

## **EPCOR Utilities Inc.**

### **Management's Discussion and Analysis December 31, 2017**

---

This management's discussion and analysis (MD&A), dated February 15, 2018, should be read in conjunction with the audited consolidated financial statements of EPCOR Utilities Inc. for the years ended December 31, 2017 and 2016, including significant accounting policies (note 3), business transfer and acquisitions (note 5), changes in liabilities arising from financing activities (note 27), related party balances and transactions (note 28) and financial instruments (note 29), and the cautionary statement regarding forward-looking information at the end of this MD&A. In this MD&A, any reference to "the Company", "EPCOR", "it", "its", "we", "our" or "us", except where otherwise noted or the context otherwise indicates, means EPCOR Utilities Inc., together with its subsidiaries. Financial information in this MD&A is based on the audited consolidated financial statements, which were prepared in accordance with International Financial Reporting Standards (IFRS), and is presented in Canadian dollars unless otherwise specified. In accordance with its terms of reference, the Audit Committee of the Company's Board of Directors reviews the contents of the MD&A and recommends its approval by the Board of Directors. This MD&A was approved and authorized for issue by the Board of Directors on February 15, 2018.

#### **OVERVIEW**

The Corporation, through wholly owned subsidiaries, builds, owns and operates electrical, natural gas, and water transmission and distribution networks, water and wastewater facilities and sanitary and stormwater systems in Canada and the United States (U.S). The Corporation also provides electricity, natural gas and water products and services to residential and commercial customers. The Company provides Rate Regulated Option (RRO) and default supply electricity related services and sells electricity and natural gas to Alberta residential consumers under contracts through its Encor brand. In addition, EPCOR provides design, build finance, operation and maintenance services for electrical, water and wastewater infrastructure for municipal and industrial customers in Canada and the U.S. EPCOR operates its business under the Water Services, Distribution and Transmission, Energy Services and U.S. Operations reporting segments. The Company operates in Canada and the Southwestern U.S.

Net income was \$87 million and \$256 million for the three and twelve months ended December 31, 2017, respectively, compared with net income of \$88 million and \$309 million for the corresponding periods in the previous year. Net income was lower for the three months ended December 31, 2017, primarily due to gains from the sale of Capital Power Corporation (Capital Power) shares in 2016 and no favorable fair value adjustments related to interest rate swaps in 2017, partially offset by higher favorable changes in the fair value of contracts-for-differences in 2017 and higher income from core operations in 2017, as described below. Net income was lower for the twelve months ended December 31, 2017, primarily due to gains from the sale of Capital Power shares and dividend income from Capital Power in 2016, lower favorable fair value of contract-for-differences in 2017 and lower income from core operations in 2017, as described below, partially offset by no unfavorable changes related to interest rate swaps in 2017.

Income from core operations was \$84 million and \$253 million for the three and twelve months ended December 31, 2017, respectively, compared with \$51 million and \$255 million for the comparative periods in 2016, respectively as described in the net income table on page 6 of this MD&A. The increase of \$33 million in the quarter was driven primarily by lower income tax expense, higher water, wastewater and electricity distribution customer rates, income from the Drainage operations, and higher U.S. water sales volumes, partially offset by lower net system access service collections and higher financing expense. The decrease of \$2 million for the twelve months ended December 31, 2017, was driven by lower income from industrial services contracts primarily due to the termination of the Suncor financing and operating agreements in 2016, lower net system access

service collections, lower Energy Price Setting Plan (EPSP) margins, lower water sales volumes in Canada, higher depreciation expense, higher financing expense and losses on sale of surplus land in 2017. These decreases were partially offset by lower income tax expense, higher water, wastewater and electricity distribution and transmission customer rates, higher U.S. water sales volumes and income from the Drainage operations. Income from core operations is a non-IFRS financial measure as described in Net Income on page 6 of this MD&A

## **STRATEGY**

EPCOR's vision is to be a premier essential services utility company in North America, trusted by our customers and valued by our shareholder. To achieve this vision, EPCOR must excel at its utility operations and be successful in its pursuit of growth opportunities.

EPCOR's electricity strategy includes maintaining and developing new distribution and transmission infrastructure in its Edmonton franchise service area as well as the development and / or acquisition of new rate-regulated or contracted assets and operations outside the Edmonton region.

EPCOR's water strategy includes maintaining and developing new regulated water treatment and distribution infrastructure, sanitary and stormwater collection and wastewater treatment infrastructure within its current franchise service areas and the development and / or acquisition of new rate-regulated or contracted assets and operations in new markets. This includes design, build, finance and operate services for municipal water and wastewater treatment infrastructure and the provision of water and wastewater treatment services and potable and process water for industrial customers. EPCOR expects that significant capital investment will be required in its Edmonton franchise service area to address flood mitigation and other infrastructure related to its sanitary and stormwater systems.

We believe the long-term outlook for the North American electricity and water and wastewater businesses remains strong. The demand for electricity and water and wastewater infrastructure in North America is expected to increase due to population growth, aging infrastructure and water scarcity issues. Further, consumer expectations are increasing for reliable power; safe, high quality water; and environmentally responsible wastewater treatment and disposal.

Over the next five years we plan to invest in electricity, natural gas and water assets where appropriate returns are expected, operational excellence can be delivered and the environmental impact is acceptable. We will seek growth opportunities within our existing utility footprint and in new geographies such as Ontario and Texas where we have made recent acquisitions. This includes exploring opportunities in natural gas distribution through acquisitions and greenfield development. EPCOR also intends to invest in renewable energy generation within its operational footprint, including solar and bio gas facilities to enhance its environmental performance.

Maintaining our investment grade credit rating remains a priority. This will ensure we have access to capital through existing and new credit facilities and public or private debt financing offerings. We recognize that we are not immune to recessionary trends and will remain vigilant to maintain a prudent balance of rate-regulated and contracted operations within our financial capacity.

## **KEY PERFORMANCE INDICATORS**

Operational and financial performance is monitored through financial and non-financial measures that fall under four broad categories: health, safety and environment; people; growth (financial); and operational excellence.

Specific measures are established for each business unit and the corporate shared service group in alignment with the Company's strategy. Business unit measures are focused on customer related measures relevant to the particular business unit, such as customer satisfaction survey results and service reliability.

Recordable injury frequency rates for EPCOR overall were better (lower) than EPCOR's 2017 target. We remain committed to building a culture that supports a workplace free of occupational injury and illness with minimized harm to the environment. Segment performance measures are discussed under Segment Results of this MD&A.

## **SIGNIFICANT EVENTS**

### **Appointments and Retirement to the Board of Directors**

On November 7, 2017, David D. Hay was appointed to the Board of Directors of the Company. In addition, on May 4, 2017, Douglas H. Mitchell retired from the Board of Directors of the Company and Richard H. Cruickshank and Janice G. Rennie were appointed to the Board of Directors of the Company.

### **Transfer of Drainage Utility Services from the City of Edmonton**

The City transferred its Drainage Utility Services (Drainage) to EPCOR on September 1, 2017 pursuant to an Asset and Liability Transfer Agreement. Drainage operations are comprised of the sanitary drainage utility and the stormwater drainage utility which provide wastewater and stormwater collection and conveyance, as well as bio solids management and disposal.

The transfer of Drainage was a business combination under common control as it did not result in a change in the ultimate control of the Drainage business. The Company applied book value accounting to the transaction which resulted in all assets and liabilities transferred being initially recognized at their carrying amounts on the date of transfer, adjusted to align with IFRS.

The financial results and the assets and liabilities of Drainage have been incorporated into the consolidated financial statements from the date of transfer of Drainage to the Company. Accordingly, the comparative information does not include any financial information relating to Drainage prior to the transfer date.

Consideration for the transfer included transition cost compensation with a present value of \$72 million (\$75 million of contractual cash payments, of which \$8 million was paid on the date of transfer), and the issuance of a promissory note with a fair value of \$604 million (\$593 million of principal) to the City, the terms of which mirror the principal and interest payment obligations of debentures issued by the City in respect of the Drainage operations. The difference of \$788 million between the adjusted carrying amounts of the net assets transferred of \$1,464 million less the fair value of consideration due of \$676 million was recognized as a capital contribution received from the City.

Transition of the Drainage operations to EPCOR has proceeded smoothly including the transfer of Drainage employees on September 1, 2017 which was facilitated by finalization of all the necessary union transition agreements. EPCOR entered into various service level agreements with the City in order to ensure continued safe and reliable operations throughout the transition process.

For further information on the transfer of Drainage, refer to the audited consolidated financial statements of EPCOR Utilities Inc. for the years ended December 31, 2017 and 2016, and the Capital Requirements and Contractual Obligations section below.

### **Acquisition of Hughes Gas Resources, Inc.**

On June 1, 2017, the Company acquired 100% of the common shares of Hughes Gas Resources, Inc., (Hughes), a natural gas distribution, transmission and services holding company with four wholly owned subsidiaries operating northwest of Houston, Texas, for total consideration of \$54 million (US\$40 million) and the assumption of \$14 million (US\$10 million) in third party debt.

Hughes is primarily involved in the distribution of natural gas to approximately 4,300 customer connections through its rate regulated subsidiary Hughes Natural Gas, Inc. which owns and operates a 354 kilometer (220 mile) natural gas distribution network. Other subsidiaries include Alamo Pipeline, LLC, the owner and operator of

a rate regulated natural gas transmission pipeline which transports natural gas from suppliers to Hughes Natural Gas, Inc. through its 51 kilometer pipeline. These operations are regulated by the Railroad Commission of Texas (RRC). The acquisition also includes two unregulated subsidiaries, Pinehurst Utility Construction, LLC (infrastructure contractor) and Goliad Midstream Energy, LLC (intermediary company for negotiation of natural gas supply contracts).

