

Third Quarter 2018 Conference Call

November 1, 2018



Forward Looking Information and Non-GAAP Measures

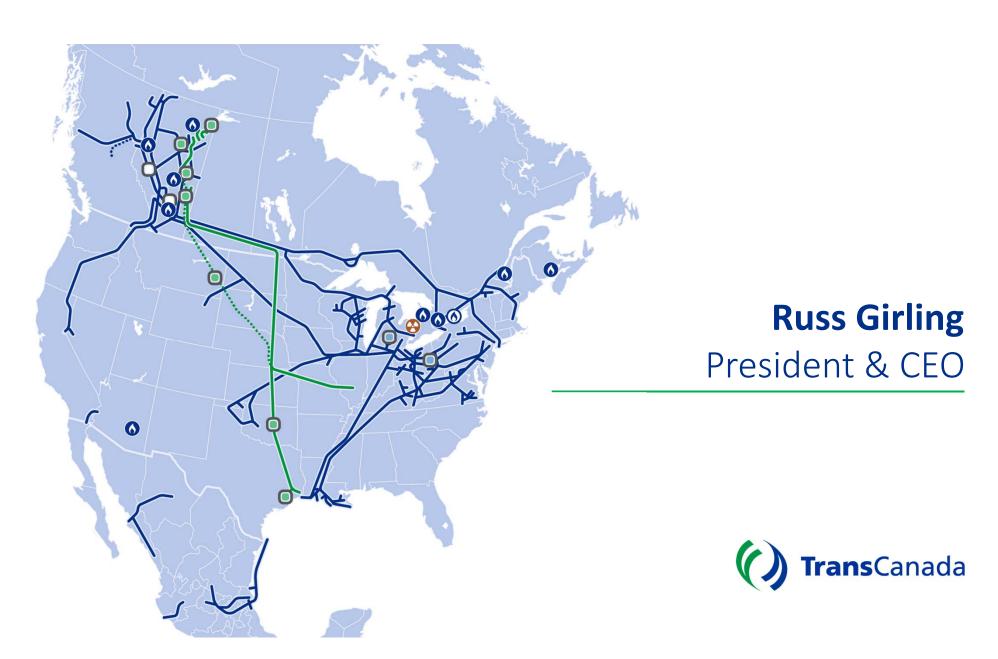
This presentation includes certain forward looking information, including future oriented financial information or financial outlook, which is intended to help current and potential investors understand management's assessment of our future plans and financial outlook, and our future prospects overall. Statements that are forward-looking are based on certain assumptions and on what we know and expect today and generally include words like anticipate, expect, believe, may, will, should, estimate or other similar words.

Forward-looking statements do not guarantee future performance. Actual events and results could be significantly different because of assumptions, risks or uncertainties related to our business or events that happen after the date of this presentation. Our forward-looking information in this presentation includes statements related to future dividend and earnings growth and the future growth of our core businesses, among other things.

Our forward looking information is based on certain key assumptions and is subject to risks and uncertainties, including but not limited to: our ability to successfully implement our strategic priorities and whether they will yield the expected benefits, the operating performance of our pipeline and energy assets, amount of capacity sold and rates achieved in our pipeline businesses, the availability and price of energy commodities, the amount of capacity payments and revenues from our energy business, regulatory decisions and outcomes, including those related to recent FERC policy changes, outcomes of legal proceedings, including arbitration and insurance claims, performance and credit risk of our counterparties, changes in market commodity prices, changes in the regulatory environment, changes in the political environment, changes in environmental and other laws and regulations, competitive factors in the pipeline and energy sectors, construction and completion of capital projects, costs for labour, equipment and materials, access to capital markets, interest, tax and foreign exchange rates, including the impact of U.S. Tax Reform, weather, cyber security, technological developments and economic conditions in North America as well as globally. You can read more about these risks and others in our October 31, 2018 Quarterly Report to Shareholders and 2017 Annual Report filed with Canadian securities regulators and the SEC and available at www.transcanada.com.

As actual results could vary significantly from the forward-looking information, you should not put undue reliance on forward-looking information and should not use future-oriented information or financial outlooks for anything other than their intended purpose. We do not update our forward-looking statements due to new information or future events, unless we are required to by law.

