

FBC Annual Review of 2018 Rates

Workshop

October 24, 2017



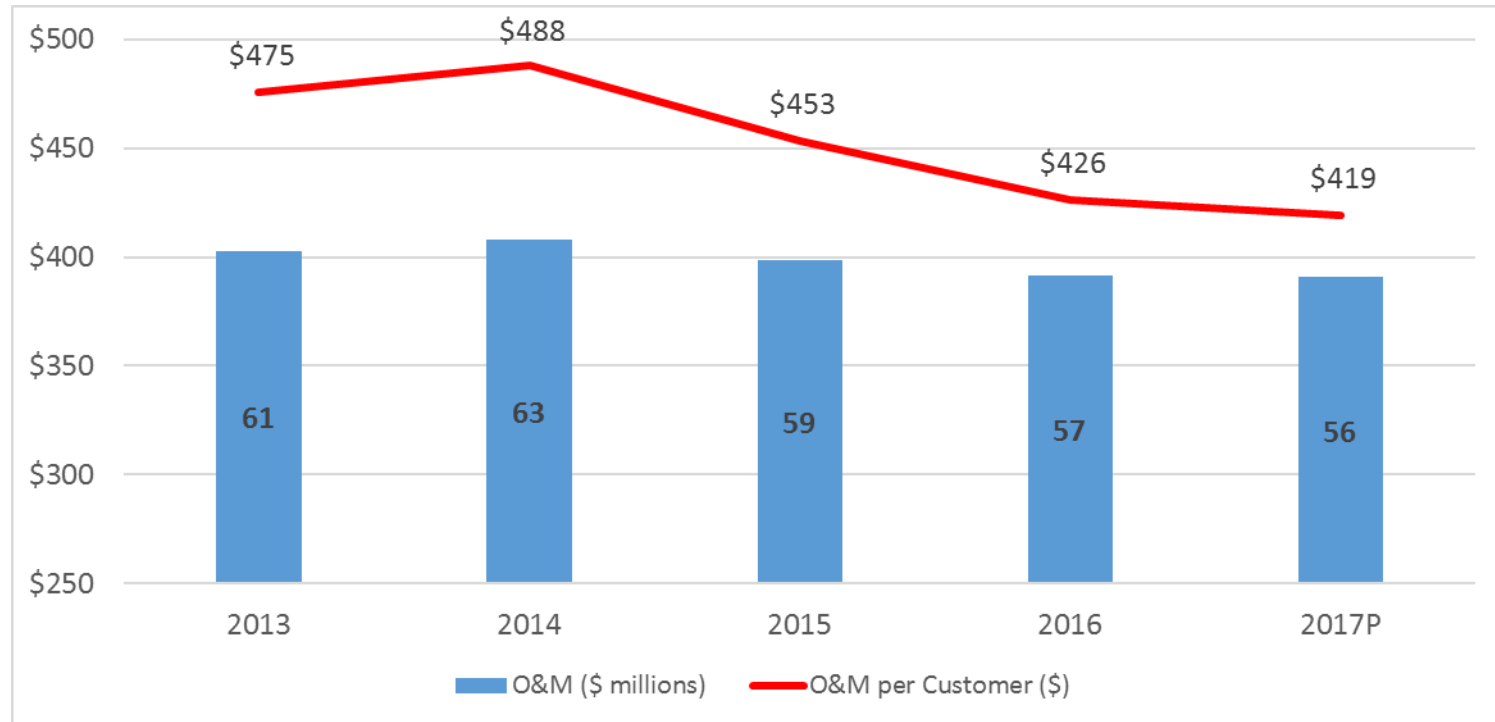
Agenda

PBR Overview	<i>Diane Roy</i>	<i>Vice President, Regulatory Affairs</i>
Revenue Requirements & Rates	<i>Joyce Martin</i>	<i>Manager, Regulatory Affairs</i>
Capital Expenditures	<i>Joyce Martin</i>	<i>Manager, Regulatory Affairs</i>
	<i>Paul Chernikhowsky</i>	<i>Director, Engineering Services</i>
	<i>Darrin Marshall</i>	<i>Project Manager</i>
Z-Factor Mandatory Reliability Standards	<i>Curtis Klashinsky</i>	<i>Manager, Assets and Compliance</i>
Service Quality Indicators (SQIs)	<i>James Wong</i>	<i>Director, Strategic Initiatives and Budgeting</i>
	<i>Suzana Prpic</i>	<i>Director, Corporate Emergency Management and Security</i>
	<i>Michelle Carman</i>	<i>Manager, Customer Operations and Contact Centre</i>
Open Question Period	<i>All</i>	