At closing, \$46 million of cash consideration was paid with the \$8 million balance of the consideration contingent upon the addition of new customer connections above a minimum of 600 incremental customer connections over a period of up to six years from the date of closing. The Company has recorded the full amount of this contingent consideration based on expected growth in the region. The Company funded the closing payment using existing cash resources.

For further information on the fair value estimates, refer to the audited consolidated financial statements of EPCOR Utilities Inc. for the years ended December 31, 2017 and 2016. Refer to the Capital Requirements and Contractual Obligations section for additional information.

### **Natural Resources Gas Limited Asset Acquisition**

On November 1, 2017, the Company assumed operations and acquired substantially all of the natural gas distribution assets of Natural Resource Gas Limited (NRGL) for cash consideration of \$22 million and now distributes and sells natural gas to over 8,700 residential, commercial and industrial customers in the counties of Elgin, Middlesex, Oxford and Norfolk in southwestern Ontario. The distribution system consists of approximately 640 kilometers of distribution mains. The operations are regulated by the Ontario Energy Board under a price cap incentive cost-of-service rate setting framework.

### **Sale of Investment in Capital Power**

At December 31, 2016, the Company owned 249,364 common shares of Capital Power which were subsequently sold for net proceeds of \$6 million in January 2017. Capital Power back-to-back debt obligation of \$163 million was repaid to EPCOR in January 2018 and the remaining \$11 million is due to be repaid in June 2018 and will result in EPCOR no longer having any financial interests in Capital Power.

### **CONSOLIDATED FINANCIAL INFORMATION**

(\$ million)				
<b>Years ended December 31,</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	
Revenues	\$ 2,035	\$ 1,932	\$	1,996
Net income	256	309		260
Total assets	10,358	6,161		6,088
Loans and borrowings (non-current)	2,424	1,905		1,875
Other financial liabilities (non-current)	88	37		1
Common share dividends	153	141		141

### **Segment Disclosures**

During the year, the Company reassessed its business segments due to the addition of Drainage. Drainage has been aggregated with the existing Canadian water operations under the Water Services segment while U.S. operations are now being reported as a separate business segment. The comparative business segment information in this MD&A has been revised to conform to these changes.

## Revenues

(unaudited, \$millions)	Three months	Twelve Months
<b>Revenues for the periods ended December 31, 2016</b>	<b>\$ 474</b>	<b>\$ 1,932</b>
Higher Water Services segment revenues	50	19
Higher Distribution and Transmission segment revenues	36	69
Higher Energy Services segment revenues	18	26
Higher U.S. Operations segment revenues	4	12
Other	(10)	(23)
Increase in revenues from core operations	98	103
<b>Revenues for the periods ended December 31, 2017</b>	<b>\$ 572</b>	<b>\$ 2,035</b>

Consolidated revenues were higher by \$98 million and \$103 million for the three and twelve months ended December 31, 2017, respectively, compared with the corresponding periods in 2016 primarily due to the net impact of the following:

- Water Services segment revenues were higher for the three months ended December 31, 2017, compared with the corresponding period in 2016, primarily due to the increase in revenues from the Drainage operations, higher water and wastewater revenues due to customer growth and higher customer rates, partially offset by lower construction revenues from the Regina wastewater treatment plant project.

Water Services segment revenues were higher for the twelve months ended December 31, 2017, compared with the corresponding period in 2016, primarily due to the increase in revenues from the Drainage operations, higher water and wastewater revenues due to customer growth and higher customer rates, partially offset by lower construction revenues from the Regina wastewater treatment plant project, lower water and wastewater volumes due to higher precipitation in the city of Edmonton in 2017 and lower industrial services contract revenues including termination of contracts with Suncor in August 2016.

- Electricity Distribution and Transmission segment revenues were higher for the three months ended December 31, 2017, compared with the corresponding periods in 2016, primarily due to higher system access service revenue and higher electricity distribution customer rates.

Electricity Distribution and Transmission segment revenues were higher for the twelve months ended December 31, 2017, compared with the corresponding periods in 2016, primarily due to higher system access service revenue and higher electricity distribution and transmission customer rates, partially offset by lower commercial services revenue.

- Energy Services segment revenues were higher for the three months and twelve months ended December 31, 2017, compared with the corresponding period in 2016, primarily due to customer growth and higher electricity prices, partially offset by lower electricity volumes.
- U.S. Operations segment revenues were higher for the three and twelve months ended December 31, 2017, compared with the corresponding periods in 2016, primarily due to higher commercial services revenue from the EPCOR 130 Pipeline and Hughes as well as higher wastewater rates and water volumes.

## Net Income

We use income from core operations to distinguish operating results from the Company's water, electricity and natural gas businesses from results with respect to its previous investment in Capital Power and changes in the fair value of derivative financial instruments. The change in the fair value of derivative financial instruments is the difference between the opening and the closing fair value of the derivative instruments. Income from core operations is a non-IFRS financial measure which does not have any standardized meaning prescribed by IFRS

and is unlikely to be comparable to similar measures published by other entities. However, it is presented below as it provides a useful income performance measure of the Company's core business operations and may be referred to by debtholders and other interested parties in evaluating the Company's financial performance and in assessing its creditworthiness.

(unaudited, \$millions)	Three months	Twelve Months
<b>Net income for the periods ended December 31, 2016</b>	<b>\$ 88</b>	<b>\$ 309</b>
2016 change in the fair value of contracts-for-difference	(2)	(7)
2016 change in the fair value of interest rate swaps	(5)	4
2016 dividend income from available-for-sale investment in Capital Power	-	(9)
2016 fair value gain on available-for-sale investment in Capital Power reclassified from other comprehensive income	(30)	(42)
<b>2016 income from core operations</b>	<b>51</b>	<b>255</b>
Higher (lower) Water Services segment operating income	16	(9)
Higher (lower) Distribution and Transmission segment operating income	5	(6)
Lower Energy Services segment operating income excluding change in the fair value of contracts-for-difference	-	(6)
Higher U.S. Operations segment operating income	5	5
Higher financing expense	(6)	(7)
Lower income tax expense	12	23
Other	1	(2)
Increase (decrease) in income from core operations	33	(2)
<b>2017 income from core operations</b>	<b>84</b>	<b>253</b>
2017 change in the fair value of contracts-for-difference	3	2
2017 fair value gain on available-for-sale investment in Capital Power reclassified from other comprehensive income	-	1
<b>Net income for the periods ended December 31, 2017</b>	<b>\$ 87</b>	<b>\$ 256</b>

Changes in each business segment's operating results compared with the corresponding periods in 2016 are described in Segment Results below. Explanations of the remaining variances in net income for the three and twelve months ended December 31, 2017, are as follows:

- Higher favorable changes in the fair value of contracts-for-differences for the three months ended December 31, 2017 compared with corresponding period in 2016. Lower favorable changes in the fair value of contracts-for-differences for the twelve months ended December 31, 2017 compared with corresponding period in 2016.
- Favorable fair value adjustments related to interest rate swaps for the three months December 31, 2016 and unfavorable fair value adjustments related to interest rate swaps for the twelve months December 31, 2016, with no corresponding adjustments in 2017 due to the settlement of outstanding interest rate swaps on January 3, 2017.
- No dividend income from the Capital Power shares recognized due to the sale of the remaining shares in January 2017.
- Lower recognition of a fair value gain on sale of the remaining investment in Capital Power in January 2017 compared with the fair value gains recognized on sales of the investment in the third and fourth quarters of 2016.
- Higher financing expenses for the three and twelve months ended December 31, 2017, compared with the corresponding periods in 2016, primarily due to higher interest expense on new debt due to the transfer of

Drainage and higher interest expense related to the \$400 million public debenture issuance in November 2017. In addition, for the twelve months ended December 31, 2017 higher interest expense on debt issued to acquire Blue Water Project 130 L.P. (Blue Water)

- Income tax expense was lower for the three and twelve months ended December 31, 2017, compared with the corresponding periods in 2016, primarily due to an income tax recovery in the U.S. Operations segment resulting from the re-measurement of its deferred tax liabilities at the reduced corporate income tax rate under the U.S. Tax Cuts and Jobs Act which was enacted in December 2017.

In addition, income tax expense was lower for the twelve months ended December 31, 2017, in the Water Services segment resulting from lower industrial services contract income in Canada.

## **SEGMENT RESULTS**

### **Water Services**

Water Services is primarily involved in the treatment, transmission and distribution and sale of water, the collection and conveyance of wastewater and stormwater and the treatment of wastewater within Edmonton and other communities in Western Canada. This segment's water and wastewater business also includes the provision of design, build, finance, operating and maintenance services for municipal and industrial customers in Western Canada.

Water Services' primary objective is to provide safe and reliable water and to collect and treat wastewater including the conveyance of stormwater while meeting or exceeding all environmental requirements and delivering value to customers and the shareholder. The majority of Water Services' income is earned through a performance based rate tariff charged to its Edmonton customers. The performance based rate tariff is intended to allow Water Services the opportunity to recover its costs and earn a fair rate of return on invested capital while providing an incentive to manage costs below inflation and other prescribed adjustments built into the tariff. In October 2016, EPCOR's Water Services segment received the decision related to its 2017 – 2021 Edmonton water and wastewater Performance Based Regulation (PBR) Bylaw application. The decision includes a 10.175% return on equity which will be in place for the full term of the PBR Bylaw.

The City approved the EPCOR Drainage Services Bylaw to cover the period from January 1, 2018 to March 31, 2022, which includes customer rates and terms and conditions for Drainage services under PBR. Bylaw 18100 reflects EPCOR's commitment to hold the average annual rate increases to 3% for the current PBR term and provides a mechanism for non-routine adjustments and service quality metrics and targets. For the interim period September 1 to December 31, 2017, EPCOR operated the Drainage utility under an Interim Regulatory Framework Agreement. EPCOR is to provide Drainage services in accordance with the Drainage Bylaw.