This presentation contains reference to certain financial measures (non-GAAP measures) that do not have any standardized meaning as prescribed by U.S. generally accepted accounting principles (GAAP) and therefore may not be comparable to similar measures presented by other entities. These non-GAAP measures may include Comparable Earnings, Comparable Earnings per Common Share, Comparable Earnings Before Interest, Taxes, Depreciation and Amortization (Comparable EBITDA), Funds Generated from Operations, Comparable Funds Generated from Operations, Comparable Distributable Cash Flow (DCF) and Comparable DCF per Common Share. Reconciliations to the most directly comparable GAAP measures are included in this presentation and in our October 31, 2018 Quarterly Report to Shareholders filed with Canadian securities regulators and the SEC and available at www.transcanada.com.



Third Quarter 2018 Highlights

Continued to generate record financial results

- Comparable earnings were \$1.00 per common share in third quarter, \$2.82 per common share on year-to-date basis
- High quality, diversified asset portfolio expected to drive record performance in 2018

Declared quarterly dividend of \$0.69 per common share

• Equivalent to an annualized \$2.76 per share, a 10 per cent increase over 2017

Advanced \$36 billion secured capital program

- Includes \$6.2 billion Coastal GasLink Pipeline project, Bruce Power Unit 6 MCR program and NGTL 2022 Expansion
- Projects moving forward largely as planned with ~\$10 billion of assets expected to enter service by early 2019

Progressed over \$20 billion of projects under development

• Includes Keystone XL and remainder of Bruce Power Life Extension program

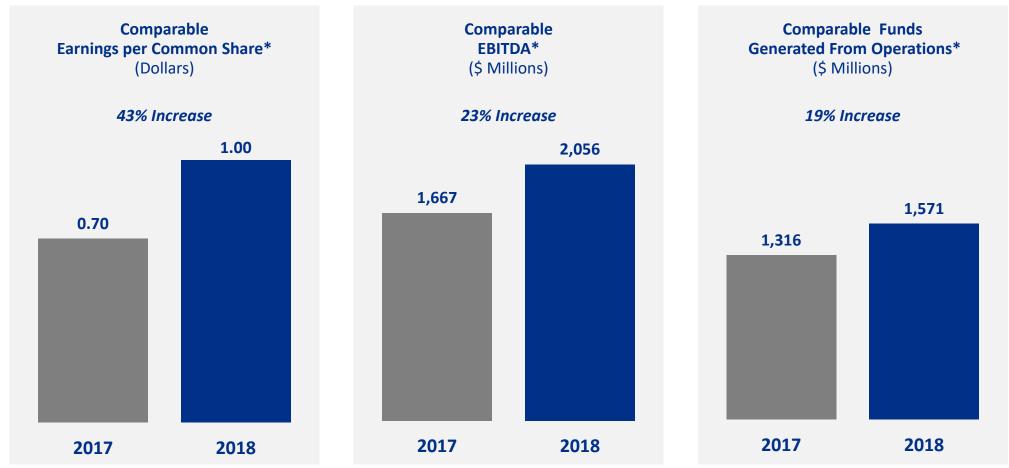
Funding program completed for 2018

- Issued \$6.1 billion of long-term debt on compelling terms
- Raised \$2.0 billion through the DRP and ATM program
- ~\$1.0 billion to be realized in fourth quarter from Cartier Wind sale and reimbursement of Coastal GasLink development costs
- Balance to come from growing funds generated from operations

