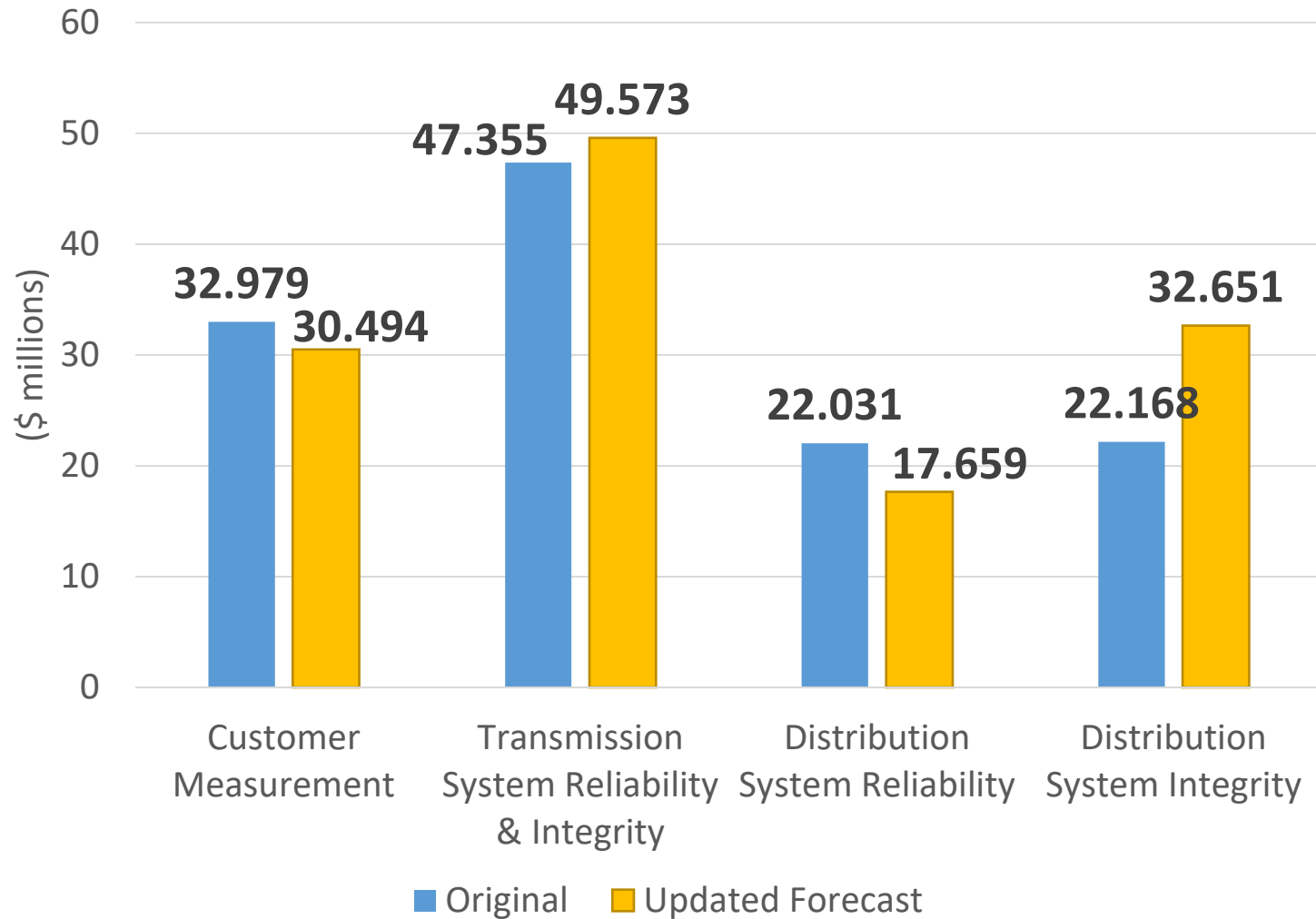
Asset Investment Planning Process



2023 Sustainment Capital