Operationally, the facilities owned or managed by Water Services generally performed according to plan in 2017. In the first half of 2017, persistent rainfall throughout the North Saskatchewan River watershed and longer spring run-off significantly impacted the river's water quality. EPCOR was still able to maintain the required quality of Edmonton's drinking water throughout the period. Due to the increased rainfall, water consumption was lower than anticipated for the first half of 2017.

Work on several significant projects within Edmonton progressed in 2017. These projects include the annual water main renewal program to improve Edmonton's water distribution system, the private development transmission mains project used to fund the extension of the transmission network concurrent with subdivision development, construction of a hydrovac sanitary grit treatment facility at Gold Bar wastewater treatment facility (Gold Bar), water distribution line relocation as a result of the City's light rail transit expansion, accelerated fire protection program to improve Edmonton's fire hydrant and fire flow availability and upgrades and rehabilitation to other infrastructure at Gold Bar. In addition, Drainage projects included Neighborhood Renewal to address the

renewal and replacement of aging local sewers in mature neighborhoods around the City, upgrades to dry ponds to mitigate the future risk of flooding in various communities, capital investment to maintain aging drainage infrastructure and rehabilitate the trunk sewers in West Jasper Place and Groat Road, and new trunk sewer infrastructure to support new development.

### Water Services Operating Income

(\$ millions, including intersegment transactions)		Three months ended December 31,		Twelve months ended December 31,	
		2017	2016	2017	2016
Revenues	Water sales	\$ 52	\$ 50	\$ 214	\$ 208
	Provision of services	97	40	237	177
	Construction revenues	5	14	11	50
	Other commercial revenue	1	1	6	14
		155	105	468	449
Expenses	Other raw materials and other charges	24	29	81	111
	Staff costs and employee benefits expenses	31	22	103	92
	Depreciation and amortization	37	18	88	51
	Franchise fees and property taxes	8	5	25	21
	Other administrative expenses	10	6	27	22
		110	80	324	297
	Operating income before corporate charges	45	25	144	152
	Corporate charges	10	6	24	23
	<b>Operating income</b>	<b>\$ 35</b>	<b>\$ 19</b>	<b>\$ 120</b>	<b>\$ 129</b>

	Three months ended December 31,	Twelve months ended December 31,
<b>Operating income for the periods ended December 31, 2016</b>	<b>\$ 19</b>	<b>\$ 129</b>
Drainage operating income	11	13
Higher water sales	2	6
Higher wastewater services	1	6
Higher depreciation excluding Drainage	-	(13)
Higher (lower) industrial services margin excluding depreciation	2	(22)
Other	-	1
Increase (decrease) in operating income	16	(9)
<b>Operating income for the periods ended December 31, 2017</b>	<b>\$ 35</b>	<b>\$ 120</b>

Water Services' operating income increased by \$16 million for the three months ended December 31, 2017, compared with the corresponding period in 2016, primarily due to income from the Drainage operations, higher water and wastewater revenues due to customer growth and higher customer rates, lower water treatment costs due to better river quality conditions in the North Saskatchewan River during the quarter, and higher income related to industrial services contracts.

Water Services' operating income decreased by \$9 million for the twelve months ended December 31, 2017, compared with the corresponding period in 2016, primarily due to lower income related to industrial services contracts including termination of contracts with Suncor in August 2016, lower water and wastewater volumes due



to higher precipitation in the city of Edmonton, higher water treatment costs due to poor river quality conditions in the North Saskatchewan River early in 2017, higher depreciation expense and gain from sale of surplus land in first quarter of 2016, partially offset by income from the Drainage operations, customer growth and higher customer rates.

<b>Year ended December 31,</b>	<b>2017</b>	<b>2016</b>
<b>Water sales volumes (megalitres)</b>		
Water sales for Edmonton and surrounding region	125,499	126,364

Edmonton water sales decreased in 2017 compared with 2016 primarily due to higher precipitation, partially offset by customer growth.

The following table shows EPCOR's sanitary revenue volumes, based on metered water volumes, for the period September 1 to December 31, 2017:

<b>Year ended December 31,</b>	<b>2017</b>	<b>2016</b>
<b>Sanitary revenue volumes (millions of cubic metres)</b>		
Sanitary revenue volumes for Edmonton and surrounding region	28,639	-

## **Distribution and Transmission**

Distribution and Transmission is involved in the transmission and distribution of electricity within Edmonton. The segment also provides commercial services including the construction and maintenance of street lighting, traffic signal and light rail transit electrical infrastructure to the City and other municipal and commercial customers in Alberta.

Distribution and Transmission's priority is to be a trusted provider of safe and reliable electricity, known for operational excellence through innovative and practical solutions. Distribution and Transmission earns income principally by transmitting high-voltage electricity through its facilities that form part of the Alberta Interconnected Electrical System to points of distribution, and from there, distributing lower voltage electricity to end-use customers. The transmission services are provided to the Alberta Electric System Operator (AESO). The distribution services are provided to electricity retailers within its distribution service area in Edmonton. Distribution and Transmission's assets are located in and around Edmonton and are rate-regulated by the Alberta Utilities Commission (AUC). Transmission charges a rate-regulated tariff intended to allow recovery of prudent costs and earn a fair rate of return on invested capital. Distribution earns income through a performance based rate tariff charged to its customers. The performance based rate tariff is intended to allow Distribution the opportunity to recover its costs and earn a fair return on capital while providing an incentive to manage costs below inflation and other prescribed adjustments built into the tariff

Transmission filed its 2018 - 2019 Transmission Facility Owner Tariff Application with the AUC on November 30, 2017. Until a decision is issued, Transmission will be on interim rates approved by the AUC on October 26, 2017. A decision is expected in the fourth quarter of 2018.

Distribution rates for 2018 will continue at 2017 approved levels on an interim basis until an application is made for 2018 final rates following the issuance of a decision by the AUC on the 2018 - 2022 PBR framework. A decision is expected in the first quarter of 2018.

The Transportation Systems Electrical Services Agreement with the City related to installation, maintenance and repair of street lighting, traffic signals and light rail transit expired on December 31, 2017. An agreement to extend the contract to December 31, 2018 was formally approved by the City on January 15, 2018.

## Distribution and Transmission Operating Income

(\$ millions, including, intersegment transactions)		Three months ended December 31,		Twelve months ended December 31,	
		2017	2016	2017	2016
Revenues	Distribution	\$ 132	\$ 96	\$ 509	\$ 436
	Transmission	25	25	99	97
	Commercial and other	26	26	95	101
		183	147	703	634
Expenses	Energy purchases and system access fees	58	26	250	182
	Other raw materials and operating charges	13	13	48	46
	Staff costs and employee benefits expenses	19	21	83	85
	Depreciation and amortization	24	24	86	80
	Franchise fees and property taxes	20	18	79	71
	Other administrative expenses	4	5	16	19
		138	107	562	483
Operating income before corporate charges		45	40	141	151
Corporate charges		7	7	25	29
<b>Operating income</b>		<b>\$ 38</b>	<b>\$ 33</b>	<b>\$ 116</b>	<b>\$ 122</b>

	Three months ended December 31,	Twelve months ended December 31,
<b>Operating income for the periods ended December 31, 2016</b>	<b>\$ 33</b>	<b>\$ 122</b>
Higher transmission customer rates	-	2
Higher depreciation expense	-	(6)
Higher distribution approved customer rates and lower net system access collections	3	(1)
Other	2	(1)
Increase (decrease) in operating income	5	(6)
<b>Operating income for the periods ended December 31, 2017</b>	<b>\$ 38</b>	<b>\$ 116</b>

Distribution and Transmission's operating income increased by \$5 million for the three months ended December 31, 2017, compared with the corresponding period in 2016, primarily due higher electricity distribution customer rates, partially offset by lower net system access service collections.

Distribution and Transmission's operating income decreased by \$6 million for the twelve months ended December 31, 2017, compared with the corresponding period in 2016, primarily due to lower net system access service collections, losses on sale of surplus land, lower income from commercial services and higher depreciation expense due to addition of assets, partially offset by higher electricity distribution and transmission customer rates and lower corporate allocations and lower losses on disposal of other assets.

Year ended December 31,	2017	2016
<b>Distribution reliability volumes</b>		
Reliability (system average interruption duration index in hours)	0.83	0.92
Electricity distribution (gigawatt-hours)	7,668	7,609

Distribution and Transmission's primary measure of distribution system reliability is the System Average Interruption Duration Index (SAIDI), which it focuses on minimizing. This measure captures the annual average number of hours of interruption experienced by Distribution and Transmission's customers, including scheduled and unscheduled interruptions to its primary distribution circuits. In 2017, the SAIDI was 0.83 hours which is an improvement over the 2016 value of 0.92. Distribution and Transmission will continue with its reliability improvement programs to help maintain and improve overall system reliability. Electricity distribution volumes in 2017 were relatively flat year over year.

## Energy Services

Energy Services is primarily involved in the provision of the RRO electricity service and default supply electricity services to residential, small commercial and agricultural customers in Alberta. The segment also provides competitive electricity and natural gas products under the Encor brand.

The Energy Services' business focuses on providing cost effective retail electricity service and efficient customer care through a highly skilled, knowledgeable, caring and engaged customer service team. Energy Services earns income from selling electricity to residential, farm and small commercial customers under a regulated rate tariff (RRT) and default rate (customers with higher electricity volumes that are not under a competitive contract) in the EPCOR Distribution and Transmission Inc. and FortisAlberta Inc. service areas and several Rural Electrification Association service territories. The RRT is intended to allow Energy Services to recover its prudent costs and earn a return margin. Energy Services also provides billing, collection, and contact center services for EPCOR Water and Drainage operations in Edmonton and the City Waste department. Energy Services focuses on providing excellent service experiences for its customers and measures call answer performance, billing performance, and customer satisfaction. These results are reported to the AUC on a quarterly basis.