Strong performance expected to continue

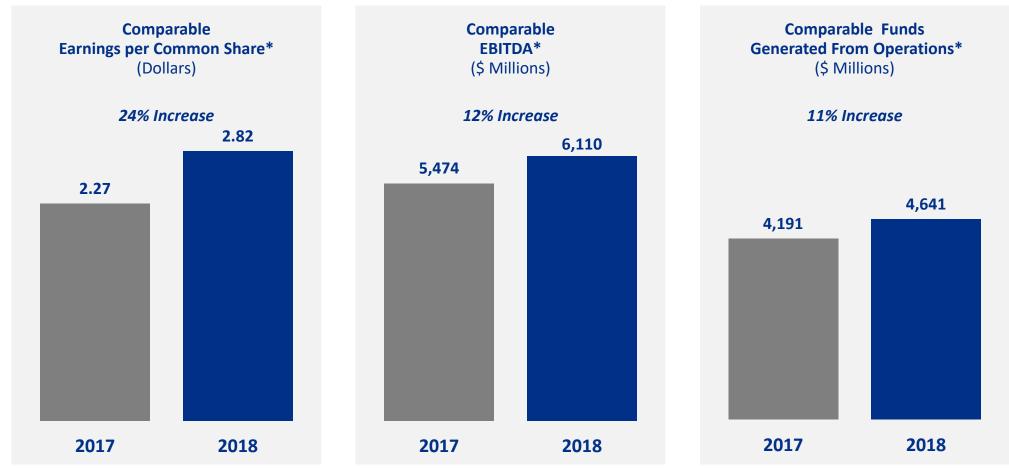
- Fourth quarter results expected to be consistent with performance in the first nine months of 2018
- Financial position remains solid, well positioned to fund future capital programs and achieve targeted credit metrics

Financial Highlights – Three Months Ended September 30 (Non-GAAP)



*Comparable Earnings per Common Share, Comparable EBITDA and Comparable Funds Generated from Operations are non-GAAP measures. See the forward looking information and non-GAAP measures slide at the front of this presentation for more information.

Financial Highlights – Nine Months Ended September 30 (Non-GAAP)



*Comparable Earnings per Common Share, Comparable EBITDA and Comparable Funds Generated from Operations are non-GAAP measures. See the forward looking information and non-GAAP measures slide at the front of this presentation for more information.

Natural Gas Pipelines Recent Developments

Canadian Natural Gas Pipelines

- NGTL expansion program now totals \$9.1 billion including the \$1.5 billion 2022 Program
- Coastal GasLink to proceed following positive LNG Canada FID. Exploring joint venture partners and project financing for \$6.2 billion project

U.S. Natural Gas Pipelines

- Progressing US\$6.1 billion of expansion projects
- 2018 FERC Actions not expected to have material financial impact to TransCanada

Mexico Natural Gas Pipelines

- Advancing US\$2.9 billion capital program
- Completed offshore construction of Sur de Texas, expected in-service end of 2018
- CFE commenced payments for Tula, Villa de Reyes and Sur de Texas projects



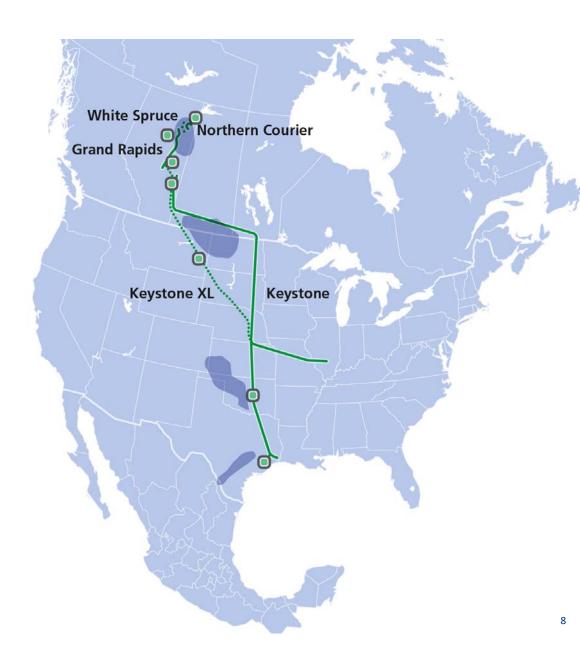
Liquids Pipelines Recent Developments

Assets producing strong operating results

- Grand Rapids and Northern Courier placed in service in second half of 2017
- Keystone Pipeline System and liquids marketing activities benefiting from favourable market conditions

Keystone XL continues to advance

- Nebraska Supreme Court hearing case against Public Service Commission approval of an alternative route
- Working collaboratively with landowners to obtain the necessary easements in Nebraska for the approved route
- U.S. Department of State issued a Draft SEIS on September 21 which concluded the alternative route would have no significant effect on the environment. The Draft SEIS is open for comment for 45 days
- Commercial support confirmed; 20-year commitments underpin return of and on total capital