2024 Sustainment Capital



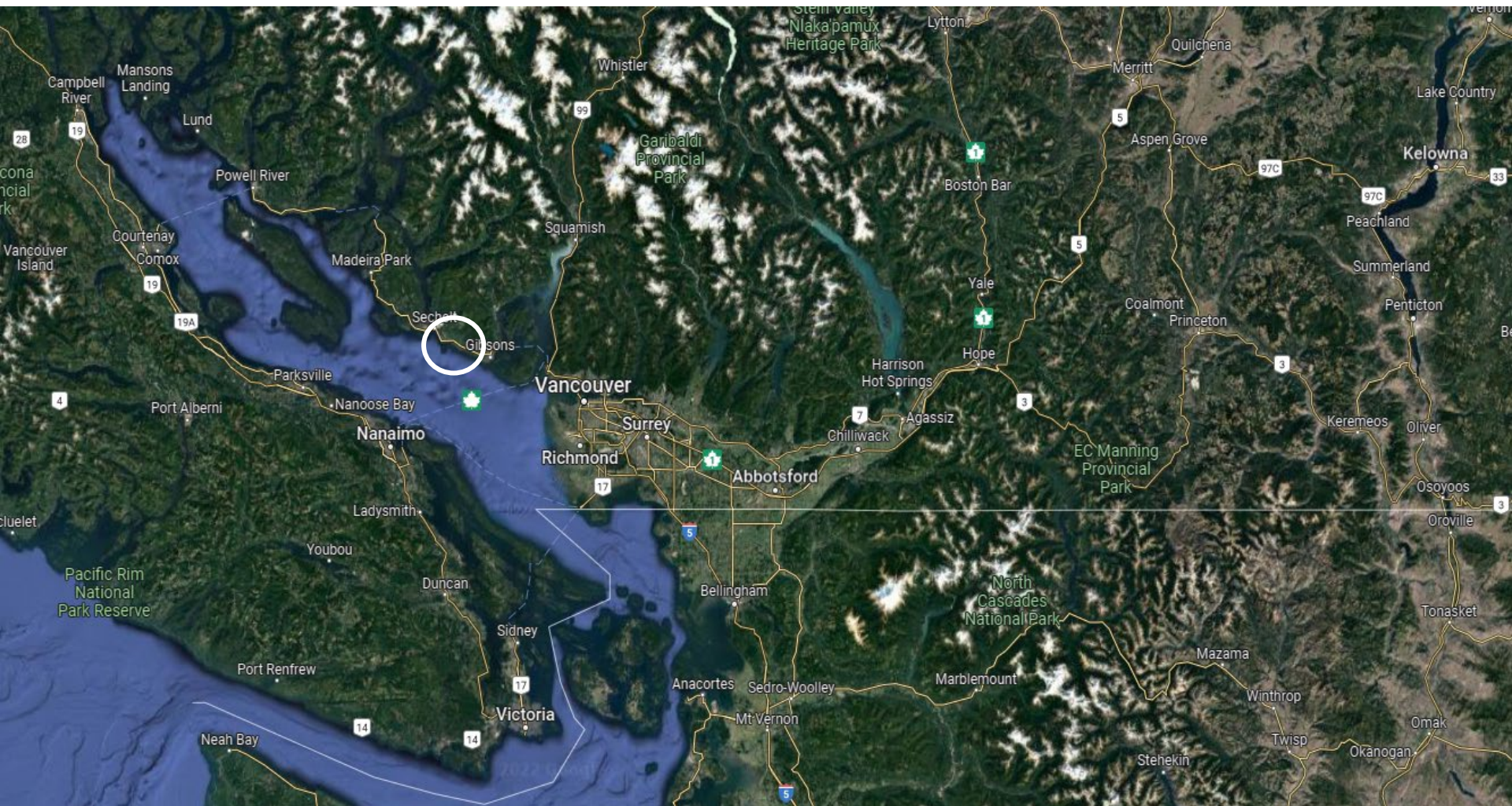
Questions?