Approvals Sought

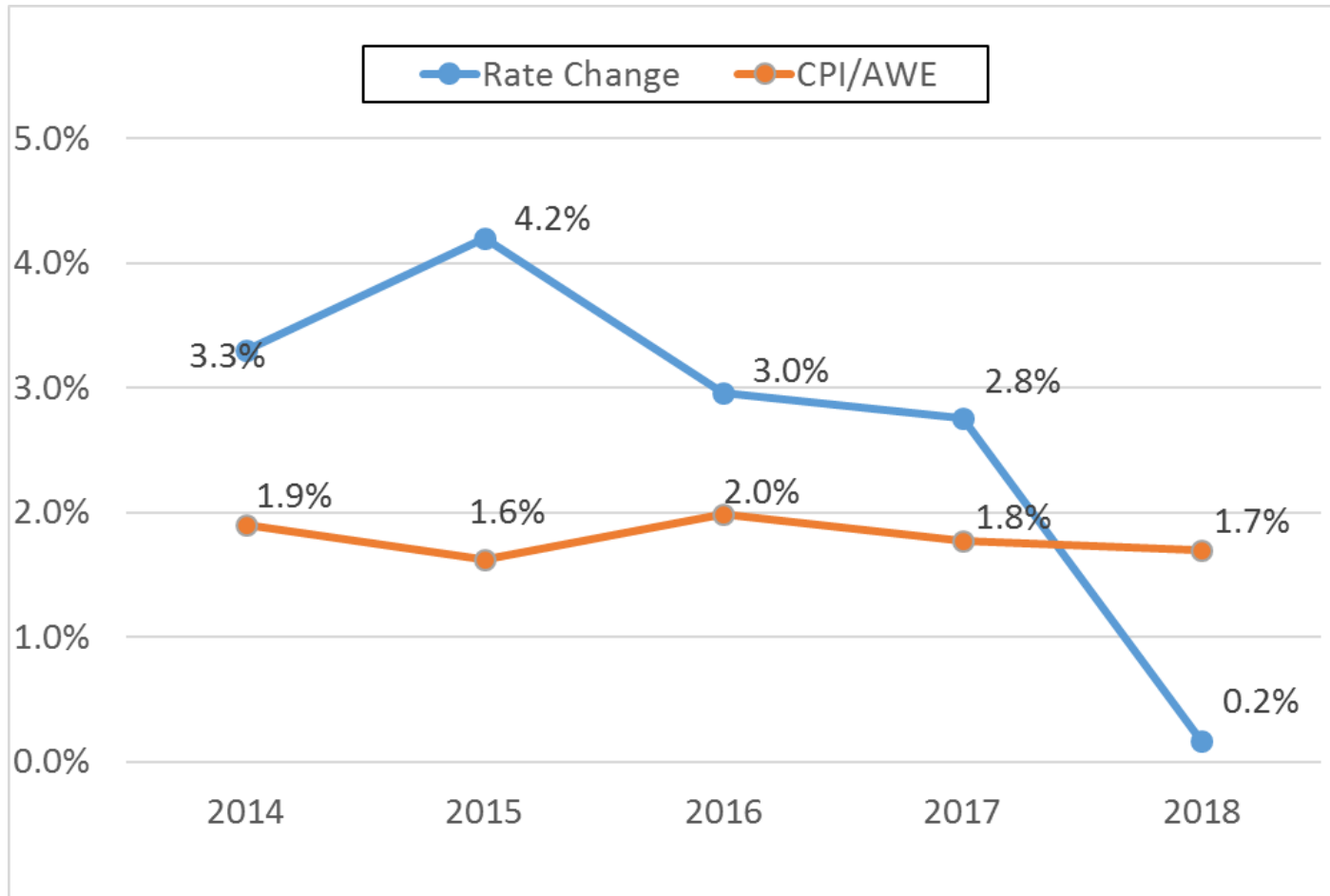
- Rate increase of 0.17 percent
- Five new deferral account requests:
 - Multi-Year Demand Side Management Expenditure Schedule
 - Community Solar Pilot Project
 - Tariff Applications
 - 2020 Revenue Requirements Application
 - 2018 Joint Use Pole Audit
- Z-Factor treatment for the Mandatory Reliability Standards Assessment Reports No. 8 and 10

