

Second Quarter 2018 Conference Call

August 2, 2018



Forward Looking Information and Non-GAAP Measures

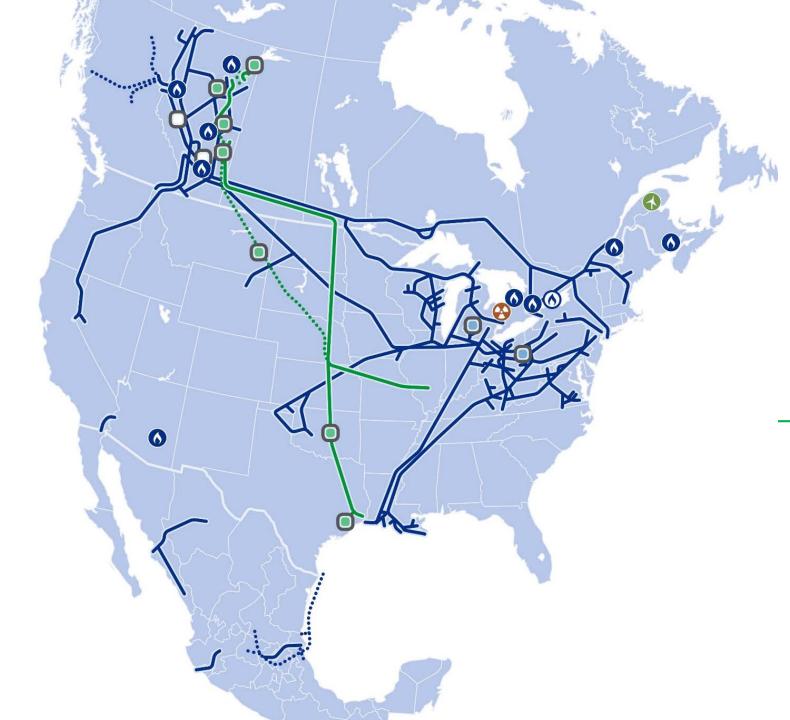
This presentation includes certain forward looking information, including future oriented financial information or financial outlook, which is intended to help current and potential investors understand management's assessment of our future plans and financial outlook, and our future prospects overall. 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 growth and the future growth of our core businesses.

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 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, including the economic benefit of asset drop downs to TC PipeLines, LP, interest, tax and foreign exchange rates, including the impact of U.S. Tax Reform, weather, cyber security, technological developments, economic conditions in North America as well as globally. You can read more about these risks and others in our August 1, 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 DCF per Common Share. Reconciliations to the most closely related GAAP measures are included in this presentation and in our August 1, 2018 Quarterly Report to Shareholders filed with Canadian securities regulators and the SEC and available at www.transcanada.com.



Russ Girling President & CEO



Second Quarter 2018 Highlights

Continued to generate record financial results

- Comparable earnings were \$0.86 per common share in second quarter, \$1.83 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 \$28 billion near-term capital program

- Includes \$5.8 billion of maintenance capital over 2018 2020 period
- Projects moving forward largely as planned with ~\$10 billion of assets expected to enter service by end of year

Progressed over \$20 billion of medium- to longer-term projects under development