Gibsons Capacity Upgrade Project

Karen Coldham, *Manager, Gas System Assets*



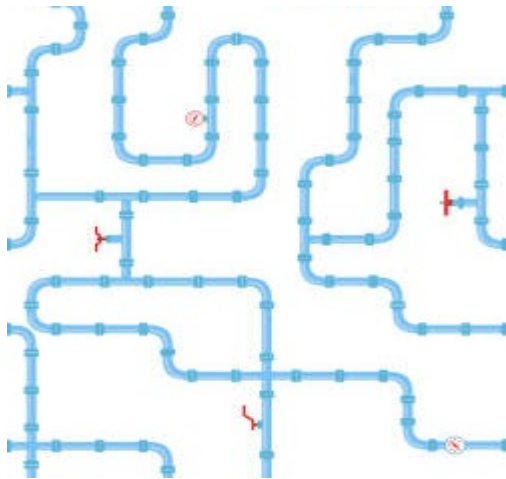
Project Location



Project Need



Proposed Alternative



Existing Distribution
System

Non-Peak Times
Excess Capacity

Capacity Needed
Peak Times



CNG Storage
Vessels

Project Alternatives



Project Alternatives – Class 4

Criteria	Alternative 1 Sechelt to Gibsons	Alternative 2 Port Mellon to Gibsons		Alternative 3 CNG Peak Shaving
Non-Financial Ranking	3	1		2
Financial Criteria				
Alternatives		Option A	Option B	
PV of Total Incremental Revenue Requirement (\$millions)	\$52.400	\$38.800	\$44.700	\$14.700 *
Combined Ranking	4	2	3	1

* Class 3 Cost Estimate: \$12.194 million

Conclusion

- GCU project is necessary to address capacity shortfall in Gibsons community
- Proposed Alternative is an innovative, cost-effective solution that meets all required project objectives
- Based on Class 3 study, the total GCU project costs are estimated to be \$12.194 million

Questions?



Kelowna Space Project

Becky Richardson, *Facilities Planning Manager*



Current Facilities

Springfield

Enterprise

Benvoulin



Owned | 3.2 Acres

Office + Warehouse: 35,189 ft²



Leased | 1.5 Acres

Office + Warehouse: 10,652 ft²



Owned | 3.4 Acres

Office + Warehouse: 25,268 ft²

Challenge

Springfield

Enterprise

Benvoulin



Space Constraints

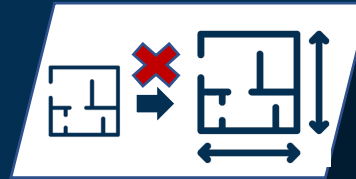
Constraints



Account for projected
headcount growth



No further
densification possible



No office floor
addition possible



Parking overflow |
No expansion



Limited land availability
in real estate market



ALR prevents
property expansion



Zoning restrictions limit
property resale value

Options Considered



1 Acquire New Combined Operations Centre

Buy ten-acre land parcel | Springfield & Benvoulin sold



61K ft² Office
22K ft² WH/FI/Shop
Secured Yard
Covered parking

\$70m

2 Acquire New Electric Operations Centre

Buy six-acre land parcel | Springfield renovated & Benvoulin sold



47K ft² Office
14K ft² WH/FI/Shop
Secured Yard
Covered parking

\$48m

3 Acquire New Electric Operations Centre

Buy six-acre land parcel | Springfield sold & Benvoulin renovated



47K ft² Office
14K ft² WH/FI/Shop
Secured Yard
Covered parking

\$45m

4 New Lease for Shared Services Depts

Gas & Electric Operations swap



Improvements
implemented at
all locations

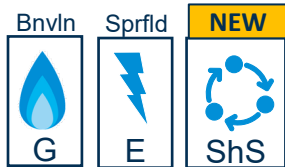
\$14m

Selected Option Benefits

4

New Lease for Shared Services Depts

Gas & Electric Operations swap



Improvements
implemented at
all locations

\$14m



Moving Shared Services
away from Operations
creates more room for
Operations

Springfield

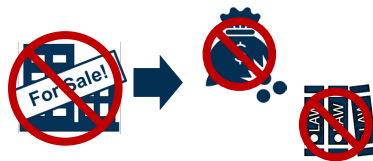


Greater efficiency from
having all Electric Operations
at the Springfield site

Benvoulin



Gas Operations space
requirements better aligned
to Benvoulin site



No asset disposal means no
zoning issues



Of all options, Option Four
results in significantly
reduced capital investment



Location changes have
minimal impact on
employee commutes

Implementation Timing

Legend

**New Lease
Facility**

Springfield

Benvoulin

2022

Design Development &
Construction Drawings

2023

Tenant Improvement
Construction and Move
In

Tenant Improvement
Construction 2nd & 3rd
Floor upon Relocation of
Support Services

2024

Tenant Improvements /
Operations Building
Swap

Tenant Improvements
Continued

Questions



Clean Growth Innovation Fund (CGIF)

Mark Warren, *Director, Business Innovation*



CGIF Criteria and Portfolios

Table 10-7: Approved and Rejected Spending for Portfolios One through Four (\$ millions)

