FEI Annual Review of 2019 Rates

Workshop



Agenda

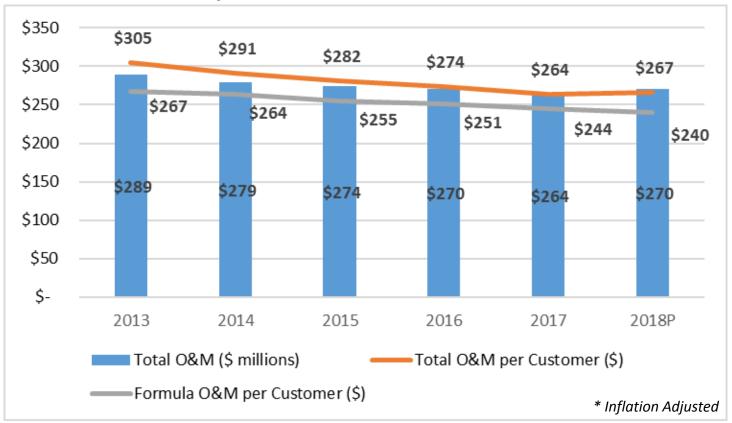
Approvals Sought & PBR Overview	Diane Roy	Vice President, Regulatory Affairs
Revenue Requirements & Rates	Rick Gosselin	Manager, Cost of Service
Growth Capital	Jason Wolfe	Director, Energy Solutions
Integrity Management and Sustainment Capital	Paul Chernikhowsky	Director, Integrity Management and Damage Prevention
Service Quality Indicators (SQIs)	James Wong	Director, Strategic Initiatives & Budgeting
Open Question Period	All	

Approvals Sought

- Delivery rate freeze for 2019, achieved by drawing down existing Revenue Surplus Deferral account by \$6.319 million
- Four deferral account requests:
 - 2019-2022 DSM Expenditures regulatory proceeding new
 - □ TIMC CPCN development new
 - 2017 LTRP regulatory proceeding three-year amortization period
 - 2017 Rate Design Application five-year amortization period
- Continuation of existing treatment of MCRA costs of \$3.6 million
- Z Factors for 2019 Employer Health Tax and 2018/2019 MSP premium reductions
- Biomethane Variance Account Rate Rider for 2019
- Revenue Stabilization Adjustment Mechanism (RSAM) riders for 2019



Summary of PBR Results – O&M *



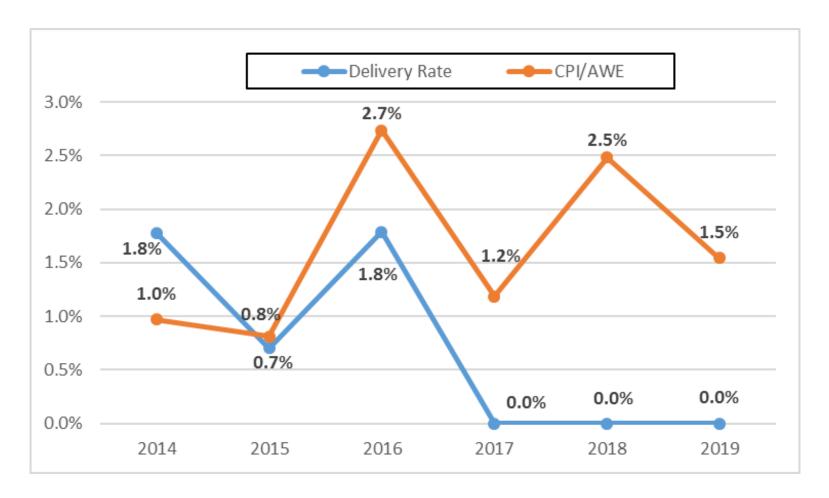
- O&M has trended favourably both in total and on a per customer basis since the outset of PBR term
- \$43 million in savings shared with customers through earnings sharing mechanism plus \$13 million savings embedded in the formula