• Includes Keystone XL, Coastal GasLink and Bruce Power Life Extension program

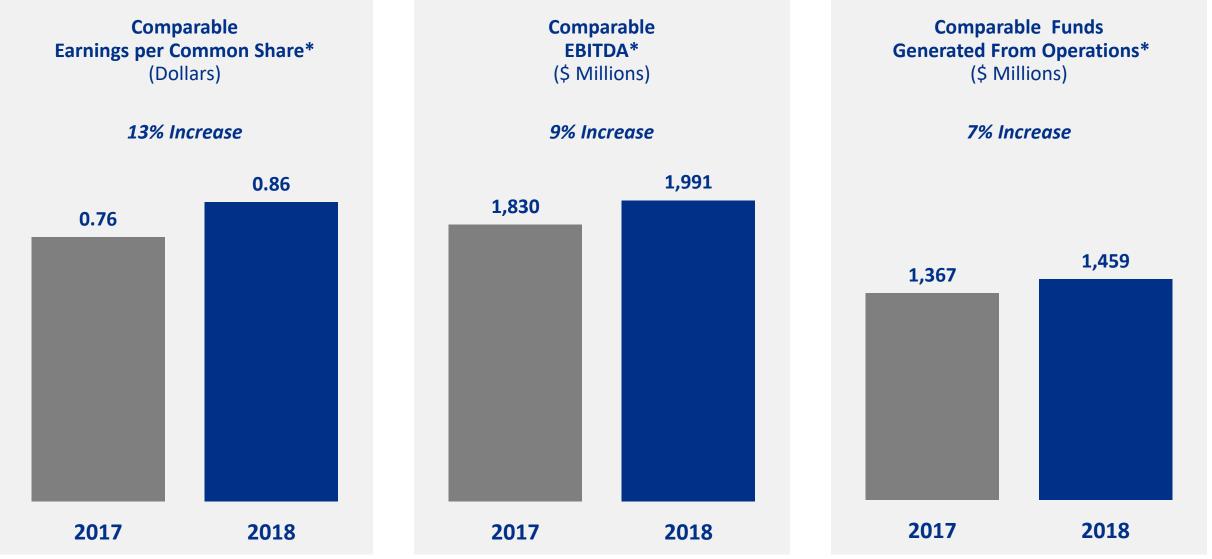
Raised \$6.1 billion to help fund capital program

- Issued \$4.3 billion of long-term debt on compelling terms
- Raised \$1.2 billion through the DRP and ATM program
- Announced \$0.6 billion sale of Cartier Wind
- Collectively represents sizeable component of our 2018 funding requirements

Strong performance expected to continue

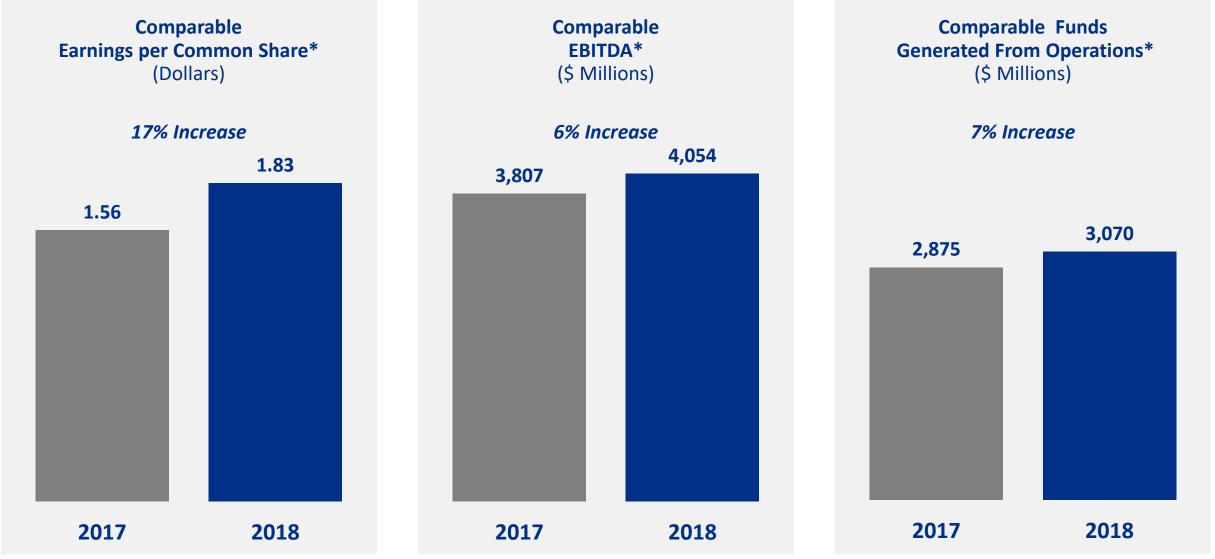
- Comparable earnings per share for second half of 2018 expected to be similar to results achieved in first half of year
- Financial position remains solid, well positioned to fund our capital program

Financial Highlights – Three Months Ended June 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 – Six Months Ended June 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

- Advancing \$7.4 billion of NGTL expansion projects
- Received NEB approval for NGTL's 2018-2019 **Revenue Requirement Settlement**
- Coastal GasLink project continues to progress LNG Canada expected to make FID by year-end