	Portfolio 1	Portfolio 2	Portfolio 3	Portfolio 4	Total
Approved	\$1.5	\$0.5	\$1.7	\$0.6	\$4.3
Rejected, Cancelled or Deferred	\$0.2	\$3.2	\$1.8	\$0.2	\$5.4

CGIF Proposals are grouped into Portfolios for efficient review against criteria

- Estimated CO2e and CAC reduction in British Columbia
- Estimation of energy cost reductions for customers
- Amount of co-funding secured (from applicant and third parties)
- Relevant experience of the applicant project team

Rejected: Do not meet CGIF criteria

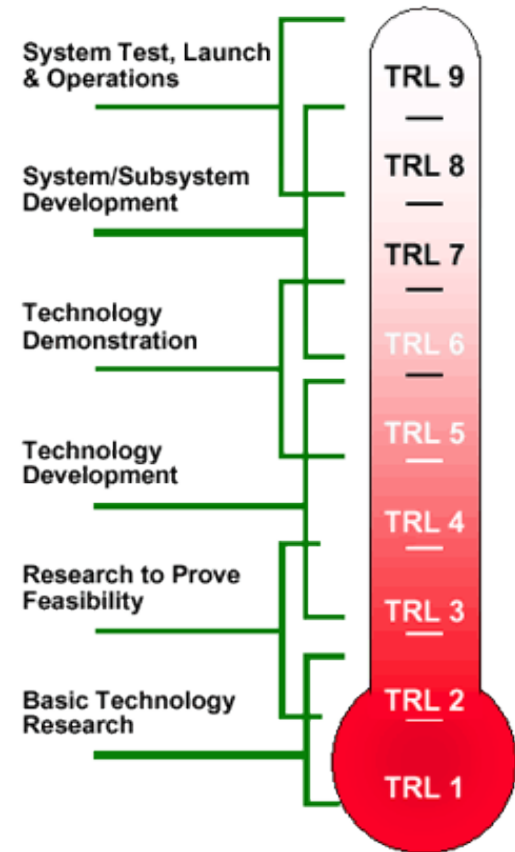
Cancelled: Proponent withdraws application

Deferred: Need to improve alignment with CGIF criteria

Clean Growth Innovation Fund Trends

Two key trends:

- Research and Development activity is increasing
- Technology Readiness Levels are rising



Approved and Actual/Forecast Expenditures

(\$ millions)	2020	2021	2022	2023
Portfolio Approvals	1.500	2.200	2.495+	TBD
Portfolio Expenditures	1.022	1.127	1.500	2.500

Figures consolidated from:

Exhibit B-2 (Application) Table 10-6, Table 10-7 and Exhibit B-7, BCOAPO IR1 11.2.

Questions?

BC Low Carbon Fuel Standard (BC-LCFS) and Emissions Regulation Deferral Account

Jamie King, *Senior Manager, Business Development*



Emissions Regulation Deferral Account History

- 2012-2013 Revenue Requirement Application:
 - FEI requested establishment of the Emissions Regulation Deferral Account to capture incremental costs and recoveries related to the growing number of regulations around emission trading, including Emissions Trading Regulation and the Renewable and Low Carbon Fuel Requirement Regulation
- Approved by Order G-44-12:
 - *“The Commission Panel finds that the establishment of an Emissions Regulation Deferral Account is appropriate given the uncertainties surrounding the costs and revenues that could accrue to FEU”*
- FEI Annual Review for 2017 Rates, approved by Order G-182-16:
 - BCUC approves a five-year amortization period for the Emissions Regulation Deferral Account

BC-LCFS

- The Greenhouse Gas Reduction (Renewable & Low Carbon Fuel Requirements) Act and the Renewable & Low Carbon Fuel Requirements Regulation, known collectively as British Columbia's low carbon fuel standard (BC-LCFS), was introduced to reduce the carbon intensity (CI) of fuels used in the province
 - ❑ The BC-LCFS sets CI targets that decline each year.
 - ❑ Fuel suppliers generate credits for supplying fuels with a CI below the targets and receive debits for supplying fuels with a CI above the targets.
 - ❑ The debits and credits are proportional to the emissions a fuel generates over its full life cycle.
 - ❑ Credits can be traded between fuel suppliers or banked for future use.

FEI and the BC-LCFS

"Part 3 fuel supplier" means

- a person who, within British Columbia, sells Part 3 fuel for the first time after it is manufactured in or brought into British Columbia, ...