Formula Capital Expenditures

		2014		2015			2016		
	<u>Actual</u>	<u>Formula</u>	<u>Variance</u>	<u>Actual</u>	<u>Formula</u>	<u>Variance</u>	<u>Actual</u>	<u>Formula</u>	<u>Variance</u>
Growth	24.231	21.478	2.753	45.776	28.480	17.296	47.500	33.262	14.238
Other	100.168	98.343	1.825	107.803	110.901	- 3.098	114.641	112.053	2.588
Pension/OPEB	3.915	3.915		4.324	4.324		4.075	4.075	
Total	128.314	123.736	4.578	157.903	143.705	14.198	166.216	149.390	16.826
			3.70%			9.88%			11.26%
		2017			2018		(Cumulative	<u>:</u>
	<u>Actual</u>	2017 Formula	<u>Variance</u>	Projected	2018 Formula	<u>Variance</u>	Projected	Cumulative <u>Formula</u>	<u>Variance</u>
Growth	<u>Actual</u> 59.542		Variance 26.065	Projected 67.912		Variance 30.428			
Growth Other		<u>Formula</u>			<u>Formula</u>		Projected	<u>Formula</u>	<u>Variance</u>
	59.542	<u>Formula</u> 33.477	26.065	67.912	Formula 37.485	30.428	Projected 244.961	Formula 154.181	Variance 90.780
Other	59.542 139.416	Formula 33.477 113.104	26.065 26.312	67.912 153.460	Formula 37.485 114.596	30.428 38.865	Projected 244.961 615.488	Formula 154.181 548.997	Variance 90.780

2018 Projected updated to include additional \$7.2 million for Whistler IP Extension project

Summary of PBR Results – Delivery Rates



Note: 2019 delivery rate increase was 1.1 percent before offset from 2017/2018 Revenue Surplus

Major Initiatives

Name	Implementation				Anticipated O&M Savings								
Name	Year		Capital		O&M	2	2014/2015		2016		2017		2018+
Regionalization (Phase 1)	2014/15	\$	1.3	\$	0.9	\$	2.0	\$	1.0	\$	1.0	\$	1.0
Regionalization (Phase 2)	2016	\$	0.7	\$	0.8	\$	-	\$	1.1	\$	1.1	\$	1.1
Project Blue Pencil	2014/15		< \$0.3	\$	-	\$	1.0	\$	1.0	\$	1.0	\$	1.0
Review of Technical and Infrastructure Provider	2014/15	\$	1.5	\$	-	\$	1.8	\$	2.0	\$	2.0	\$	2.0
Online Service Application	2015/16/17	\$	1.9	\$	0.1	\$	-	\$	-	\$	0.05	\$	0.05
SAP Integration **	2017/18	\$	4.2	\$	0.3	Annual savings of \$0.9 million starting 2019					9		
Gas Workforce Management ***	2017/18/19	\$	5.8	\$	1.1	\$	-	\$	-	\$	-	\$	0.50
Common Trenching	2018/19	\$	-	\$	-	\$	-	\$	-	\$	ı	\$	-

^{*} Costs and Savings are expressed in \$ millions.



^{**} SAP Integration costs and savings are shared between FEI and FBC.

^{***} Gas Workforce Management savings are expected starting 2020.

^{****} Common Trenching program under development with savings to be determined.