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\$2.8 billion capital program
- Completed offshore construction of Sur de Texas, expected in-service late 2018
- CFE commenced payments for Tula and Villa de Reyes projects
- Topolobampo placed into physical service



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

- South Dakota Supreme Court dismissed appeal against the recertification of the project
- Nebraska Supreme Court to hear appeal 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 Environmental Assessment with comments due by August 29
- Commercial support confirmed; 20-year commitments underpin return of and on total capital
- Primary construction is expected to begin in 2019 and will take approximately two years to complete



Energy Recent Developments

Construction progressing on the 900 MW Napanee project

• Expected in-service in fourth quarter 2018

Work continues on the Bruce Power life extension program

- First Major Component Replacement expected to begin in 2020
- Cost to be finalized in fourth quarter 2018

Announced sale of 62 percent ownership interest in Cartier Wind (365 MW) for \$630 million before closing adjustments



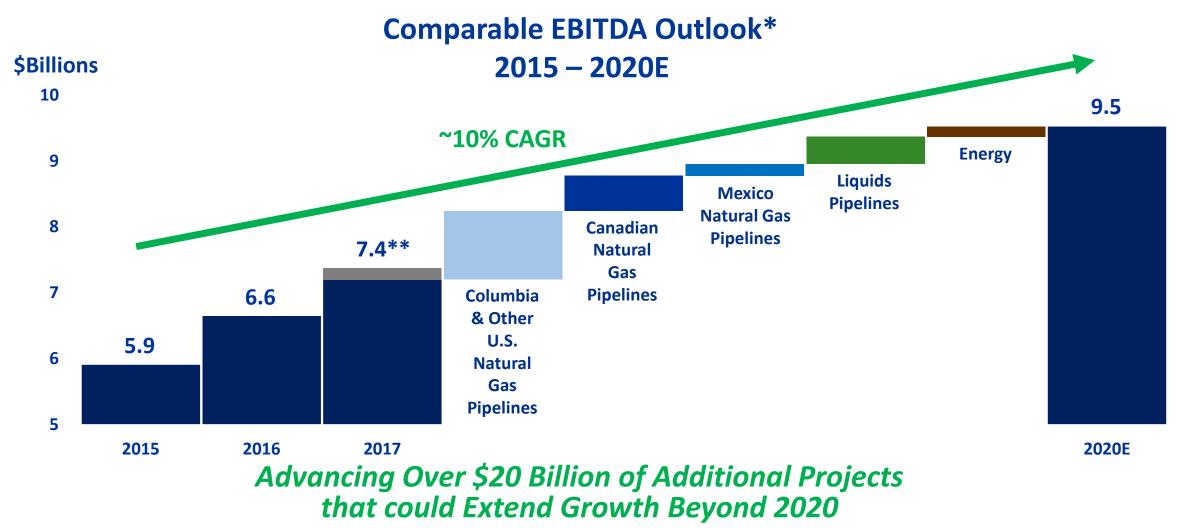
Advancing \$28 Billion Near-Term Capital Program

Project	Estimated Capital Cost*	Invested to Date*	Expected In-Service Date*
Canadian Mainline	0.2	-	2018-2021
NGTL System	0.6	0.4	2018
WB XPress	US 0.9	US 0.6	2018
Mountaineer XPress	US 3.0	US 1.4	2018
Gulf XPress	US 0.6	US 0.4	2018
Sur de Texas**	US 1.3	US 1.2	2018
Napanee	1.5	1.3	2018
Bruce Power Life Extension**	0.9	0.3	Up to 2020
Canadian Natural Gas Pipelines Regulated Maintenance	2.5	0.2	2018-2020
U.S. Natural Gas Pipelines Regulated Maintenance	US 1.9	US 0.2	2018-2020
Liquids Pipelines Recoverable Maintenance	0.1	-	2018-2020
Non-recoverable Maintenance	0.7	0.1	2018-2020
Modernization II	US 1.1	US 0.3	2018-2020
Other U.S. Gas**	US 0.3	US 0.1	2018-2020
Villa de Reyes	US 0.8	US 0.6	2019
White Spruce	0.2	0.1	2019
NGTL System	2.6	0.5	2019
Tula	US 0.7	US 0.5	2020
Buckeye XPress	US 0.2	-	2020
NGTL System	1.7	0.1	2020
NGTL System	2.5	-	2021+
Foreign Exchange Impact (1.31 exchange rate)	3.3	1.6	-
Total Canadian Equivalent	27.6	9.9	