And:

- a person who, for the person's own use, manufactures Part 3 fuel in British Columbia;

FEI and the BC-LCFS – CNG Service



Title of the gas during
compression determines who
is the Part 3 fuel supplier

A) For stations at customer locations, FEI sells gas at the meter, prior to it being compressed

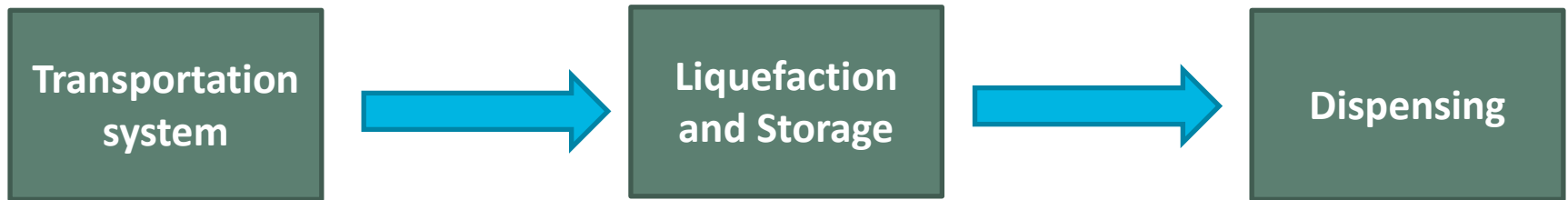
Customer is the Part 3 Fuel Supplier

B) FEI owns title to the gas used for its CNG fleet

C) At Surrey Ops, FEI sells gas under Rate Schedule 6P at the Dispenser.

FEI is the Part 3 Fuel Supplier

FEI and the BC-LCFS – LNG Service



Title of the gas during
liquefaction determines who
is the Part 3 fuel supplier

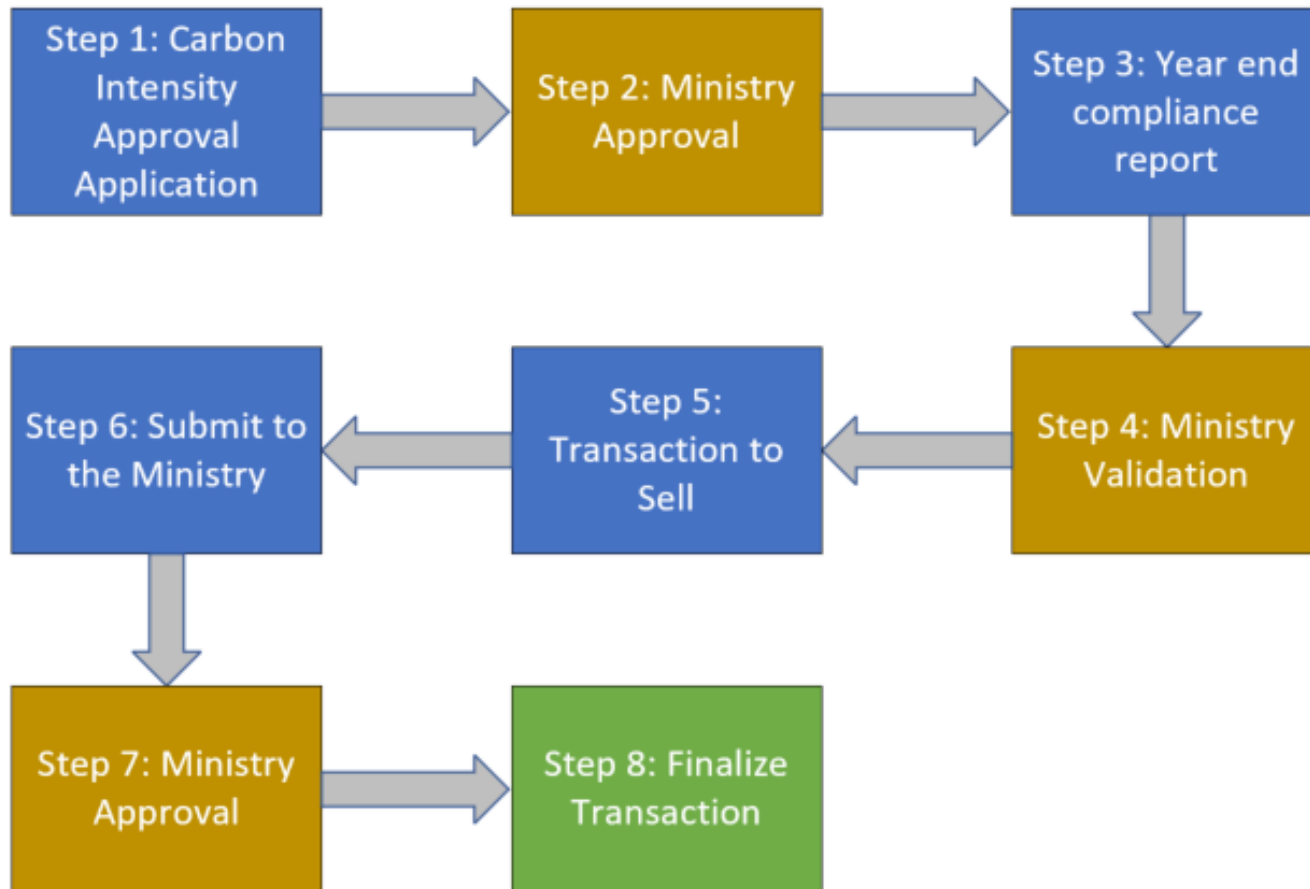
D) Under RS 46 Transportation Service, the customer delivers gas to FEI upstream, and the customer retains title to the gas through the LNG Plant (6.4b)