Energy Services filed for approval of its 2018 – 2020 RRT in August, 2017, which included plans for a new billing system to be implemented in 2020. Energy Services expects to have a decision on its 2018 – 2020 RRT in the second quarter of 2018.

Energy Services' allowed electricity revenue is determined in accordance with an EPSP approved by the AUC. Under the EPSP, Energy Services manages its exposure to customer load and fluctuating wholesale electricity spot prices by entering into financial electricity purchase contracts in advance of the month of consumption under a well-defined risk management process. Energy Services received approval of their 2016 – 2018 EPSP in the first quarter of 2016 and the Company implemented the new plan in the third quarter of 2016. The plan adapts more quickly to changes in wholesale market conditions thereby reducing EPCOR's risk of receiving inadequate commodity risk compensation for the current wholesale market conditions. Under the 2016 - 2018 EPSP Energy Services is receiving lower risk compensation compared to the previous iterations of the EPSP. Energy Services filed the next iteration of the EPSP applicable for 2018 – 2021 in January 2017. In the 2018 – 2021 EPSP, Energy Services has applied for a market based mechanism to set EPCOR's risk compensation which, if approved, will further increase the alignment between changes in wholesale market conditions and EPCOR's commodity risk compensation. Energy Services expects to have a decision on its 2018 – 2021 EPSP in the first quarter of 2018.

In May 2014, Energy Services re-entered the competitive retail market by offering electricity and natural gas contracts to Alberta consumers under the Encor brand in order to mitigate the impact of RRO customer attrition. The expanded service offering, including green energy options, provides customers wishing to move from the RRO to a competitive contract with an Encor offering. In January 2018, Encor expanded its product offering to

small and medium size business customers.

### Energy Services Operating Income

(\$ millions, including, intersegment transactions)		Three months ended December 31,		Twelve months ended December 31,	
		2017	2016	2017	2016
Revenues	Electricity sales	\$ 224	\$ 205	\$ 824	\$ 798
	Provision of services	6	7	25	25
		230	212	849	823
Expenses	Energy purchases and system access fees	201	184	746	707
	Staff costs and employee benefits expenses	6	7	27	28
	Depreciation and amortization	2	1	6	6
	Other administrative expenses	7	8	26	27
		216	200	805	768
Operating income before corporate charges		14	12	44	55
Corporate charges		4	3	10	10
<b>Operating income</b>		<b>10</b>	<b>9</b>	<b>34</b>	<b>45</b>
Exclude change in the fair value of contracts-for-difference		(3)	(2)	(2)	(7)
<b>Operating income excluding change in the fair value of contracts-for-difference</b>		<b>\$ 7</b>	<b>\$ 7</b>	<b>\$ 32</b>	<b>\$ 38</b>

	Three months ended December 31,	Twelve months ended December 31,
<b>Operating income excluding change in the fair value of contracts-for-difference for the periods ended December 31, 2016</b>	<b>\$ 7</b>	<b>\$ 38</b>
Lower EPSP margins	(1)	(11)
Higher competitive business margins	1	2
Other	-	3
Decrease in operating income	-	(6)
<b>Operating income excluding change in the fair value of contracts-for-difference for the periods ended December 31, 2017</b>	<b>\$ 7</b>	<b>\$ 32</b>

Energy Services' operating income excluding change in the fair value of contracts-for-differences remained the same for the three months ended December 31, 2017, compared with the corresponding period in 2016. This was primarily due to growth in the competitive business offset by lower EPSP margins.

Energy Services' operating income excluding change in the fair value of contracts-for-differences decreased by \$6 million for the twelve months ended December 31, 2017, compared with the corresponding period in 2016. This was primarily due to lower EPSP margins, partially offset by growth in the competitive business.

Energy Services' retail sales volumes were as follows:

<b>Year ended December 31,</b>	<b>2017</b>	<b>2016</b>
<b>Retail Power Sales (gigawatt hours)</b>		
RRO	4,918	4,919
Default and competitive supply	815	772
<b>Total Retail Power Sales</b>	<b>5,733</b>	<b>5,691</b>

Energy Services' RRO sales volumes were flat in 2017 compared with 2016. The increased default and competitive supply sales volume was primarily due to an increase in the number of competitive supply sites served, partially offset by a decrease in the number of default sites served.

## **U.S. Operations**

U.S. Operations is primarily involved in the treatment, transmission and distribution, and sale of water, and the collection and treatment of wastewater within the states of Arizona, New Mexico and Texas. In addition, this segment also provides natural gas distribution and transmission services in Texas, U.S. All of the Company's operations conducted in the U.S. are included in this segment.

Customer rates in Arizona and New Mexico are subject to approval by the Arizona Corporation Commission (ACC) and the New Mexico Public Regulation Commission respectively. Customer rates are intended to allow EPCOR the opportunity to recover costs and earn a reasonable rate of return under a historical cost-of-service framework.

At December 31, 2017, in Arizona and New Mexico, EPCOR owned operations in 14 water utility districts, each containing one or more water treatment and / or distribution facilities, and two wastewater utility districts, each containing one or more wastewater treatment and / or collection facilities. In June 2017, the Arizona Corporation Commission (ACC) voted and approved consolidation of five of the six wastewater utility districts in Arizona resulting in new consolidated rates to be phased in over five years. U.S. Operations has also applied for consolidation of all Arizona water districts and is pending a vote and decision by the ACC in 2018.

U.S. Operations also operates non-regulated water services in the U.S. state of Texas. The EPCOR 130 Pipeline delivers water through a 30 inch pipeline to four municipal customers near Austin, Texas under long-term contracts. While these wholesale water contracts are technically subject to Texas Public Utilities Commission appellate review, they are considered to be effectively unregulated.

The acquisition of Hughes adds natural gas services to our U.S. business platform and expands our Texas-based operations. Natural gas customer rates in Texas are subject to approval by the RRC. Refer to the Significant Events section for additional information.

Work on several significant projects within the U.S. progressed satisfactorily in 2017. These projects include the Luke 303 Water Reclamations Facility, expansion of the White Tanks Water Treatment Facility and completion of a new operations center in Aqua Fria, Arizona that will centralize operations from numerous districts into one location.

## U.S. Operations Operating Income

(\$ millions, including intersegment transactions)		Three months ended December 31,		Twelve months ended December 31,	
		2017	2016	2017	2016
Revenues	Water sales	\$ 37	\$ 38	\$ 156	\$ 157
	Provision of services	20	15	69	56
		57	53	225	213
Expenses	Other raw materials and operating charges	11	12	44	40
	Staff costs and employee benefits expenses	8	8	32	31
	Depreciation and amortization	12	10	43	39
	Franchise fees and property taxes	3	2	8	7
	Other administrative expenses	4	5	14	16
		38	37	141	133
Operating income before corporate charges		19	16	84	80
Corporate charges		1	3	6	7
<b>Operating income</b>		<b>\$ 18</b>	<b>\$ 13</b>	<b>\$ 78</b>	<b>\$ 73</b>

	Three months ended December 31,	Twelve months ended December 31,
<b>Operating income for the periods ended December 31, 2016</b>	<b>\$ 13</b>	<b>\$ 73</b>
Higher approved customer rates and consumption	3	6
Higher depreciation	(1)	(4)
Other	3	3
Increase in operating income	5	5
<b>Operating income for the periods ended December 31, 2017</b>	<b>\$ 18</b>	<b>\$ 78</b>

U.S. Operations' operating income increased by \$5 million for the three months ended December 31, 2017, compared with the corresponding period in 2016, primarily due higher wastewater customer rates, higher water volumes due to above average temperatures and lower corporate allocations, partially offset by higher depreciation.

U.S. Operations' operating income increased by \$5 million for the twelve months ended December 31, 2017, compared with the corresponding periods in 2016, primarily due to higher wastewater customer rates, higher water volumes due to above average temperatures and higher income due to the acquisition of Hughes in June 2017, partially offset by higher depreciation expense.

Year ended December 31,	2017	2016
<b>Water sales volumes (megalitres)</b>		
Water sales for Arizona and New Mexico	85,434	85,244
Wholesale (by EPCOR 130)	2,577	650
<b>Total</b>	<b>88,011</b>	<b>85,894</b>

Arizona and New Mexico water sales volumes increased in 2017 compared with 2016 primarily due to above average temperatures in 2017. EPCOR 130 water volumes increased in 2017 compared with 2016 primarily due to full year of ownership in 2017 compared to 2016.

<b>Year ended December 31,</b>	<b>2017</b>	<b>2016</b>
<b>U.S. natural gas distribution volumes (thousands of cubic feet)</b>		
Natural gas distribution volumes	120,272	-

Since the acquisition of Hughes on June 1, 2017 to December 31, 2017, 120,272 thousand cubic feet has been distributed.

### **Capital Spending and Investment**

(\$ million)				
<b>Years ended December 31,</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	
Water Services segment	\$ 210	\$ 132	\$ 152	
Distribution and Transmission segment	241	281	235	
Energy Services segment	4	4	1	
U.S. Operations segment	101	74	62	
Other segment	10	11	13	
Total capital spending	566	502	463	
Blue Water and Cross County Water Supply Corporation (CCWSC) acquisition	-	48	-	
Willow Valley Water Company acquisition	-	3	-	
Hughes acquisition	46	-	-	
NRGL asset acquisition	22	-	-	
Total investment spending	68	51	-	
<b>Total capital spending and investment</b>	<b>\$ 634</b>	<b>\$ 553</b>	<b>\$ 463</b>	

In 2017, we continued to invest in our infrastructure assets to improve reliability and meet increasing electricity, treated water, sanitary and stormwater collection and treatment demands. Total capital spending was higher for the twelve months ended December 31, 2017, compared with the corresponding period in 2016, primarily due to increased spending in the Water Services segment as a result of Drainage capital spending from September to December on various projects, the distribution mains Accelerated Fire Protection Program, the Gold Bar Digester 3 Upgrades project and other Gold Bar projects. This was partially offset by decreased spending in the Water Services segment due to the Accelerated Water Main Renewal Program and the Gold Bar Grit Tanks project being substantially completed and placed into service in 2016. The Distribution and Transmission segment had decreased spending on the Advanced Meter Infrastructure Project and on various growth and lifecycle projects which was partially offset by increased spending on vehicles, new circuit additions and renovations to its major work center. The U.S. Operations segment had increased spending on various growth projects.