Includes \$5.8 Billion of Maintenance Capital for the 2018 – 2020 Period ~85 Percent of which is Expected to be Recovered Through Current and Future Tolls

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

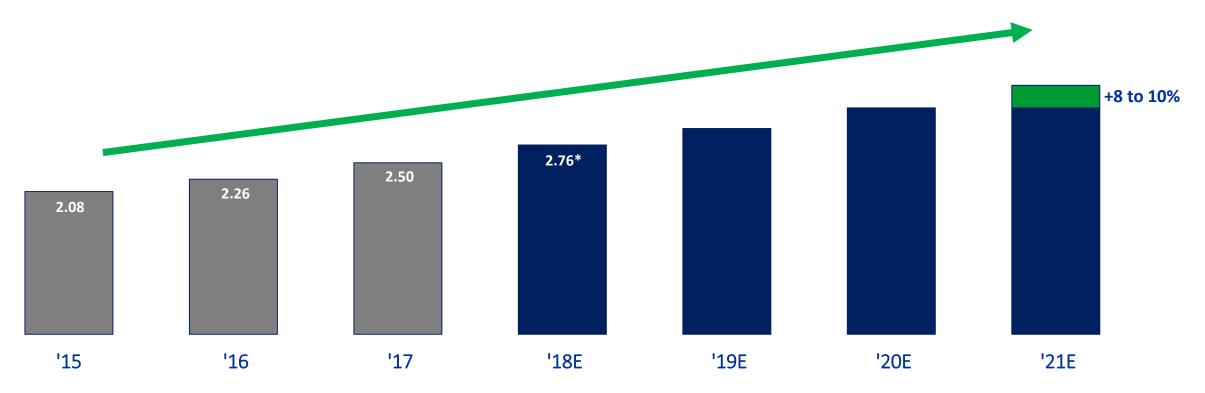
\$28 Billion of Near-Term Projects Drive Significant Growth



* Includes existing assets, non-controlling interests in U.S. Natural Gas Pipelines and \$28 billion of near-term projects and maintenance capital expenditures subject to various conditions including corporate and regulatory approvals. Does not include potential impact of 2018 FERC Final Rule or asset sales. Comparable EBITDA is a non-GAAP measure. See the non-GAAP measures slide at the front of this presentation for more information. **Grey bar indicates EBITDA from Energy assets sold.

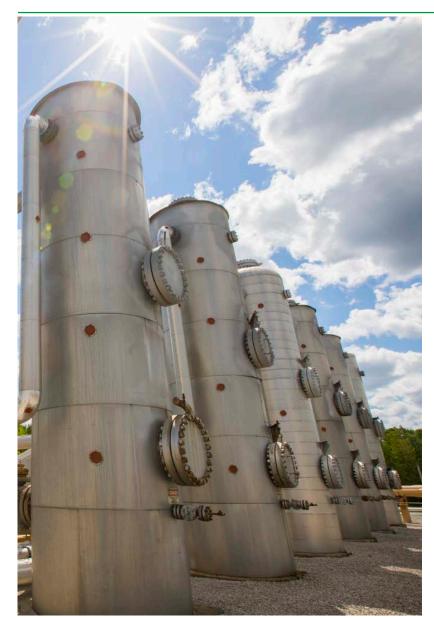
Dividend Growth Outlook Through 2021

Annual Growth at the Upper End of 8 to 10 Percent Expected to End of Decade Further 8 to 10 Percent Growth Anticipated in 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 Very Well*
- Record performance expected in 2018