**Customer is the Part 3
Fuel Supplier**

E) Under RS46 LNG Sales and Dispensing Service, title transfer occurs “at the outlet flange” of the LNG Plant (6.4a)

**FEI is the Part 3 Fuel
Supplier**

Carbon Credit Validation Process



- No incremental O&M; approx. \$10 thousand absorbed in formula O&M for internal labour
- Approx. \$10 thousand in external consultant and legal costs to be included in the deferral account

Carbon Credit Validation Timeline

Compliance Period	2018	2019	2020	2021
Initial Report	29-Mar-19	27-Mar-20	25-Mar-21	22-Mar-22
Supplemental Report		6-Jul-20	4-Feb-22	
Supplemental Report		17-Feb-21		
Supplemental Report		4-Feb-22		
Approval	23-Sep-19	18-Feb-22	18-Feb-22	
Credits	26,521	28,918	24,710	2,419

- Timing, value, and magnitude of the credits remains uncertain and difficult to forecast
- Current credits have been accruing since January 1, 2018

Emissions Regulation Deferral Account Amortization

Exhibit A-6

Question 2b:

- Please discuss the alternatives considered by FEI related to the proposed amortization of the Emissions Regulations Deferral Account, such as returning monetized credits to CNG and LNG transportation customers only instead of amortizing the deferral account to the benefit of all ratepayers, and why these alternatives were rejected.

Questions?

Service Quality Indicators

James Wong, Director, Budgeting and Strategic Initiatives

Amar Mangat, Manager, Customer Experience, Billing Services



Customer

Service Quality Indicator	2020 Results	2021 Results	2021 Status (Relative to Benchmark and Threshold)	2022 August YTD Results	2022 Status (Relative to Benchmark and Threshold)	Benchmark	Threshold
Customer SQIs							
First Contact Resolution	81%	79%	Meets	78%	Meets	78%	74%
Billing Index	0.6	0.9	Meets	1.0	Meets	<=3.0	5.0
Meter Reading Accuracy	89%	88%	Below threshold	87%	Below threshold	95%	92%
Telephone Service Factor (Non-Emergency)	70%	70%	Meets	63%	Below threshold	70%	68%
Meter Exchange Appointment	98.1%	98.3%	Meets	98.3%	Meets	95%	93.8%