## CONSOLIDATED STATEMENTS OF FINANCIAL POSITION - ASSETS

(\$ millions)	December 31, 2017	December 31, 2016	Increase (decrease)	Explanation of material changes
Cash and cash equivalents	\$ 338	\$ 191	\$ 147	Refer to Consolidated Statements of Cash Flows section.
Trade and other receivables	551	325	226	Increase primarily due to reclassification of the remaining amount of the Capital Power receivable related to the back-to-back debt from other financial assets (\$174 million) and the Drainage transfer.
Available-for-sale investment in Capital Power	-	6	(6)	Decrease due to sale of the remaining Capital Power shares.
Derivatives	1	-	1	
Inventories	17	14	3	Increase primarily due to the Drainage transfer (\$1 million).
Other financial assets	91	265	(174)	Decrease due to reclassification of the remaining amount of the Capital Power receivable related to the back-to-back debt to trade and other receivables (\$174 million).
Deferred tax assets	90	84	6	Increase due to recognition of tax loss carry forward balances.
Property, plant and equipment	8,977	4,983	3,994	Increase primarily due to the Drainage transfer (\$3,566 million), capital expenditures, Hughes acquisition, NRGL asset acquisition, partially offset by unfavorable foreign currency valuation adjustments, depreciation expense, and asset disposals and retirements.
Intangible assets and goodwill	293	293	-	Hughes acquisition, NRGL asset acquisition and capital expenditures, offset by amortization and unfavorable foreign currency valuation adjustments.



## CONSOLIDATED STATEMENTS OF FINANCIAL POSITION – LIABILITIES AND EQUITY

(\$ millions)	December 31, 2017	December 31, 2016	Increase (decrease)	Explanation of material changes
Trade and other payables	384	299	85	Increase primarily due to the Drainage transfer, higher other capital accruals and an increase in electricity delivery charges, partially offset by payments and release of holdbacks on the Regina wastewater treatment plant project.
Loans and borrowings (including current portion)	2,866	1,920	946	Increase primarily due to issuance of a promissory note for the Drainage transfer (\$588 million net of principal repayments) issuance of public debentures (\$400 million), partially offset by repayment of long-term debt and favorable foreign currency valuation adjustments on U.S. dollar denominated debt.
Deferred revenue (including current portion)	3,281	1,041	2,240	Increase primarily due to the Drainage transfer (\$2,152 million) and contributions received from developers, partially offset by deferred revenue recognized and favorable foreign currency valuation adjustments.
Provisions (including current portion)	116	111	5	Increase primarily due to employee benefits accrual net of payment of employee benefits and net receipts of refundable contributions from customers and developers, partially offset by favorable foreign currency valuation adjustments.
Other liabilities (including current portion)	146	72	74	Increase primarily due to the recognition of the Drainage transition cost compensation liability (\$65 million present value) and contingent consideration recorded on the acquisition of Hughes, partially offset by favorable foreign currency valuation adjustments.
Deferred tax liabilities	39	46	(7)	Decrease primarily due to the re-measurement of deferred tax liabilities for U.S. Operations at reduced tax rate enacted under the U.S. Tax Cuts Jobs Act in December 2017, offset by tax depreciation in excess of accounting depreciation.
Equity attributable to the Owner of the Company	3,526	2,672	854	Increase due to the Drainage transfer (\$788 million) and comprehensive income for the period, partially offset by dividends paid.

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(\$ millions)				
<b>Cash inflows (outflows)</b>				
Three months ended December 31,	2017	2016	Increase (decrease)	Explanation
Operating	\$ 263	\$ 109	\$ 154	Increase primarily due to higher funds from operations (including funds from operations for Drainage) and higher funds from the change in non-cash operating working capital resulting from a decrease in trade and other receivables and an increase in trade and other payables.
Investing	(230)	24	(254)	Decrease primarily due to proceeds from the partial sale of the Capital Power shares in 2016, payments received on other financial assets including Chestermere and the Regina substantial completion payment in 2016, higher capital expenditures, the NRGL asset acquisition and distributions from Capital Power in 2016. The decrease was partially offset by higher funds from the change in non-cash investing working capital and lower advances on construction financing.
Financing	254	(27)	281	Increase primarily due to higher proceeds from long-term debt issued in 2017, partially offset by repayment of short-term debt issued in 2017, higher repayment of long-term debt in 2017 and higher dividend payments to the City in 2017.
Opening cash and cash equivalents	51	85	(34)	
Closing cash and cash equivalents	\$ 338	\$ 191	\$ 147	

(\$ millions)				
<b>Cash inflows (outflows)</b>				
<b>Twelve months ended December 31,</b>	<b>2017</b>	<b>2016</b>	<b>Increase (decrease)</b>	<b>Explanation</b>
Operating	\$ 526	\$ 475	\$ 51	Increase primarily due to higher funds from operations (including funds from operations for Drainage) and lower funds from the change in non-cash operating working capital resulting from an increase in trade and other receivables, partially offset by an increase in trade and other payables.
Investing	(585)	1	(586)	Decrease primarily due to lower payments received on other financial assets as 2016 included the payment received from Capital Power related to the back-to-back debt, the payment from Suncor related to the lease receivable and receipt of the milestone payment from the City of Regina, lower proceeds on the sale of the remaining Capital Power shares, lower proceeds from the disposal of assets, higher capital expenditures, higher funds used in business acquisitions, lower distributions from Capital Power and payment of the Drainage transition cost compensation. The decrease was partially offset by lower advances on construction financing and higher funds from the change in non-cash investing working capital.
Financing	206	(321)	527	Increase primarily due to proceeds from long-term debt issued in 2017 and higher repayment of long-term and short term debt in 2016, partially offset by higher dividend payments to the City in 2017.
Opening cash and cash equivalents	191	36	155	
Closing cash and cash equivalents	\$ 338	\$ 191	\$ 147	

## Operating Activities and Liquidity

The Company maintains its financial position through rate-regulated utility and contracted operations which generate stable cash flows.

The Company expects to have sufficient liquidity to finance its plans and fund its obligations in 2018 with a combination of cash on hand, cash flow from operating activities, the issuance of commercial paper, public or private debt offerings and availability of committed credit facility described below under Financing.

Cash flows from operating activities would be impaired by events that cause severe damage to our facilities and would require unplanned cash outlays for system restoration repairs. Under those circumstances, more reliance would be placed on our credit facilities for working capital requirements until a regulatory approved recovery mechanism or insurance proceeds were put in place.

## Capital Requirements and Contractual Obligations

EPCOR's projected cash requirements for capital projects for 2018 include \$725 million to \$825 million for investment in existing businesses and new business development.

The following table represents the Company's contractual obligations by year:

(\$ millions)	2018	2019	2020	2021	2022	2023 and thereafter	Total
Distribution and Transmission segment capital projects <sup>1</sup>	\$ 38	\$ 46	\$ 5	\$ -	\$ -	\$ -	\$ 89
Developer funded sanitary and stormwater capital projects <sup>2</sup>	27	25	18	-	-	-	70
Sanitary sewer rehabilitation and upgrade projects <sup>3</sup>	10	-	-	-	-	-	10
Other sanitary and stormwater projects <sup>4</sup>	17	-	-	-	-	-	17
Water Services power contracts <sup>5</sup>	6	4	3	3	-	-	16
Water purchase and transportation of water agreements <sup>6</sup>	8	3	3	3	3	3	23
Billing and customer care services agreement <sup>7</sup>	4	3	3	3	-	-	13
Information technology and communication service agreements <sup>8</sup>	2	1	1	1	-	-	5
Loans and borrowings net of sinking fund payments received <sup>9</sup>	439	32	33	207	34	2,131	2,876
Interest payments on loans and borrowings	131	112	111	109	102	1,547	2,112
Drainage transition cost compensation <sup>10</sup>	21	17	13	10	6	-	67
Contingent consideration <sup>11</sup>	-	4	44	4	-	-	52
Operating leases, net <sup>12</sup>	10	10	9	8	7	70	114
<b>Total contractual obligations</b>	<b>\$ 713</b>	<b>\$ 257</b>	<b>\$ 243</b>	<b>\$ 348</b>	<b>\$ 152</b>	<b>\$ 3,751</b>	<b>\$ 5,464</b>

1 The Company has commitments for several Distribution and Transmission projects as directed by the AESO.

2 The Company has commitments for several developer funded new sanitary and stormwater infrastructure projects throughout the city of Edmonton.

3 The Company has a commitment to rehabilitate and upgrade the sanitary sewers in the West Jasper Place area of the city of Edmonton.

4 The Company has commitments as a sub-contractor to carry out construction of flood mitigation infrastructure within the city of Edmonton. These projects are funded by the City.

5 The Company has commitments to purchase power for its Edmonton wastewater treatment plants, distribution sites, and sanitary and stormwater collection sites. The agreements expire on or before December

31, 2021. Under the terms of the agreement, the Company is committed to purchase minimum contracted quantities at a fixed price. There are no early termination or cancellation clauses in this agreement.

- 6 Water Arizona maintains agreements with the Central Arizona Water Conservation District for the purchase and transportation of water. These agreements are for terms of 100 years expiring at the end of 2107. Under the terms of these agreements, the Company is committed for the amount of water ordered in the fall of each year to be purchased and transported the following year.

Water New Mexico maintains agreements with the various well owners for the purchase of water. These agreements are generally for terms of ten years. Under the terms of these agreements, certain minimum purchases are due each year in order to maintain the agreements until they expire.