Revenue Requirements & Rates

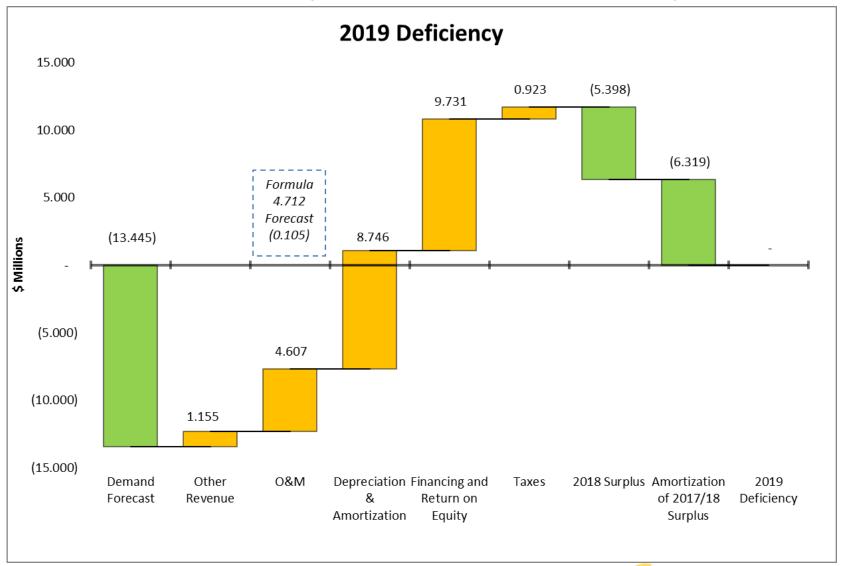
Rick Gosselin, Manager, Cost of Service



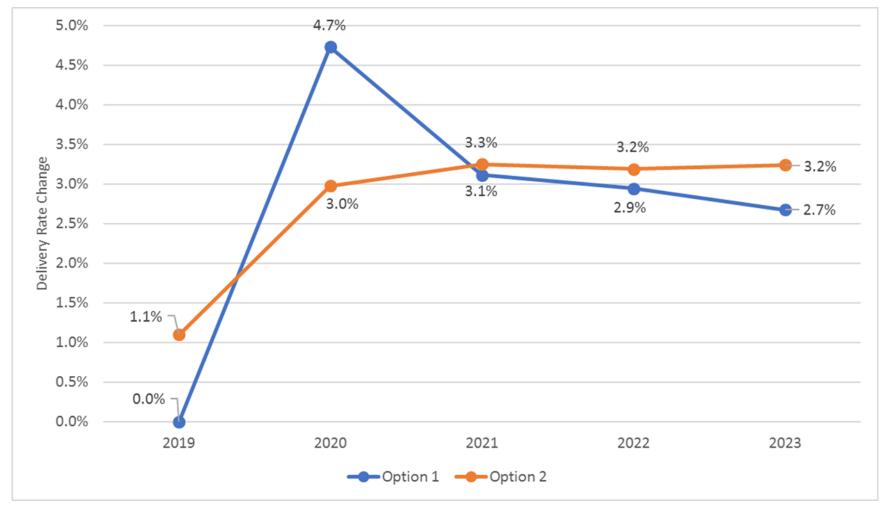
Evidentiary Update September 26, 2018

Evidentiary Update - 2019 Rates							
Line Item	Reference	Revenue Deficiency Impact (\$ millions)		Delivery Rate Impact			
August 3, 2018 Filing	Exhibit B-1, Schedule 1	\$	-	0.00%			
RDA Approved Rates	Exhibit B-1, Section 1.2.1, Appendix A		2.066	0.26%			
May/June AWE Update	Application, Page 20		0.012	0.00%			
Kelowna LILO Termination			(0.626)	-0.08%			
2018 Projected CapEx	BCUC IR 1.8.11		0.762	0.09%			
Prescribed Undertaking 3.6			0.671	0.08%			
Flow-Through Deferral Account Update			1.559	0.19%			
September 26, 2018 Evidentiary Upd	\$	4.444	0.55%				
2017 & 2018 Revenue Surplus Deferral Account			(4.444)	-0.55%			
September 26, 2018 Evidentiary Upd	\$	-	0.00%				

Summary of 2019 Deficiency



2017/2018 Surplus Amortization Options



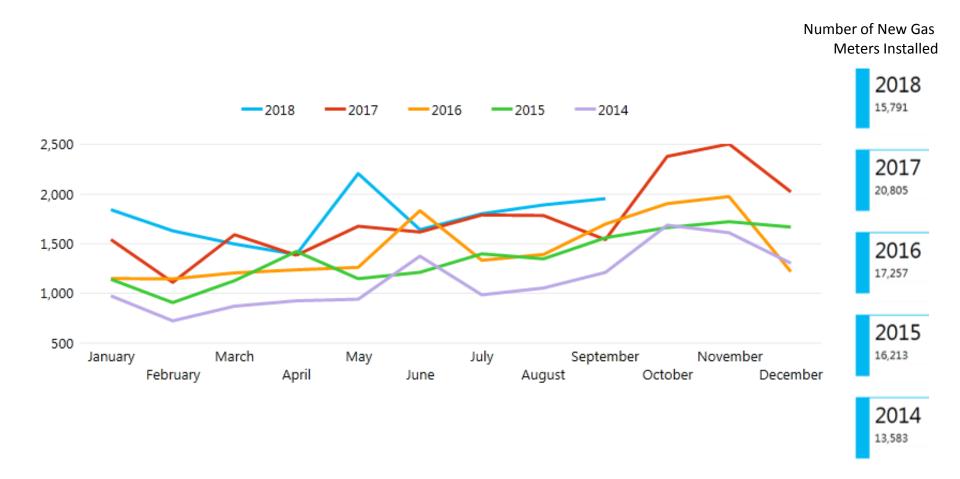
Option 1 - 0% increase, uneven amortization over 3 yrs Option 2 - 1.1% increase, uneven amortization over 3 yrs