Energy Recent Developments

Construction progressing on the 900 MW Napanee project

• Expected in-service in early 2019

Bruce Power submitted its final cost estimate for the Unit 6 Major Component Replacement program on September 28

- The IESO has until December 31, 2018 to review and verify the estimate
- Work expected to commence in early 2020 and be completed in late 2023
- TransCanada expects to invest ~\$2.2 billion in the project and ongoing asset management program through the end of 2023
- Current contract price of ~\$68 per MWh will increase in April 2019 to reflect the capital to be invested in these programs and annual inflation

Closed sale of 62 per cent ownership interest in Cartier Wind (365 MW) for \$630 million on October 24, 2018



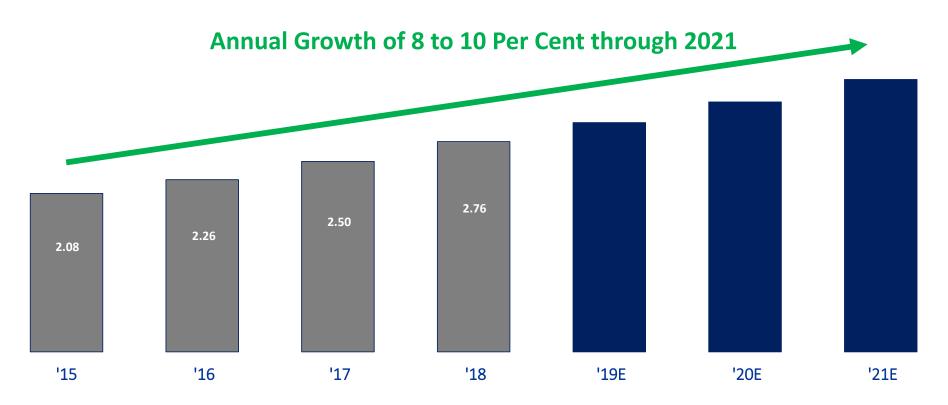
Advancing \$36 Billion Secured Capital Program Through 2023

Project	Estimated Capital Cost*	Invested to Date*	Expected In-Service Date*
Canadian Mainline	0.2	0.1	2018-2021
NGTL System	0.6	0.5	2018
WB XPress	US 0.9	US 0.8	2018
Mountaineer XPress	US 3.0	US 2.2	2018
Gulf XPress	US 0.6	US 0.5	2018
Sur de Texas**	US 1.4	US 1.3	2018
Napanee	1.6	1.4	2019
Canadian Natural Gas Pipelines Regulated Maintenance	1.9	0.5	2018-2020
U.S. Natural Gas Pipelines Regulated Maintenance	US 1.9	US 0.4	2018-2020
Liquids Pipelines Recoverable Maintenance	0.1	-	2018-2020
Non-recoverable Maintenance	0.8	0.2	2018-2020
Modernization II	US 1.1	US 0.4	2018-2020
Other U.S. Natural Gas Pipelines**	US 0.3	US 0.2	2018-2020
Bruce Power Life Extension**	2.2	0.5	2018-2023
Villa de Reyes	US 0.8	US 0.6	2019
White Spruce	0.2	0.1	2019
NGTL System	2.8	0.8	2019
Tula	US 0.7	US 0.6	2020
Buckeye XPress	US 0.2	-	2020
NGTL System	1.7	0.1	2020
NGTL System	2.5	-	2021
NGTL System	1.5	-	2022
Coastal GasLink	6.2	0.5	2023
Foreign Exchange Impact (1.29 exchange rate)	3.2	2.0	-
Total Canadian Equivalent	36.4	13.7	

Completion of Program Does Not Require Discrete Equity

^{*}Billions of dollars. Certain projects are subject to various conditions including corporate and regulatory approvals. **Our proportionate share.