- 7 The Company has entered into an agreement for billing and customer care services for U.S. Operations. The contract term is for ten years, expiring on August 31, 2021.
- 8 The Company has commitments for several information technology and communication service agreements.
- 9 During the year, the Company issued public debentures totaling \$400 million maturing in 2047 at an interest rate of 3.55%. In addition, as a result of transfer of Drainage, EPCOR issued the City a promissory note for \$593 million (fair value of \$604 million) of contractual principal repayments as back-to-back debt which mirrors the principal and interest payment obligations of debentures issued by the City in respect of the Drainage operations. A portion of the \$439 million debt maturity due in 2018 will be funded by collection of \$174 million on the long-term loans receivable from Capital Power.
- 10 The Company has a commitment to compensate the City for stranded costs, including liabilities retained by the City, related to the transfer of Drainage. Out of the total commitment \$75 million, the Company paid \$8 million to the City on the transfer date, with the remaining \$67 million due over the next five years.
- 11 On acquisition of the Blue Water and CCWSC assets, the Company committed to pay Blue Water a fee which is contingent on securing new long term contracts for the supply of water. This fee is capped at US\$32 million with no time limit for payment of the fee. In addition, on the acquisition of Hughes, the Company committed to pay a fee to the previous owners of Hughes based on the addition of new customer connections above a minimum of 600 incremental customer connections over the a period of six years from the date of acquisition. The fee is capped at US\$8 million.

The Company is reasonably certain that it will be required to settle the obligation, by way of cash payment, and has accordingly recognized the liability for contingent consideration in the consolidated statement of financial position.

- 12 In 2007, the Company entered into a long-term agreement to lease commercial space in a new office tower in Edmonton, Canada, primarily for its head office (head office lease). The agreement, which became effective in the fourth quarter of 2011, has an initial lease term of approximately 20 years, expiring on December 31, 2031, and provides for three successive five-year renewal options.

Under the terms of the lease, the Company's annual lease commitments, net of annual payments to be paid to the Company by Capital Power and another company under the sub-leases receivable are as follows:

(\$ millions)	Minimum lease payable
January 1, 2018 through December 31, 2022	\$ 6
January 1, 2023 through December 31, 2023	7
January 1, 2024 through December 31, 2031	8

All of the Company's operating lease obligations for premises, net of subleases receivable, are included in the contractual obligations table above.

As at February 15, 2018, there were three common shares of the Company outstanding, all of which are owned by the City. The City transferred Drainage to EPCOR on September 1, 2017 as described in the Significant Events section. Consistent with EPCOR's commitment to the City, the EPCOR dividend to the City increased from \$146 million to \$153 million in 2017 and to \$166 million in 2018. These increases have been approved by the Shareholder in accordance with the EPCOR Dividend Policy, the annual dividend to the City will remain at \$166 million until such time as the EPCOR Board recommends that it be changed.

In the normal course of business, EPCOR provides financial support and performance assurances, including guarantees, letters of credit and surety bonds, to third parties in respect of its subsidiaries. At December 31, 2017 total guarantees of \$421 million (2016 - \$429 million) have been issued to various third parties.

## Financing

Generally, our external capital is raised at the corporate level and invested in the operating business units. Our external financing has consisted of commercial paper issuance under committed syndicated bank credit facilities, debentures payable to the City related to utility assets transferred from the City, publicly issued medium-term notes, U.S. private debt notes and issuance of preferred shares.

On September 1, 2017 the Company issued a promissory note with \$593 million of contractual principal repayments to the City (fair value \$604 million) which mirrors the principal and interest payment obligations of the debentures issued by the City in respect of Drainage operations. During the term of the promissory note, blended payments of principal and interest are due at various times throughout each year and the note will be fully settled by June, 2042.

In November 2017, the Company issued public debentures totaling \$400 million maturing in 2047 at an interest rate of 3.55%. The public debentures are unsecured direct obligations of the Company and, subject to statutory preferred exemptions, rank equally with all other unsecured and unsubordinated indebtedness of the Company. The debentures are redeemable by the Company prior to maturity at the greater of par and a price specified under the terms of the debenture.

The Company has bank credit facilities, which are used principally for the purpose of backing the Company's commercial paper program and providing letters of credit, as outlined below:

(\$ millions)			Banking commercial paper issued	Letters of credit and other facility draws	Net amounts available
December 31, 2017	Expiry	Total facilities			
<b>Committed</b>					
Syndicated bank credit facility <sup>1</sup>	November 2022	\$ 600	\$ -	\$ -	\$ 600
<b>Uncommitted</b>					
Bank credit facilities <sup>2</sup>	No expiry	200	-	66	134
Bank credit facility	No expiry	25	-	-	25
Total uncommitted		225	-	66	159
<b>Total credit facilities</b>		<b>\$ 825</b>	<b>\$ -</b>	<b>\$ 66</b>	<b>\$ 759</b>

(\$ millions)			Banking commercial paper issued	Letters of credit and other facility draws	Net amounts available
December 31, 2016	Expiry	Total facilities			
<b>Committed</b>					
Syndicated bank credit facility <sup>1</sup>	November 2020	350	-	-	350
Syndicated bank credit facility <sup>2</sup>	November 2019	\$ 200	\$ -	\$ 73	\$ 127
Total committed		550	-	73	477
<b>Uncommitted</b>					
Bank credit facility	No expiry	25	-	-	25
<b>Total credit facilities</b>		<b>\$ 575</b>	<b>\$ -</b>	<b>\$ 73</b>	<b>\$ 502</b>

<sup>1</sup> In November 2017, the Company established a new \$600 million single tranche committed syndicated bank credit facility which replaced the previous \$350 million single tranche committed syndicated bank credit facility. The Company's \$600 million committed syndicated bank credit facility is available and primarily used for short-term borrowing and backstopping EPCOR's commercial paper program. The committed syndicated bank credit facility cannot be withdrawn by the lenders until expiry, provided that the Company operates within the related terms and covenants. The extension feature of EPCOR's committed syndicated bank credit facility give the Company the option each year to re-price and extend the terms of the facility by one or more years subject to agreement with the lending syndicate. The Company regularly monitors market conditions and may elect to enter into negotiations to extend the maturity dates.

<sup>2</sup> In November 2017 the Company established five new bilateral credit facilities (totaling \$200 million) which replaced the previous \$200 million committed syndicated bank credit facility. The Company's uncommitted line of credit is restricted to letters of credit. At December 31, 2017 Letters of credit totaling \$66 million have been issued and outstanding under uncommitted line of credit (2016 – \$73 million issued under committed syndicated bank credit facility) to meet the credit requirements of electricity market participants and to meet conditions of certain service agreements. Amounts borrowed and letters of credit issued, if any, under these facilities which are not payable within one year are classified as non-current loans and borrowings.

In December 2017, the Company filed a new Canadian base shelf prospectus under which it may raise up to \$2 billion of debt with maturities of not less than one year. At December 31, 2017, the available amount remaining under this Canadian base shelf prospectus was \$2 billion (December 31, 2016 - \$1 billion). The Canadian base shelf prospectus expires in December 2019.

If the economy were to deteriorate in the longer term, particularly in Canada and the U.S., the Company's ability to extend the maturity or revise the terms of bank credit facilities, arrange long-term financing for its capital expenditure programs and acquisitions, or refinance outstanding indebtedness when it matures could be adversely impacted. We believe that these circumstances have a low probability of occurring. We continually monitor our capital programs and operating costs to minimize the risk that the Company becomes short of cash or unable to honor its debt servicing obligations. If required, the Company would look to reduce capital expenditures and operating costs.

## Credit Ratings

Years ended December 31,	2017	2016	2015
<b>Credit ratings</b>			
Standard & Poor's Rating Services:			
Long-term debt	A-	A-	A-
DBRS Limited:			
Short-term debt	R-1 (low)	R-1 (low)	R-1 (low)
Long-term debt	A (low)	A (low)	A (low)

In September 2017, DBRS confirmed its A (low) / stable senior unsecured debt and R-1 (low) / stable short-term debt ratings for EPCOR. In October 2017, Standard & Poor's Ratings Services confirmed its A- / stable long-term corporate credit and senior unsecured debt ratings for EPCOR.

These credit ratings reflect the Company's ability to meet its financial obligations given the stable cash flows generated from the rate-regulated water, natural gas and electricity businesses. The Company's final sell-down of its interest in Capital Power in addition to the initial sale of the power generation assets in 2009 served to improve certain creditworthiness measures. Improvement in the Company's creditworthiness may not result in further credit rating upgrades. A credit rating downgrade for EPCOR could result in higher interest costs on new borrowings and reduce the availability of sources and tenor of investment capital.

## Financial Covenants

EPCOR is currently in compliance with all of its financial covenants in relation to its syndicated bank credit facility, Canadian public medium-term notes and U.S. private debt notes. Based on current financial covenant calculations, the Company has sufficient borrowing capacity to fund current and long-term requirements. Although the risk is low, breaching these covenants could potentially result in a revocation of EPCOR's credit facility causing a significant loss of access to liquidity or result in the Company's publicly issued medium-term notes and private debt notes becoming immediately due and payable causing the Company to find a means of funding which could include the sale of assets.

The key financial covenants and their thresholds, as defined in the respective agreements and EPCOR's actual measures at December 31, 2017 and 2016 were as follows:

	Actual 2017	Financial Covenant 2017	Actual 2016	Financial Covenant 2016
Modified consolidated net tangible assets to consolidated net tangible assets <sup>1</sup>	100%	> or = 80%	100%	> or = 80%
Consolidated senior debt to consolidated capitalization ratio <sup>2</sup>	45%	< or = 75%	42%	< or = 75%
Interest coverage ratio <sup>3</sup>	5.04	> or = 1.75:1.00	5.35	> or = 1.75:1.00
Debt issued by subsidiaries to consolidated net tangible assets <sup>4</sup>	6.6%	< or = 12.5%	0%	< or = 12.5%

1 Modified consolidated net tangible assets to consolidated net tangible assets refers to the total assets of the material subsidiaries of the Company on a consolidated basis, less intangible assets, the Capital Power investment adjusted for cash distributions, and the back-to-back debt expressed as a percentage of the total assets of the Company on a consolidated basis, less intangible assets, the Capital Power investment adjusted for cash distributions and the back-to-back debt.