Growth Capital

Jason Wolfe, *Director, Energy Solutions*



FEI Gross Customer Additions



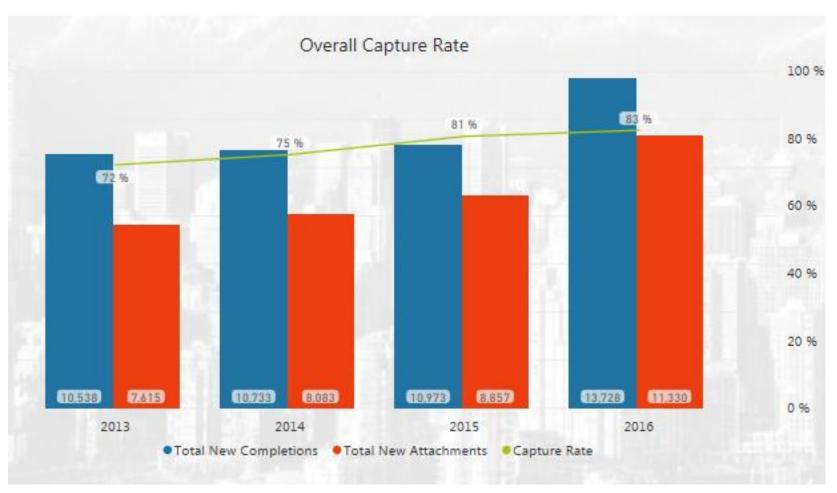


Common Trenching



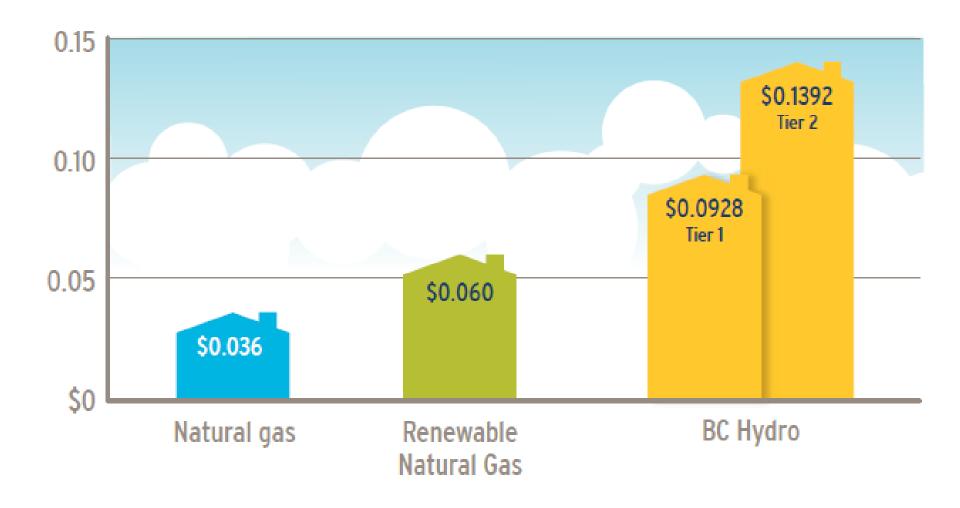


Capture Rate for Residential Customers within 200 Metres of the Main





Residential Gas and Electric Rates (\$/KwH)



Innovative Technology Examples



Integrity Management & Sustainment Capital

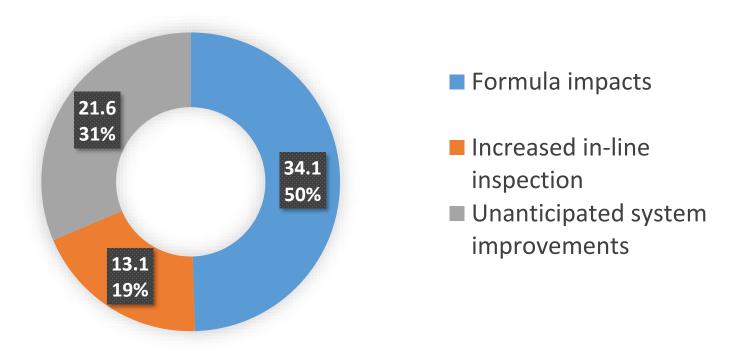
Paul Chernikhowsky, Director, Integrity Management and Damage Prevention