Summary of PBR Results – O&M



- O&M is trending favourably with O&M per customer decreasing significantly
- \$4.8 million in savings shared with customers through earnings sharing mechanism
- SQIs have been trending favourably in recent years

Summary of PBR Results – Rates



Initiatives During the PBR Term

- Continued sharing of Contact Centre Staff
- Interactive Voice Response Enhancements
- SAP Integration
- Advanced Distribution Management System / Outage Management System

Revenue Requirements and Rates

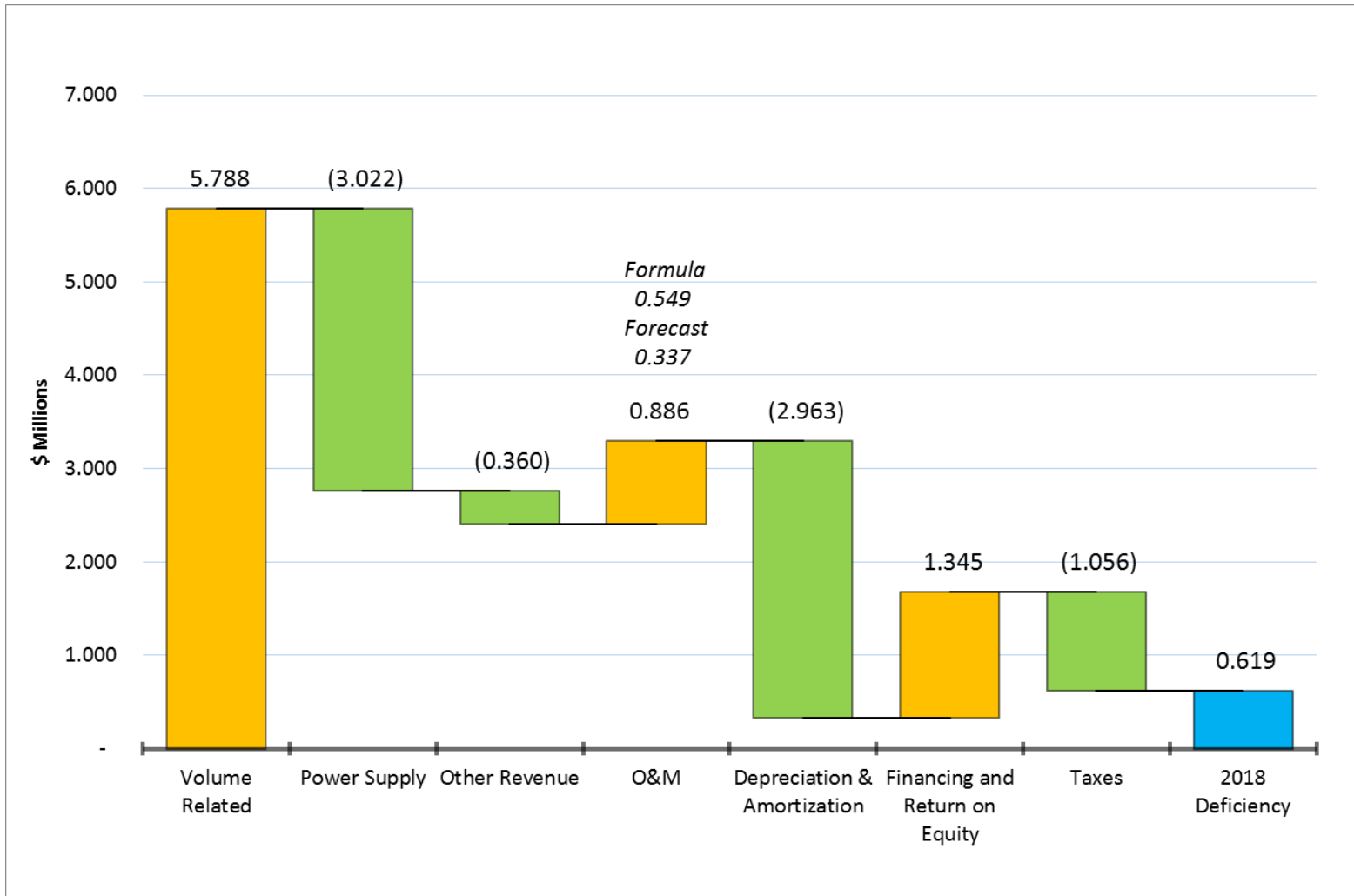
Joyce Martin, Manager, Regulatory Affairs