2 Consolidated senior debt to consolidated capitalization refers to the Company's total unsubordinated long-term debt expressed as a percentage of total unsubordinated long-term debt plus and shareholder's equity. This excludes subordinated debt which has a lower ranking for repayment.

3 Interest coverage ratio refers to the Company's ability to pay the interest that arises on outstanding debt. It is calculated by dividing the Company's operating income before interest income and depreciation and amortization expense plus cash distributions and dividends received from Capital Power by the Company's interest expense on loans and borrowings less interest income. The interest coverage ratio is not applicable if the Company has an investment grade credit rating.



- 4 Limitation of debt issued by subsidiaries refers to the total debt held by the Company's subsidiaries that is not guaranteed by the Company plus total debt held by material subsidiaries which is secured by the subsidiaries' assets, expressed as a percentage of the Company's total assets less any intangible assets.

## OUTLOOK

In 2018, EPCOR will focus on the ongoing integration of Drainage as well as the Hughes and NRGL operations. In addition, we will continue to target growth in rate-regulated and contracted water, wastewater, electricity and natural gas infrastructure. We expect much of this investment to come from new infrastructure to accommodate customer growth and lifecycle replacement of existing infrastructure primarily related to the Edmonton and U.S. based operations. We intend to expand our water and electricity commercial services activities and to invest in renewable energy generation, including solar and biogas facilities to power our operations and enhance our environmental performance.

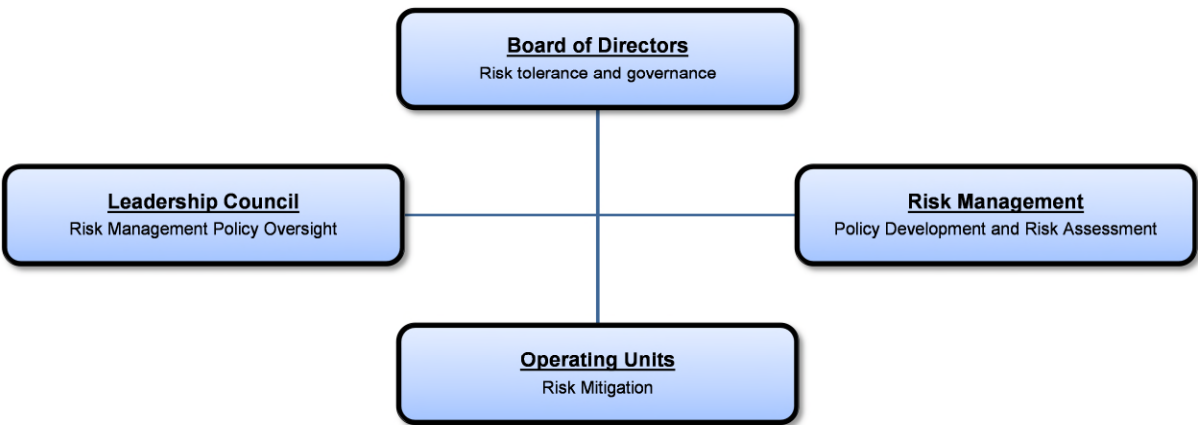
In October 2017, the Town of Collingwood (Collingwood) and EPCOR entered into an agreement for EPCOR to acquire 100% of the issued and outstanding shares of the holding company which owns Collus PowerStream Utility Service Corp (Collus PowerStream), an electricity distribution company based in Collingwood, Ontario for approximately \$25 million and the assumption of \$14 million of debt. As Collus PowerStream is jointly owned by Collingwood and Alectra Utilities Corporation (Alectra), as part of the transaction, Collingwood will acquire Alectra's 50% interest and immediately thereafter transfer 100% of the shares of the holding company to EPCOR. An application to approve the acquisition transaction is now before the Ontario Energy Board (OEB) for approval. Upon completion, EPCOR would serve approximately 18,000 electricity customers in the Collingwood, Ontario area

EPCOR is proposing to build a new solar farm just south of its existing E.L. Smith Water Treatment Plant (E.L. Smith WTP). The proposed solar farm will generate "green" energy to help power the existing E.L. Smith WTP and its water treatment and distribution processes, while reducing its greenhouse gas emissions. The solar farm is expected to have a peak generation capacity of approximately 12 megawatts. All necessary government approvals are currently expected to be received in the second quarter of 2018 which will allow construction to be completed by the end of 2019.

EPCOR has been awarded franchises by three municipalities in the Southern Bruce region of Ontario near Kincardine to build and operate a natural gas distribution system. In March 2016 EPCOR applied to the OEB for the approval of these franchise agreements. In January 2017, the OEB requested indications of interest from any parties interested in servicing these areas and subsequently requested submission of proposals by October 16, 2017. EPCOR and another entity submitted proposals. EPCOR has continued to participate in the OEB's process and it is expected that a determination as to the successful proponent will be made in 2018.

# RISK FACTORS AND RISK MANAGEMENT

## Approach to risk management



Our approach to Enterprise Risk Management (ERM) is to manage the key controllable risks facing the Company and consider appropriate actions to respond to uncontrollable risks. ERM includes the controls and procedures implemented to reduce controllable risks to acceptable levels and the identification of the appropriate management actions in the case of events occurring outside of management’s control. Acceptable levels of risk and risk appetite for EPCOR are established by the Board of Directors, representing the Shareholder, and are embodied in the decisions and corporate policies associated with risk management. EPCOR’s framework for ERM is aligned with the Committee of Sponsoring Organizations 2016 Integrated ERM Framework and the ERM process follows CAN / CSA ISO 31000-10 Risk Management – Principles and Guidelines. EPCOR’s ERM program and the risk management framework and process it supports is designed to identify, assess, measure, manage, mitigate and report on EPCOR’s significant risks. The goal is to create and sustain business value by helping the Company achieve its business objectives and strategies through better management of risk. The program promotes a common framework and language for managing risk across EPCOR. General ERM framework oversight, reviews and recommendations of risk compliance are provided by management and are based upon the objectives, targets and policies approved by the Board of Directors.

The corporate Director, Audit and Risk Management is responsible for developing the framework and assessing risk at an enterprise level and in conjunction with the Company’s internal audit function, monitoring compliance with risk management policies. The Director, Audit and Risk Management provides the Board of Directors with an enterprise risk assessment quarterly. The business units and shared service units are responsible for carrying out the risk identification, management and mitigation activities associated with the risks in their respective operations. These risk management activities are integral aspects of the business units’ and shared service units’ operations. EPCOR believes that risk management is a key component of the Company’s culture and we have put into place cost-effective risk management practices. At the same time, EPCOR views risk management as an ongoing process and we continually review our risks and look for ways to enhance our risk management processes.

Large scale emergencies resulting from various events discussed below may have a significant impact on the Company’s ability to provide services that are considered essential services to the public. Maintaining essential services is critical to EPCOR’s customers and EPCOR’s reputation. The Company manages its ability to continually deliver services with emergency response protocols and business continuity plans which are periodically tested through various exercises and scenarios. These procedures provide assurance that the

Company has the coordination, capacity and competence to respond appropriately to emergency situations arising from various forms of risk.

The Company's Ethics Policy includes procedures which provide for confidential disclosure of any wrong-doing relating to accounting, reporting and auditing matters. The policy prohibits any retaliation against any person making a complaint. During 2017, no significant substantiated complaints with respect to accounting, financial reporting or auditing matters were received under the Ethics Policy.

The Company's principal risks are outlined below in order of most to least serious, as assessed at December 31, 2017. No new risks have arisen since the end of 2016. However, the relative ranking of a number of the risks was revised, with the most significant change being New Business and Integration Risk being ranked as the Company's top risk presently.

### **New Business Integration Risk**

EPCOR plans to grow its utility infrastructure business across investment types and North American geographies. The Company is accomplishing this through expansion into the natural gas distribution and sanitary and stormwater collection utility businesses as well as entry into new geographies. Expanding its utility infrastructure offerings and geographies will help diversify the Company's investments and thereby reduce investment risk.

While EPCOR has experience and expertise in linear utility infrastructure, natural gas distribution and large sanitary and storm water collection systems are new to us. This introduces risk to the Company due to potential unfamiliarity with the associated operational, safety and regulatory aspects of these businesses in addition to the risks associated with integrating these businesses into EPCOR.

Transfer of the Drainage business from the City of Edmonton occurred on September 1, 2017, with the Company assuming responsibility for the sanitary and stormwater collection operations. Business integration planning was initiated in advance of the transfer date with most of the key integration elements completed immediately following the transfer. Integration of the Company's new gas operations in Ontario is underway, and the Company's Hughes acquisition in Texas, which closed on June 1, 2017, continues to progress well. Work to integrate all these businesses will continue into 2018. Failing to successfully integrate these new businesses could have long-term adverse effects on the Company, including reputational impact.

### **Health and Safety Risk**

The Company is responsible for ensuring that the potable water it sells to customers is safe to drink. The ability of the water treatment plants to meet potable water quality standards is dependent on continuous water testing in order to ensure that the prescribed requirements under regulation or conventional industry standards are met. Operations perform continuous and rigorous quality control testing of water purification consistent with government and industry standards to prevent public health issues due to inadequately treated, stored or distributed drinking water. Failure to properly maintain fully functioning treatment and measurement systems could result in regulatory fines or the occurrence of public health issues.