Primary Drivers of Sustainment Capital Variance

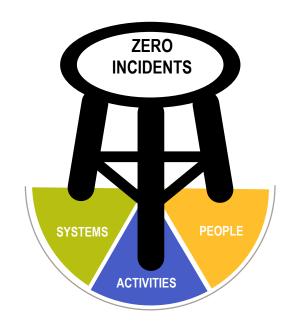
As per Updated Table C4-4: Cumulative capital variance compared to formula: \$66.5 million

Contributing drivers to cumulative capital variance (\$millions and percent)



Integrity Management at FEI

Three approaches/barriers to managing our risk:



In-Line Inspection (ILI) ...a.k.a. "Pig & Dig"





Enhancing ILI Capabilities in the FEI Transmission System

Current activities

In-line inspection with metal-loss tools

Ability to inspect small diameter lateral pipelines

Ability to detect stress corrosion cracking

Future CPCN:
"Transmission Integrity
Management Capabilities"

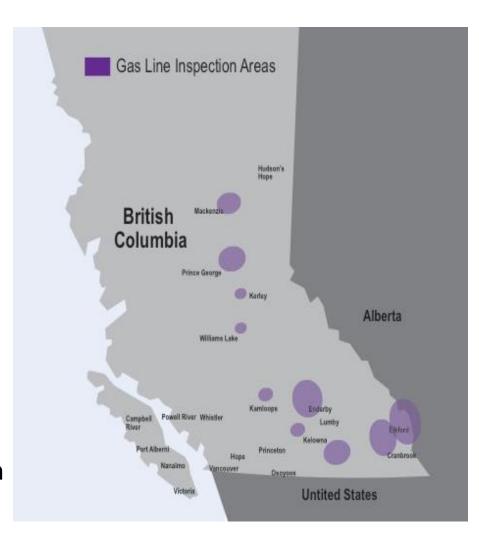
Future CPCN: "Inland Gas Upgrades"



Inland Gas Upgrades Project

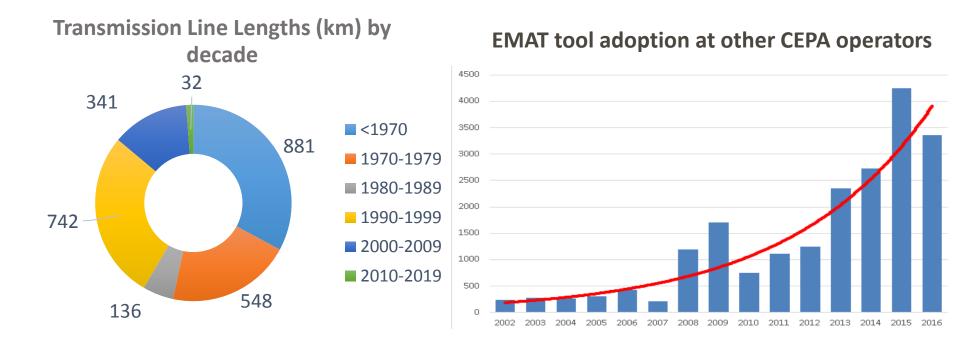
PROJECT OVERVIEW

- Multi-year project to mitigate integrity risk for 29 transmission pressure (TP) laterals (400 km)
- Options considered and proposed:
 - Modifications to allow inline inspection capabilities
 - Pressure reduction to reduce pipeline wall stresses
 - Pipeline replacements
- Project is focused on TP 6-8 inches in diameter
- CPCN filing anticipated in 2018 with project completion in 2024



Transmission Integrity Management Capabilities (TIMC) Project

- EMAT = Electro Mechanical Acoustic Transducer
- SCC = Stress Corrosion Cracking