Evidentiary Update October 3, 2017

Evidentiary Update - 2018 Rates			
Line Item	Reference	Revenue Deficiency Impact (\$ millions)	Rate Impact
August 10, 2017 Filing		\$ 0.400	0.11%
June AWE Update	Application, Page 18	0.009	0.00%
Deferral Account Updates	BCUC IR 1.23.1, CEC IR 1.36.1	0.210	0.06%
October 3, 2017 Evidentiary Update		\$ 0.619	0.17%

Summary of 2018 Revenue Deficiency



Capital Expenditures

Joyce Martin, Manager, Regulatory Affairs

Paul Chernikhowsky, Director, Engineering Services

Darrin Marshall, Project Manager



Capital Spending Above the Dead Band

- Treatment of capital expenditures in excess of the dead band (FEI Order G-182-16):

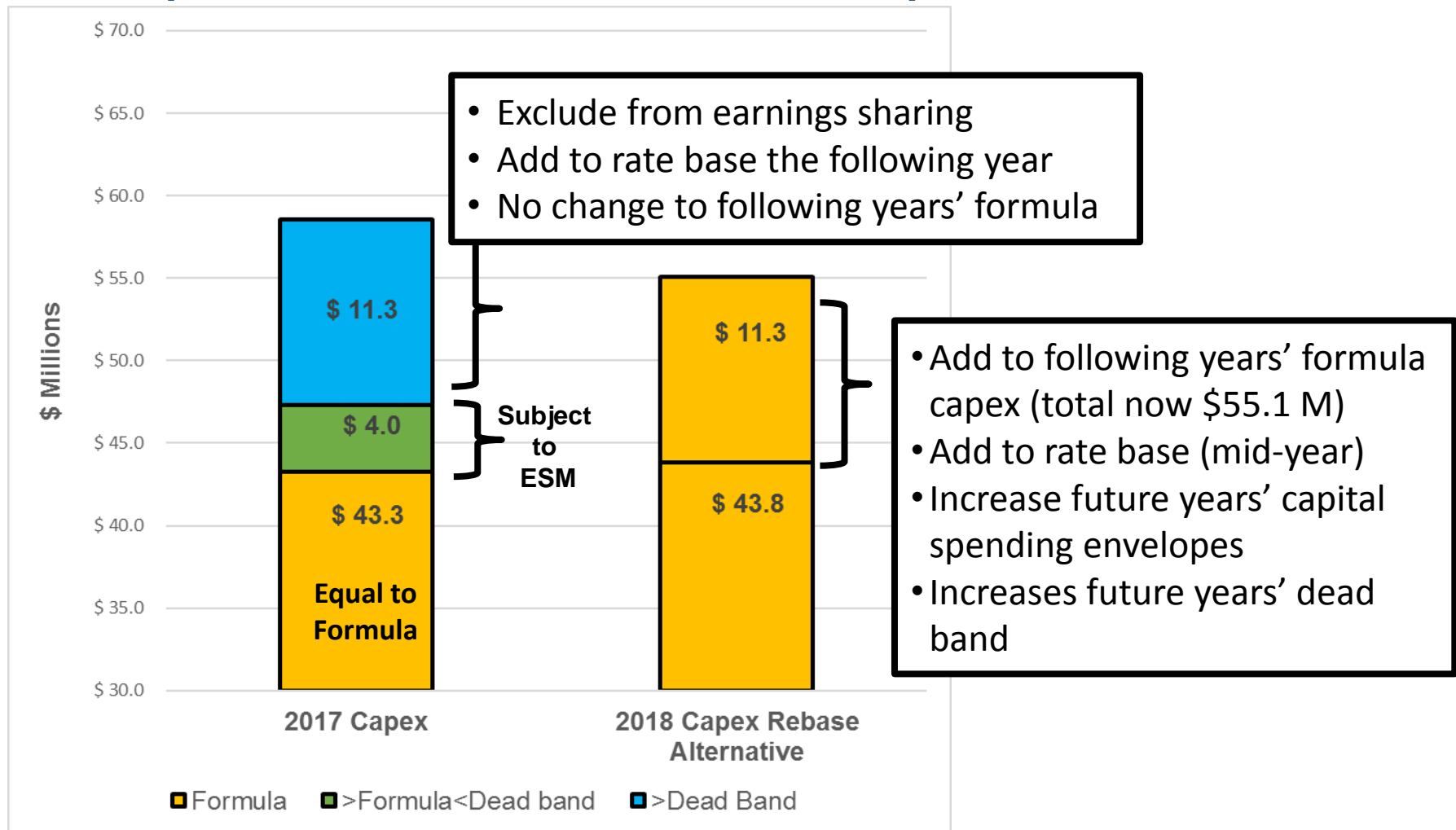
The Panel approves FEI's proposal to remove the amount of formula capital which has exceeded the cumulative dead-band from the earnings sharing calculation, and to add the amount of capital in excess of the dead-band to FEI's opening 2017 plant additions balance.