Visible Growth

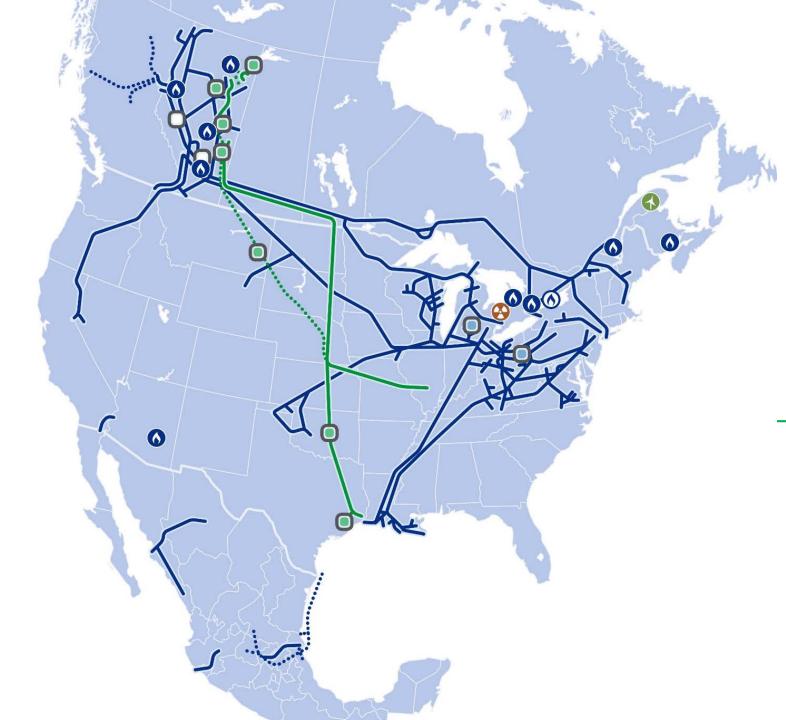
- Advancing \$28 billion of near-term growth projects
- Over \$20 billion of medium- to longer-term projects in development
- Additional organic growth expected from existing businesses

Dividend Poised to Grow

- Increased dividend by 10.4% in 2018 to \$2.76 on an annualized basis
- Expect annual growth to continue at upper end of 8 to 10% range through 2020
- Additional growth of 8 to 10% anticipated in 2021

Financial Strength and Flexibility

- Raised \$6.1 billion year-to-date
- Represents a sizeable component of 2018 funding requirements
- Numerous levers available to fund growth



Don Marchand Executive VP & CFO



Consolidated Results of Operations

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

	• •				
	Three mo	onths	Six mor	nths	
	ended Ju	ended June 30		ended June 30	
	2018	2017	2018	2017	
Net Income Attributable to Common Shares	785	881	1,519	1,524	
Specific items (net of tax):					
U.S. Northeast power marketing contracts	11	-	5	-	
Net gain on sales of U.S. Northeast power generation assets	-	(265)	-	(255)	
Integration and acquisition related costs - Columbia	-	15	-	39	
Keystone XL asset costs	-	4	-	11	
Keystone XL income tax recoveries	-	-	-	(7)	
Risk management activities	(28)	24	108	45	
Comparable Earnings ⁽¹⁾	768	659	1,632	1,357	
Net Income Per Common Share	\$0.88	\$1.01	\$1.70	\$1.76	
Specific items (net of tax):					
U.S. Northeast power marketing contracts	0.01	-	0.01	-	
Net gain on sales of U.S. Northeast power generation assets	-	(0.30)	-	(0.29)	
Integration and acquisition related costs - Columbia	-	0.02	-	0.04	
Keystone XL asset costs	-	-	-	0.01	
Keystone XL income tax recoveries	-	-	-	(0.01)	
Risk management activities	(0.03)	0.03	0.12	0.05	
Comparable Earnings Per Common Share ⁽¹⁾	\$0.86	\$0.76	\$1.83	\$1.56	
Weighted Average Basic Common Shares Outstanding (millions)	896	870	892	868	

Business Segment Results⁽¹⁾ (unaudited) (millions of dollars)

		Three months ended June 30		Six months ended June 30	
	2018	2017	2018	2017	
Comparable EBITDA ⁽²⁾					
Canadian Natural Gas Pipelines	545	527	1,039	1,031	
U.S. Natural Gas Pipelines	704	551	1,508	1,271	
Mexico Natural Gas Pipelines	142	145	302	285	
Liquids Pipelines	413	332	844	644	
Energy	202	287	378	592	
Corporate	(15)	(12)	(17)	(16)	
Total	1,991	1,830	4,054	3,807	