Dividend Growth Outlook Through 2021



Supported by Expected Growth in Earnings and Cash Flow and Continued Strong Coverage Ratios

Key Takeaways



Proven Strategy - Low Risk Business Model

• Over 95% of Comparable EBITDA from regulated assets or long-term contracts

Businesses Performing Extremely Well

• Record performance expected in 2018

Visible Growth

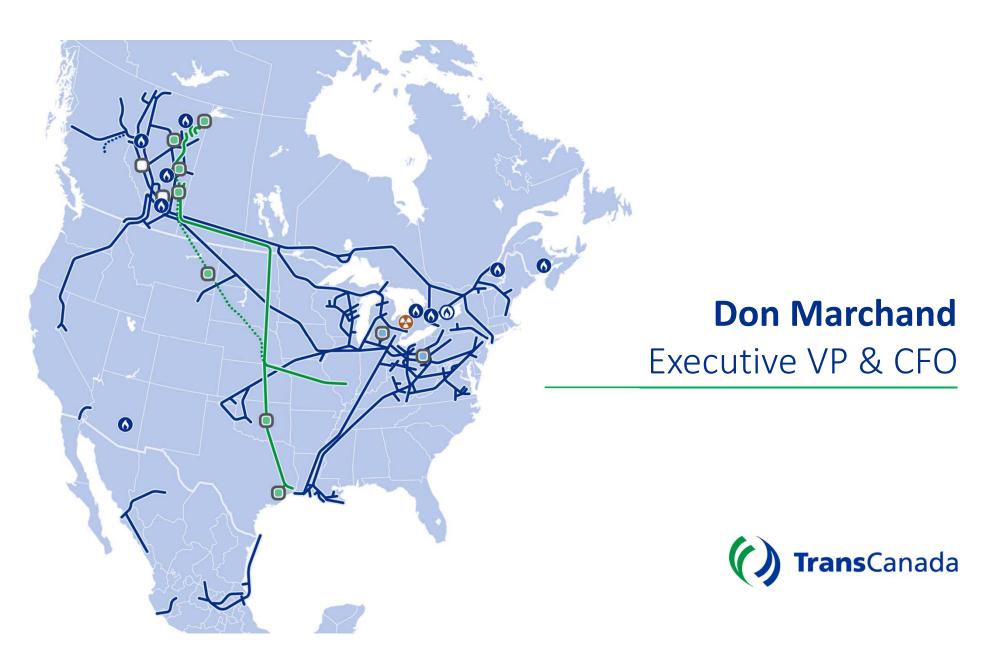
- Advancing \$36 billion of secured growth projects
- Over \$20 billion of projects under development
- Additional organic growth expected from existing businesses

Dividend Poised to Continue to Grow

Expect annual growth of 8 to 10% through 2021

Financial Strength and Flexibility

- 2018 funding program complete
- Numerous levers available to fund growth
- On track to achieve targeted credit metrics



Consolidated Results of Operations

(unaudited) (millions of dollars, except per share amounts)

	Three mo	nths	Nine months		
	ended Septe	mber 30	ended September 30		
	2018	2017	2018	2017	
Net Income Attributable to Common Shares	928	612	2,447	2,136	
Specific items (net of tax):					
U.S. Northeast power marketing contracts	(8)	-	(3)	-	
Net loss/(gain) on sales of U.S. Northeast power generation assets	-	12	-	(243)	
Integration and acquisition related costs - Columbia	-	30	-	69	
Keystone XL asset costs	-	8	-	19	
Keystone XL income tax recoveries	-	-	-	(7)	
Risk management activities	(18)	(48)	90	(3)	
Comparable Earnings ⁽¹⁾	902	614	2,534	1,971	
Net Income Per Common Share	\$1.02	\$0.70	\$2.72	\$2.46	
Specific items (net of tax):					
U.S. Northeast power marketing contracts	(0.01)	-	-	-	
Net loss/(gain) on sales of U.S. Northeast power generation assets	-	0.01	-	(0.28)	
Integration and acquisition related costs - Columbia	-	0.03	-	0.08	
Keystone XL asset costs	-	0.01	-	0.02	
Keystone XL income tax recoveries	-	-	-	(0.01)	
Risk management activities	(0.01)	(0.05)	0.10	-	
Comparable Earnings Per Common Share ⁽¹⁾	\$1.00	\$0.70	\$2.82	\$2.27	
Weighted Average Basic Common Shares Outstanding (millions)	906	873	898	870	

Business Segment Results⁽¹⁾

(unaudited) (millions of dollars)