- Capital spending exceeds the dead band in 2017.

How the Capital Dead Band Works

- Spending within the capital dead band is subject to earnings sharing
- Spending outside of the capital dead band:
 - ❑ Excluded from earnings sharing
 - ❑ Opening plant in service in the following year is adjusted up or down by the amount outside of the dead band
- Alternative to adjust (or “rebase”) the following years’ capital formula
 - ❑ FBC’s recommendation is to not rebase the formula
 - ❑ Consistent with conclusion in FEI’s 2017 rates decision

Option to Re-Base the Capital Formula



No Changes Proposed to PBR Plan

- Only two years left in the PBR term
- The PBR Plan is a package of interdependent components
- Rebasing the capital formula does not result in a better outcome for customers

FBC will propose a new capital base and a revised capital formula, or alternative approach to the treatment of capital, in the next PBR Plan where a fulsome review of the formula in the context of all of the other components will take place

Formula Capital Expenditures

Table 1-2: Capital Expenditures 2014 to 2017 (\$ millions)

	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>
Formula Capital	42.665	42.193	0.472	44.791	42.384	2.407	45.838	42.874	2.964
Pension/OPEB	6.396	6.396	-	4.253	4.253	-	3.674	3.674	-
Total	49.061	48.589	0.472	49.044	46.637	2.407	49.512	46.548	2.964
			<i>0.97%</i>			<i>5.16%</i>			<i>6.37%</i>
	2017			Cumulative					
	<u>Projected</u>	<u>Formula</u>	<u>Variance</u>	<u>Projected</u>	<u>Formula</u>	<u>Variance</u>			
Formula Capital	58.560	43.254	15.306	191.854	170.705	21.149			
Pension/OPEB	3.539	3.539	-	17.862	17.862	-			
Total	62.099	46.793	15.306	209.716	188.567	21.149			
			<i>32.71%</i>			<i>11.22%</i>			

Capital Efficiencies

- Methods of reducing costs:
 - Economies of Scope
 - Economies of Scale
 - Risk Management
- Examples
 - Bundling of Work
 - Bundling of Transmission Rehabilitation Projects (45% cost reduction in 2016, 22% cost reduction in 2017)
 - Multi-year Commitments (Predictability)
 - Distribution Condition Assessment (25% cost reduction annually until 2019)
 - Re-Prioritization (Flexibility)

Mandatory Reliability Standards

Curtis Klashinsky, Manager, Assets and Compliance



Z Factor Criteria

- Costs must be attributable entirely to events outside the control of the utility
- Costs must be directly related to the exogenous event and clearly outside the original base costs
- Impact of the event unforeseen
- Costs must be prudently incurred
- Costs related to each exogenous event must exceed the materiality threshold