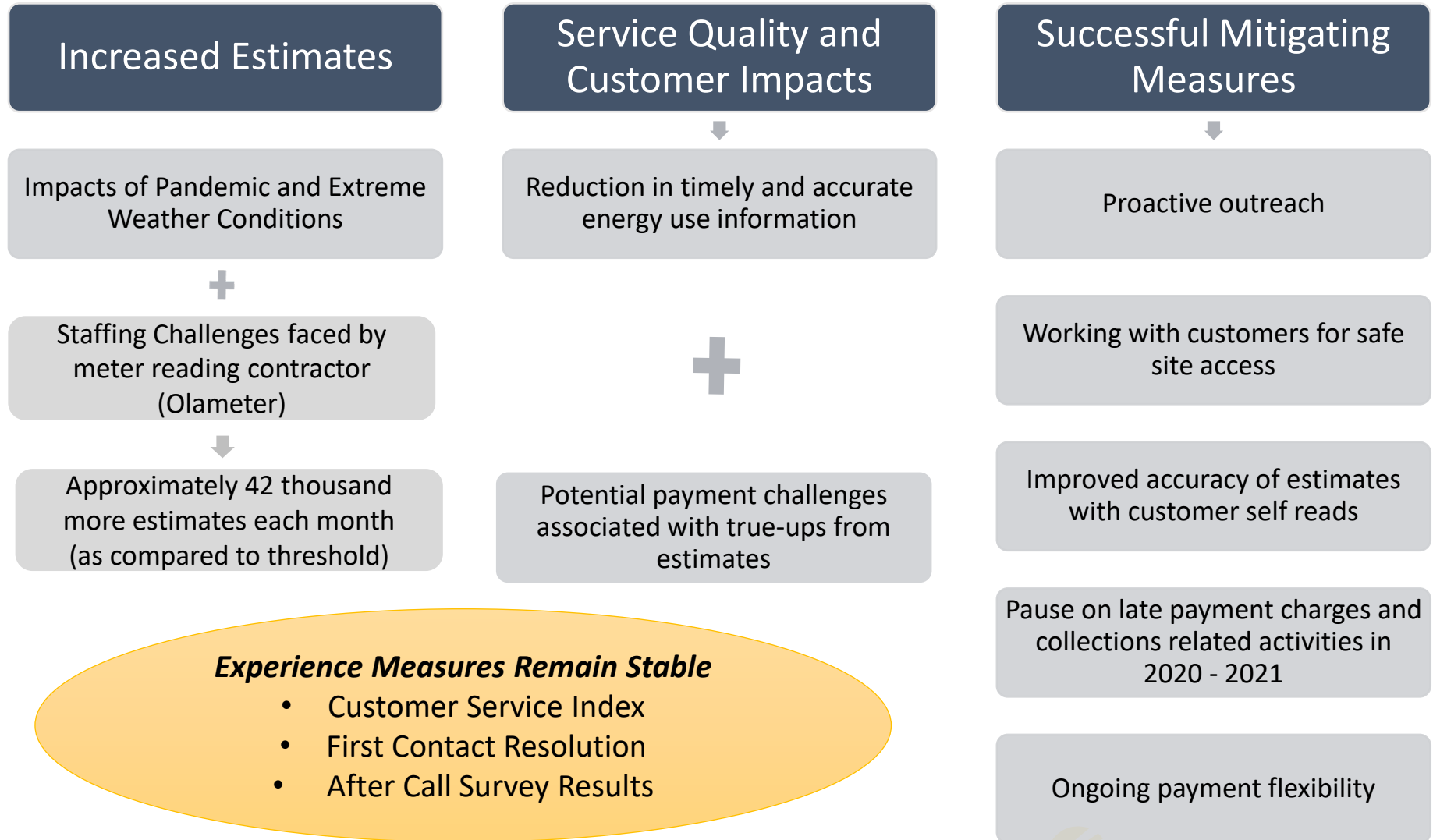
Informational Indicator	2020 Results	2021 Results		2022 August YTD Results			
Customer Satisfaction Index	8.7	8.7	n/a	8.6	n/a		
Average Speed of Answer	72 sec.	65 sec.	n/a	92 sec.	n/a		

Safety and Reliability

Service Quality Indicator	2020 Results	2021 Results	2021 Status (Relative to Benchmark and Threshold)	2022 August YTD Results	2022 Status (Relative to Benchmark and Threshold)	Benchmark	Threshold
Safety SQIs							
Emergency Response Time	97.7%	97.7%	Meets	97.9%	Meets	97.7%	96.2%
Telephone Service Factor (Emergency)	96.9%	96.9%	Meets	97.5%	Meets	95%	92.8%
All Injury Frequency Rate	1.66	1.75	Meets	1.66	Meets	2.08	2.95
Public Contacts with Gas Lines	7	6	Meets	5	Meets	<=8	12

Informational Indicator	2020 Results	2021 Results		2022 August YTD Results			
Reliability SQIs							
Transmission Reportable Incidents	1	0	n/a	0	n/a		
Leaks per KM of Distribution System Mains	0.0065	0.0055	n/a	0.0041	n/a		

Meter Reading Accuracy: Impacted by the Pandemic and Extreme Weather Events



Questions?

Question Period