		Three months ended September 30		Nine months ended September 30	
	2018	2017	2018	2017	
Comparable EBITDA ⁽²⁾					
Canadian Natural Gas Pipelines	522	544	1,561	1,575	
U.S. Natural Gas Pipelines	715	482	2,223	1,753	
Mexico Natural Gas Pipelines	153	118	455	403	
Liquids Pipelines	467	303	1,311	947	
Energy	207	224	585	816	
Corporate	(8)	(4)	(25)	(20)	
Total	2,056	1,667	6,110	5,474	

Third quarter 2018 comparable EBITDA increased \$389 million compared to same period in 2017. Principal variances included:

U.S. Natural Gas Pipelines

• Higher primarily due to Columbia growth projects entering service, additional contract sales on ANR and Great Lakes, improved commodity prices and throughput in Midstream, and amortization of net regulatory liabilities recognized in 2017 as a result of U.S. Tax Reform

Liquids Pipelines

• Higher mainly due to Grand Rapids and Northern Courier commencing operations in the second half of 2017, a larger contribution from liquids marketing activities and higher volumes on Keystone Pipeline System

Other Income Statement Items⁽¹⁾

(unaudited) (millions of dollars)

		Three months ended September 30		onths ember 30
	2018	2017	2018	2017
Comparable EBITDA ⁽²⁾	2,056	1,667	6,110	5,474
Depreciation and amortization	(564)	(506)	(1,669)	(1,532)
Comparable EBIT ⁽²⁾	1,492	1,161	4,441	3,942
Interest expense ⁽³⁾	(577)	(503)	(1,662)	(1,527)
Allowance for funds used during construction	147	145	365	367
Interest income and other ⁽³⁾	48	58	166	103
Income tax expense ⁽³⁾	(108)	(163)	(425)	(605)
Net income attributable to non-controlling interests	(59)	(44)	(229)	(189)
Preferred share dividends	(41)	(40)	(122)	(120)
Comparable Earnings ⁽²⁾	902	614	2,534	1,971

Principal variances between third quarter 2018 and the same period in 2017 included:

- Interest expense (3)
 - Higher due to new debt issuances, net of maturities, lower capitalized interest and increased foreign exchange impact due to a stronger U.S. dollar in translating U.S. dollar denominated interest
- Income tax expense(3)
 - Lower mainly due to reduced rates as a result of U.S. Tax Reform and lower flow-through income taxes in Canadian rate-regulated pipelines, partially offset by higher comparable earnings before income taxes
- Net income attributable to non-controlling interests
 - Higher primarily due to increased earnings in TC PipeLines, LP
- (1) For more information, see the October 31, 2018 Quarterly Report to Shareholders; (2) Non-GAAP measures, excluding specific items. See the forward looking information and non-GAAP measures slide at the front of this presentation for more information; (3) Excludes specific items to arrive at comparable earnings.

Comparable Distributable Cash Flow

(unaudited) (millions of dollars, except per share amounts)

	Three mo		Nine mo	
	ended Septe	mber 30	ended Septe	ember 30
	2018	2017	2018	2017
Comparable Funds Generated From Operations(1)	1,571	1,316	4,641	4,191
Dividends on preferred shares	(40)	(39)	(118)	(116)
Distributions paid to non-controlling interests	(57)	(66)	(174)	(215)
Non-recoverable maintenance capital expenditures ⁽²⁾	(61)	(41)	(191)	(169)
Comparable Distributable Cash Flow ⁽¹⁾	1,413	1,170	4,158	3,691
Comparable Distributable Cash Flow Per Common Share(1)	\$1.56	\$1.34	\$4.63	\$4.24
Dividends Declared per Common Share	\$0.69	\$0.625	\$2.07	\$1.875
Coverage Ratio	2.3x	2.1x	2.2x	2.3x

⁽¹⁾ Non-GAAP measure. See the forward looking information and non-GAAP measures slide at the front of this presentation for more information.

⁽²⁾ Includes non-recoverable maintenance capital expenditures from all segments including cash contributions to fund our proportionate share of maintenance capital expenditures for our equity investments which are primarily related to Bruce Power.