Assessment Report 8 – Critical Infrastructure and Protection Version 5

- Capital infrastructure and Operations and Planning work complete by end of 2017
- Transition to CIPv5, implement repetitive tasks, process changes and annual training during 2018
- Future sustaining capital expenditures to support the installed hardware and software

Assessment Report 8 Costs ('000s)						
	2016	2017	2018	2019	2020	2021
O&M	464	50	540	540	540	540
Capital		1350	50	80	100	100
Total	464	1400	590	620	640	640

Assessment Report 10 – Increased Operations and Planning Requirements

- ❑ Implement Real-Time Contingency Analysis (RTCA) software and analysis processes at least every 30 minutes (24/7)
- ❑ Perform, document, and communicate system studies every day (365 days)
- ❑ Follow Reliability Coordinator outage coordination requirements and process
- ❑ Backup software and methods in the event of primary software and processes failure

Assessment Report 10 - Execution

- For 2018:
 - Achieve compliance with standards in effect
 - Identify and analyze options for remaining standards
 - Evaluate software options
 - Reach out to other entities
 - Watching audit results in the US
- Execute selected options during 2019
- Full compliance with all AR10 standards by October 1 2020
- Preliminary assessment of one-time costs \$3.3 million
 - \$0.180 million in 2018 for evaluation phase

2018 Compliance Audit

- FBC's third triennial compliance audit
 - Timelines and scope to be issued November 2017
- Audit Timeline
 - Notice of audit (3 months prior to on-site)
 - Evidence gathering and submission
 - On-site audit (typically 1 week)
- MRS audit costs not included in Formula O&M
 - Forecast cost \$0.350 million

Service Quality Indicators

James Wong, Director, Strategic Initiatives & Budgeting

Suzana Prpic, Director, Corporate Emergency Management

Michelle Carman, Manager, Customer Operations and Contact Centre



SQL Performance

Service Quality Indicator	2016 (Relative to Benchmark and Threshold)	2017 August YTD (Relative to Benchmark and Threshold)
<i>Safety SQLs</i>		
Emergency Response Time	Meets	Meets
All Injury Frequency Rate (AIFR)	Within Range	Meets
<i>Responsiveness to Customer Needs SQLs</i>		
First Contact Resolution	Meets	Meets
Billing Index	Meets	Meets
Meter Reading Accuracy	Meets	Meets
Telephone Service Factor (Non-Emergency)	Meets	Meets
Customer Satisfaction Index - informational	n/a	n/a
Telephone Abandon Rate - informational	n/a	n/a
<i>Reliability SQLs</i>		
System Average Interruption Duration Index (SAIDI) - Normalized	Meets	Within Range
System Average Interruption Frequency Index (SAIFI) - Normalized	Meets	Meets
Generator Forced Outage Rate - informational	n/a	n/a

Responsiveness to Customer Needs

Service Quality Indicator	2016 Results	Status (Relative to Benchmark and Threshold)	2017 August YTD Results	Status (Relative to Benchmark and Threshold)	Benchmark	Threshold
<i>Responsiveness to Customer Needs SQIs</i>						
First Contact Resolution	79%	Meets	80%	Meets	78%	72%
Billing Index	0.57	Meets	0.14	Meets	5.0	<=5.0
Meter Reading Accuracy	99%	Meets	99%	Meets	97%	94%
Telephone Service Factor (Non-Emergency)	70%	Meets	70%	Meets	70%	68%

Informational Indicators	2016 Results		2017 August YTD Results		2014 Actuals	2015 Actuals
Customer Satisfaction Index	8.2	n/a	8.1	n/a	8.1	8.1
Telephone Abandon Rate	3.9%	n/a	4.4%	n/a	12.4%	2.7%

Safety and Reliability

Service Quality Indicator	2016 Results	Status (Relative to Benchmark and Threshold)	2017 August YTD Results	Status (Relative to Benchmark and Threshold)	Benchmark	Threshold
Safety SQIs						
Emergency Response Time	97%	Meets	94%	Meets	93.0%	90.6%
All Injury Frequency Rate	1.97	Within Range	1.35	Meets	1.64	2.39
Reliability SQIs						
SAIDI - Normalized	2.18	Meets	2.44	Within Range	2.22	2.62
SAIFI - Normalized	1.51	Meets	1.44	Meets	1.64	2.50