Second quarter 2018 comparable EBITDA increased \$161 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 on 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 second half 2017, increased volumes on Keystone Pipeline System, a higher liquids marketing contribution and lower business development costs from capitalizing Keystone XL expenditures
- Energy
 - Lower due to the sale of U.S. Northeast Power and Ontario Solar generation assets in 2017 along with decreased Bruce Power earnings due to reduced volumes from increased outage days and lower results from contracting activities, partially offset by higher Western Power results due to greater realized margins on larger generation volumes

Other Income Statement Items⁽¹⁾ (unaudited) (millions of dollars)

	Three months ended June 30		Six months ended June 30	
	2018	2017	2018	2017
Comparable EBITDA ⁽²⁾	1,991	1,830	4,054	3,807
Depreciation and amortization	(570)	(516)	(1,105)	(1,026)
Comparable EBIT ⁽²⁾	1,421	1,314	2,949	2,781
Interest expense	(558)	(524)	(1,085)	(1,024)
Allowance for funds used during construction	113	121	218	222
Interest income and other ⁽³⁾	55	40	118	45
Income tax expense ⁽³⁾	(146)	(198)	(317)	(442)
Net income attributable to non-controlling interests	(76)	(55)	(170)	(145)
Preferred share dividends	(41)	(39)	(81)	(80)
Comparable Earnings ⁽²⁾	768	659	1,632	1,357

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

- Interest expense
 - Higher due to new debt issuances, net of maturities, and lower capitalized interest, partially offset by repayment of Columbia bridge facilities in 2017 and a weaker U.S. dollar
- 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 August 1, 2018 Quarterly Report to Shareholders; (2) Non-GAAP measures. For additional information on these items see the August 1, 2018 Quarterly Report to Shareholders; (3) Excludes specific items to arrive at comparable earnings.

Comparable Distributable Cash Flow

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

	Three months ended June 30		Six months ended June 30	
	2018	2017	2018	2017
Comparable Funds Generated From Operations ⁽¹⁾	1,459	1,367	3,070	2,875
Dividends on preferred shares	(39)	(38)	(78)	(77)
Distributions paid to non-controlling interests	(48)	(69)	(117)	(149)
Non-recoverable maintenance capital expenditures ⁽²⁾	(66)	(79)	(130)	(128)
Comparable Distributable Cash Flow ⁽¹⁾	1,306	1,181	2,745	2,521
Comparable Distributable Cash Flow Per Common Share ⁽¹⁾	\$1.46	\$1.36	\$3.08	\$2.90
Dividends Declared per Common Share	\$0.69	\$0.625	\$1.38	\$1.25
Coverage Ratio	2.1x	2.2 x	2.2x	2.3 x

(1) Non-GAAP measure. For additional information on these items see the August 1, 2018 Quarterly Report to Shareholders

(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.

2018 Funding Program Continues to Advance

Strong, predictable and growing cash flow from operations

- Comparable funds generated from operations of \$1.5 billion in the quarter and \$3.1 billion year-to-date
- \$1.6 billion of cash and cash equivalents on hand at June 30

Access to capital markets on compelling terms

- Completed US\$2.5 billion three-tranche senior notes offering comprised of US\$1 billion of 10-year notes at 4.25 percent, US\$500 million of 20-year notes at 4.75 percent and US\$1 billion of 30-year notes at 4.875 percent
- Additional \$1.0 billion of MTNs issued in early July including \$800 million of 30-year notes at 4.182 percent and \$200 million of 10-year notes at 3.39 percent

Significant ongoing Dividend Reinvestment Plan participation

• Approximately 33 per cent or \$208 million of common dividends reinvested in common shares in the second quarter bringing year-to-date dividends reinvested to \$442 million