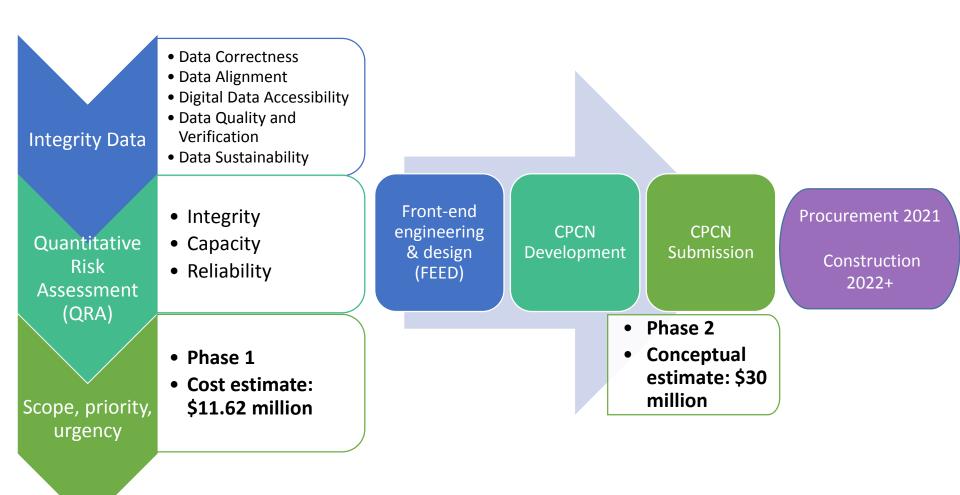


Transmission Integrity Management Capabilities Project

- SCC can result in pipeline cracking which is undetectable with current ILI tools
- Project includes:
 - Adoption of EMAT inspection tools
 - Established industry method for detection of pipeline cracking
 - Pipeline modifications to provide capability to run EMAT in-line inspection tools
 - Prioritization based on risk assessment
 - Enhanced detection for ~1,400 km of TP lines
- CPCN anticipated filing in 2020 with project completion beyond 2023



Transmission Integrity Management Capabilities Project



Service Quality Indicators

James Wong, Director, Strategic Initiatives & Budgeting



SQI Performance

Service Quality Indicator	2017 (Relative to Benchmark and Threshold)	2018 August YTD (Relative to Benchmark and Threshold)
Safety SQIs		
Emergency Response Time	Meets	Meets
Telephone Service Factor (Emergency)	Meets	Meets
All Injury Frequency Rate (AIFR)	Meets	Meets
Public Contacts with Pipelines	Meets	Meets
Responsiveness to Customer Needs SQIs		
First Contact Resolution	Meets	Meets
Billing Index	Meets	Meets
Meter Reading Accuracy	Meets	Within Range
Telephone Service Factor (Non-Emergency)	Meets	Meets
Meter Exchange Appointment	Meets	Meets
Customer Satisfaction Index - informational	n/a	n/a
Telephone Abandon Rate - informational	n/a	n/a
Reliability SQIs		
Transmission Reportable Incidents - informational	n/a	n/a
Leaks per KM of Distribution System Mains - informational	n/a	n/a

Responsiveness to Customer Needs

Service Quality Indicator	2017 Results	2017 Status (Relative to Benchmark and Threshold)	2018 August YTD Results	2018 Status (Relative to Benchmark and Threshold)	Benchmark	Threshold
Responsiveness to Customer	Needs SQ	Is				
First Contact Resolution	80%	Meets	83%	Meets	78%	74%
Billing Index	0.75	Meets	2.81	Meets	5.0	<=5.0
Meter Reading Accuracy	96.2%	Meets	94.9%	Within Range	95%	92%
Telephone Service Factor (Non-Emergency)	71%	Meets	71%	Meets	70%	68%
Meter Exchange Appointment	97.0%	Meets	96.3%	Meets	95%	93.8%

Informational Indicators	2017 Results		2018 August YTD Results		2015 Actuals	2016 Actuals
Customer Satisfaction Index	8.4	n/a	8.6	n/a	8.6	8.8
Telephone Abandon Rate	1.9%	n/a	2.0%	n/a	2.0%	2.2%

Safety and Reliability

Service Quality Indicator	2017 Results	Status (Relative to Benchmark and Threshold)	2018 August YTD Results	Status (Relative to Benchmark and Threshold)	Benchmark	Threshold
Safety SQIs						
Emergency Response Time	97.8%	Meets	97.7%	Meets	97.7%	96.2%
Telephone Service Factor (Emergency)	97.6%	Meets	97.9%	Meets	95%	92.8%
All Injury Frequency Rate	2.00	Meets	1.81	Meets	2.08	2.95
Public Contacts with Pipelines	8	Meets	8	Meets	16	16

Informational Indicators	2017 Results		2018 August YTD Results		2015 Actuals	2016 Actuals
Reliability SQIs						
Transmission Reportable Incidents	4	n/a	2	n/a	3	3
Leaks per KM of Distribution System Mains	0.0047	n/a	0.0038	n/a	0.0045	.0047

Question Period