Informational Indicators	2016 Results		2017 August YTD Results		2014 Actuals	2015 Actuals
Generator Forced Outage Rate - informational	0.8%	n/a	0.7%	n/a	1.74%	0.1%

Safety

All Injury Frequency Rate (AIFR)

Description	2009	2010	2011	2012	2013	2014	2015	2016	August 2017
									YTD
Annual Results	1.41	1.72	1.48	1.72	2.82	3.21	1.54	1.15	1.36
Three Year Rolling Average	2.00	2.00	1.54	1.64	2.01	2.58	2.52	1.97	1.35
Benchmark	n/a	n/a	n/a	n/a	n/a	1.64	1.64	1.64	1.64
Threshold	n/a	n/a	n/a	n/a	n/a	2.39	2.39	2.39	2.39

2016 annual AIFR improved over recent years' performance

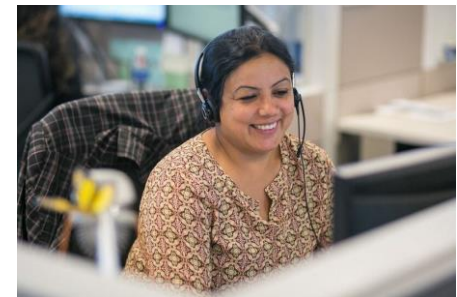
- ❑ Target Zero implemented
- ❑ 2017 YTD results continue to be favourable

Abandon Rates and Call-Back Feature

Abandon Rates

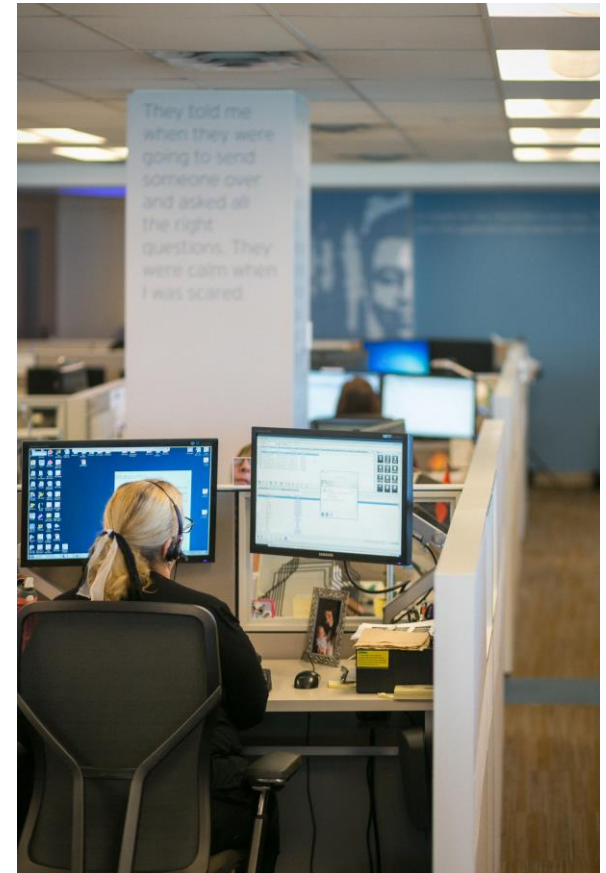
# Seconds until abandon	0 – 30 Seconds	31 – 60 Seconds	61 – 120 Seconds	Over 120 Seconds
% of Abandons (2017 YTD)	27%	13%	18%	41%
% of Abandons (2016)	27%	13%	24%	36%

- The 2017 August YTD abandon rate is 4.4%
- The higher abandon rate in recent years does not appear to be due to long wait times
- Abandoned calls can be caused by a number of other things including:
 - Customer behavior and choice
 - Large scale outages and the use of IVR



Commission Directive – Call-Back Feature

- Discussion on the impact of the call-back feature and other potential measures or informational indicators
- *Impact*
 - Expected to reduce abandoned calls due to waiting times; however, impact on overall rate is limited due to small percentage and minimal wait times
 - Approximately 2% of calls per month use this feature
 - Treated the same as a call when a customer waits on the line
 - Included in existing performance metrics
- *Other Measures*
 - With relatively small overall impact and inclusion in existing metrics, additional informational indicators unlikely to provide additional value or insight



Question Period