Third Quarter Funding Activity

Strong, predictable and growing cash flow from operations

- Comparable funds generated from operations of \$1.6 billion
- \$1.1 billion of cash and cash equivalents on hand at September 30

Access to capital markets on compelling terms

- Issued \$1.0 billion of MTNs in July including \$800 million of 30-year notes at 4.18 per cent and \$200 million of ~10-year notes at 3.39 per cent
- Subsequently, in October completed Senior Unsecured Notes issuance including US\$1 billion of ~30-year notes at 5.10 per cent and US\$400 million of ~10-year notes at 4.25 per cent

Significant ongoing DRP participation supports simultaneous large capital program and de-leveraging

• Approximately 34 per cent or \$213 million of common dividends reinvested in common shares

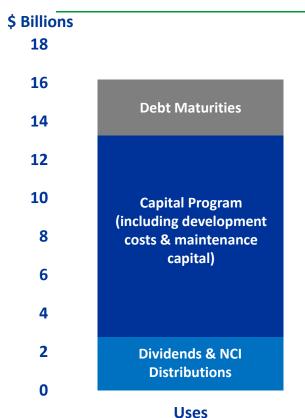
At-the-Market (ATM) equity issuance

- Issued 6.1 million common shares at an average price of \$57.75 per share for gross proceeds of \$354 million
- No further issuance expected at this time

Completed sale of 62 per cent ownership interest in Cartier Wind power facilities for \$630 million in October

Announced reimbursement of \$400 million of Coastal GasLink development costs to be realized in the fourth quarter

2018 Funding Complete





~\$9.1 billion raised through an array of competitive funding options

- \$6.1 billion of long-term debt in Canadian and U.S. markets
- ~\$900 million of proceeds from Dividend Reinvestment Plan*
- \$1.1 billion common equity issued under ATM
- \$630 million from sale of Cartier Wind
- \$400 million reimbursement of Coastal GasLink development costs

Program Highlights Diversity, Depth and Competitiveness of Funding Levers
On Track to Achieve Targeted Credit Metrics

* Includes Q3 2018 dividend paid on October 31, 2018

Delivering Long-Term Shareholder Value

Track Record

12% average annual total shareholder return since 2000

Visible Growth

Advancing over \$20 billion of additional projects in development

\$36 billion to 2023

Attractive, Growing Dividend

Dividend raised 10.4% in February 2018
5.5% yield
8-10% expected CAGR through 2021

Strong
Financial Position

Numerous levers available to fund future growth

Simple, understandable corporate structure

Proven Resilience Through all Points of the Business Cycle

Question & Answer Period





Russ Girling



Don Marchand



Karl Johannson



Stan Chapman



Paul Miller



Glenn Menuz



David Moneta



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Appendix – Reconciliation of Non-GAAP Measures

(unaudited) (millions of dollars)

	Three months ended September 30		Nine months	
			ended September 30	
	2018	2017	2018	2017
Comparable EBITDA ⁽¹⁾	2,056	1,667	6,110	5,474
Depreciation and amortization	(564)	(506)	(1,669)	(1,532)
Comparable EBIT ⁽¹⁾	1,492	1,161	4,441	3,942
Specific items:				
Foreign exchange gain/(loss) – inter-affiliate loan	(60)	7	(52)	(1)
U.S. Northeast power marketing contracts	12	-	5	-
Net gain on sales of U.S. Northeast power generation assets	-	(12)	-	469
Integration and acquisition related costs - Columbia	-	(32)	-	(91)
Keystone XL asset costs	-	(10)	-	(23)
Risk management activities	(34)	45	(44)	(102)
Segmented Earnings	1,410	1,159	4,350	4,194

Appendix – Reconciliation of Non-GAAP Measures continued

(unaudited) (millions of dollars)

	Three months ended September 30		Nine mo ended Septe		
	2018	2017	2018	2017	
Net Cash Provided by Operations	1,299	1,185	4,516	3,840	
Increase in operating working capital	284	86	130	224	
Funds Generated from Operations ⁽¹⁾	1,583	1,271	4,646	4,064	
Specific items:					
U.S. Northeast power marketing contracts	(12)	-	(5)	-	
Integration and acquisition related costs - Columbia	-	32	-	84	
Keystone XL asset costs	-	10	-	23	
Net loss on sales of U.S. Northeast power generation assets	-	3	-	20	
Comparable Funds Generated from Operations ⁽¹⁾	1,571	1,316	4,641	4,191	