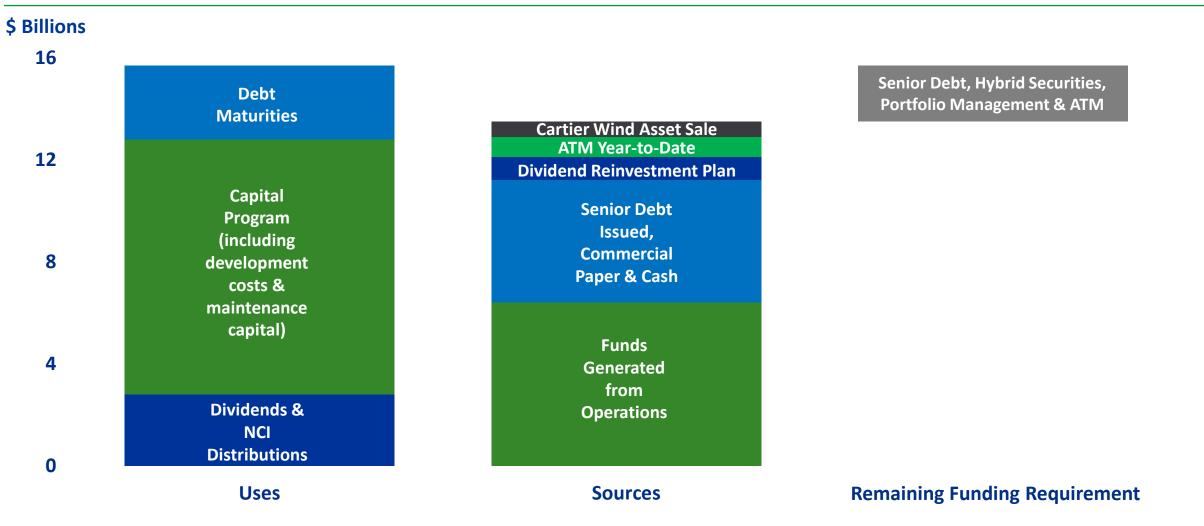
At-the-Market (ATM) equity issuance supports simultaneous large capital program and de-leveraging

 Issued 8.1 million common shares at an average price of \$54.63 per share for gross proceeds of \$443 million in second quarter bringing year-to-date gross proceeds to \$772 million

Announced sale of 62 percent ownership interest in Cartier Wind power facilities for \$630 million

• Further portfolio management activities possible

2018 Funding Plan on Track



Funding Program Manageable

Completion of \$28 Billion Near-Term Capital Program Does Not Require Discrete Equity

Delivering Long-Term Shareholder Value

Track	Visible	Attractive, Growing	Strong
Record	Growth	Dividend	Financial Position
13% average annual total shareholder return since 2000	\$28 billion to 2021 Advancing over \$20 billion of additional medium to longer-term projects	Dividend raised 10.4% in February 2018 4.7% yield 8-10% expected CAGR through 2021	Numerous levers available to fund future growth Simple, understandable corporate structure

Performance Highlights Diversified, Low Risk Business Strategy

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 June 30		Six months ended June 30	
	2018	2017	2018	2017
Comparable EBITDA ⁽¹⁾	1,991	1,830	4,054	3,807
Depreciation and amortization	(570)	(516)	(1,105)	(1,026)
Comparable EBIT ⁽¹⁾	1,421	1,314	2,949	2,781
Specific items:				
Foreign exchange gain/(loss) – inter-affiliate loan	87	(8)	8	(8)
U.S. Northeast power marketing contracts	(15)	-	(7)	-
Net gain on sales of U.S. Northeast power generation assets	-	492	-	481
Integration and acquisition related costs - Columbia	-	(20)	-	(59)
Keystone XL asset costs	-	(5)	-	(13)
Risk management activities	99	(91)	(10)	(147)
Segmented Earnings	1,592	1,682	2,940	3,035

Appendix – Reconciliation of Non-GAAP Measures continued (unaudited) (millions of dollars)

	Three months ended June 30		Six months ended June 30	
	2018	2017	2018	2017
Net Cash Provided by Operations	1,805	1,353	3,217	2,655
(Decrease)/increase in operating working capital	(361)	(17)	(154)	138
Funds Generated from Operations ⁽¹⁾	1,444	1,336	3,063	2,793
Specific items:				
U.S. Northeast power marketing contracts	15	-	7	-
Integration and acquisition related costs - Columbia	-	20	-	52
Keystone XL asset costs	-	5	-	13
Net loss on sales of U.S. Northeast power generation assets	-	6	-	17
Comparable Funds Generated from Operations ⁽¹⁾	1,459	1,367	3,070	2,875