In Alberta, water quality for EPCOR's operations is regulated under the provincial *Environmental Protection and Enhancement Act* (EPEA). Regulation under the EPEA takes the form of an "Approval to Operate" which, among other things, specifies the quality of the treated water, the number, frequency and form of water quality testing, as well as mandatory standards for the water treatment process. The drinking water quality requirements in Alberta meet or exceed the National Guidelines for Canadian Drinking Water Quality recommended by Health Canada.

Raw water quality is an important factor in the treatment of potable water. In Edmonton, we obtain surface water from the North Saskatchewan River to treat and sell to customers in the greater Edmonton area. The North Saskatchewan Watershed Alliance, among other things, aims to protect and improve North Saskatchewan River water quality by developing and sharing knowledge and facilitating workshops with members and interested

parties.

Drinking water quality and wastewater standards for EPCOR's U.S. operations are regulated by the U.S. Environmental Protection Agency (U.S. EPA) under the Safe Drinking Water Act and Clean Water Act, respectively. Among other things, the U.S. EPA sets drinking water standards specifying the treatment, source water protection, operator training and funding for water system improvement and relies on the states and localities to carry out the standards. Oversight of water and wastewater systems is conducted by state and county authorities to the degree that they establish standards at least as stringent as the U.S. EPA.

In Arizona, we obtain water from surface water and ground water sources. Surface water primarily comes from the Central Arizona Project canal to treat and sell to customers. The Central Arizona Project conducts water quality testing upstream of the take-off points and has a formal notification process in place to notify our Arizona operations of any water quality issues that may arise. Process and compliance sampling results are stringently analyzed and trended for all groundwater and surface water systems in Arizona and New Mexico to ensure systems continue to meet all regulatory standards. Each system in Arizona and New Mexico has an Emergency Operations Plan which addresses water quality issues and provides further risk mitigation.

There are no formal watershed protection groups in the Arizona and New Mexico service areas. The Arizona Department of Environmental Quality and New Mexico Environment Department oversee the water systems in their respective states. In Texas, the Texas Commission on Environmental Quality and the Texas State Soil and Water Conservation Board support the development and implementation of watershed protection plans. Water wells in Arizona, New Mexico and Texas are protected from contamination by proper well construction and system operation and management.

Our operations have hazardous chemicals, high voltage electricity and natural gas transmission and distribution systems located in close proximity to populated areas and a significant incident could result in injury to the public, our employees or on-site suppliers.

We manage health, safety and environment (HSE) risks through a management system and measure HSE performance against recognized industry and internal performance measures. We conduct external and internal compliance and conformance audits to verify that we meet or exceed all regulatory requirements. We are committed to working with industry partners to share and improve health, safety and environment practices within the industry. In 2017, all of our Edmonton water treatment facilities, reservoirs and transmission and distribution operations, Gold Bar and our electricity distribution and transmission operations remain ISO 18001 registered.

### **Political and Legislative Risk**

EPCOR is subject to risks associated with changing political conditions and changes in federal, provincial, state, local or common law, regulations and permitting requirements in Canada and the U.S. It is not always possible to predict changes in laws or regulations that could impact the Company's operations, income tax status or ability to renew permits as required.

In December 2016, the Government of Alberta enacted Bill 21: the Modernized Municipal Government Act (MGA) which could impose restrictions on the ability of a municipally controlled corporation (MCC) to conduct its business. EPCOR, which is an MCC of the City, was previously exempted from the MGA and a similar exemption is not present in the new MGA. Until the new Division of the MGA is proclaimed into force, the current provisions apply and EPCOR remains exempted. EPCOR is working to ensure the previous exemption is re-instated as the related regulations are developed. Failing to obtain the exemption could materially impact EPCOR's ability to execute on its Long Term Plan.

### **Regulatory Risk**

For the majority of its operations, EPCOR is subject to risks associated with the regulation of utility rates. Such

processes can result in significant lags between the time when customer rates or tariffs are applied for and the time that regulatory decisions are received. Furthermore, the regulator may deny or alter the applied for customer rates or tariffs.

EPCOR's water treatment and distribution services and wastewater treatment services to customers within Edmonton are rate regulated by Edmonton City Council pursuant to the EPCOR Water Services and Wastewater Treatment Bylaw. EPCOR's sanitary and stormwater collection services to customers within Edmonton are rate regulated by Edmonton City Council pursuant to the EPCOR Drainage Services Bylaw. Our ability to fully recover operating and capital costs and to earn a fair return is dependent upon achieving the performance targets prescribed in the bylaws, maintaining cost increases below inflation, managing operational risks and not exceeding approved capital additions. Rates for water sales to regional water commissions surrounding Edmonton are regulated by the AUC on a complaints-only basis. EPCOR sets the rates it charges to the regional water commissions to recover actual operating and capital costs including a fair rate of return.

The AUC utilizes a PBR structure for electricity and natural gas distribution utilities in Alberta. Under PBR, EPCOR's annual electricity distribution rates are set by a formula that is generally equal to last year's rate plus an inflation factor less a productivity factor plus a provision for additional approved capital additions. Certain capital projects may be applied for annually in a separate capital application (capital tracker). Our ability to recover the actual costs of providing service and to earn a fair return is dependent upon maintaining cost increases at or below inflation, achieving the productivity factor and not exceeding the approved capital additions, all as defined by the PBR formula or approved in a capital tracker application. The Next Generation PBR framework, effective January 1, 2018, will set rates to December 31, 2022.

The AUC sets rates intended to permit the regulated Energy Services' RRO customer services business to recover forecast costs of providing service plus a fair return margin.

Water, wastewater and natural gas services provided by EPCOR's U.S. subsidiaries are subject to state laws and regulation by the state regulatory commissions within Arizona, New Mexico and Texas. Our ability to fully recover operating and capital costs and earn a fair return is dependent upon achieving our capital and operating cost targets incorporated into the rates, and meeting the customer growth and consumption targets built into the rates. Since rates are established on a historical cost basis, any new capital additions for water, wastewater or natural gas infrastructure must be carefully planned and evaluated before commencement since the addition of such costs to the regulatory rate base for subsequent recovery will only take place after the new infrastructure is built and the regulator approves the rate base additions through the rate application process.

### **Strategy Execution Risk**

Our growth strategy is dependent on the development, acquisition and operation of linear infrastructure for municipal, commercial and industrial customers in Canada and the U.S. Opportunities may be impacted by depressed oil prices and any weakening of Canadian and U.S. economies in the future. This could slow or delay the Company's growth plans.

Such growth is dependent on opportunities in the marketplace which will be impacted by the willingness of parties to sell such assets, political and public sentiment regarding third party ownership and EPCOR's cost competitiveness. These risks could result in delays or curtailment of EPCOR's growth plans.

Business development projects, including acquisitions, can take a relatively long period of time to execute, exposing such projects to event and external factor risks that may emerge and thereby alter project economics or completion.

For each new business development project, EPCOR seeks to ensure project success by addressing project risks, including events and external factors, as part of its due diligence process and project execution.

## **Information Technology Related Security Risks**

We use several key information technology systems to support our core operations including industrial control systems and electricity settlement and utility billing systems. These systems and the associated hardware are vulnerable to malfunction and unauthorized access including cyber-attacks, which could lead to loss or unauthorized disclosure of sensitive customer or EPCOR information or extortion or otherwise disrupt operations. We take measures to reduce the risk of malicious corruption or failure of these systems, data and the hardware and network infrastructure on which they operate. EPCOR's security program is based on the ISO 27002 control framework. In applying this framework, EPCOR has implemented a series of complementary defense mechanisms, starting from the external information technology perimeter down to the end user. Each layer is designed to prevent, detect and report on malicious activity.

We regularly monitor our information technology protection systems and periodically employ third-party security providers to test the effectiveness and to strengthen the system as new cyber threats arise.

Financial exposures associated with cyber-attacks are partly mitigated through our insurance programs.

## **Risk of Reputational Damage**

EPCOR has controls and strategies in place to mitigate the exposure to the various risks that could result in damage to EPCOR's reputation should an event occur. The Company proactively maintains positive and transparent interactions with stakeholders. In addition, EPCOR communicates with stakeholders and the media when issues first arise and actively monitors social media in order to address reputational matters before they escalate.

## **Environment Risk**

There are a variety of environmental risks associated with EPCOR's water and wastewater treatment and sanitary and stormwater collection operations and its electricity and natural gas transmission and distribution businesses. EPCOR's operations are subject to laws, regulations, and operating approvals which are designed to reduce the impacts on the environment. An environmental event could materially and adversely impact EPCOR's business, prospects, reputation, financial condition, operations or cash flow. Furthermore, such incidents could result in spills or emissions in excess of those permitted by law, regulations or operating approvals.

Environmental risks associated with water and wastewater treatment and sanitary and stormwater collection operations include wastewater discharge, biogas release, and residuals management. EPCOR's wastewater treatment operations are regulated with stringent wastewater treatment standards and controls covering quality of treated wastewater effluent. Water and wastewater treatment technologies and supporting processes are continuing to evolve and are influenced by more stringent regulation and environmental challenges. Failure to identify and deploy viable new technologies to meet these regulations and challenges could undermine the competitiveness of EPCOR's market position and exclude it from some market opportunities.

Risks associated with electricity distribution and transmission operations include the unintended environmental release of substances such as oil from its oil-filled pipe-type cable, hydraulic oil and polychlorinated biphenyl transformer fluid.

To the best of our knowledge we comply, in all material respects, with the laws, regulations and operating approvals affecting our facilities, and minimize the potential for incidents by incorporating environmental management practices in our strategy, policies, processes and procedures. To achieve this, we require each facility to have an environmental emergency response plan which is based on the ISO 14001 standard. These plans encompass the identification of the scope, objectives, training and stewardship of our environmental responsibility. Each plant and facility is also subject to third party environmental audits to help ensure conformance with the EPCOR HSE management system and compliance with all regulations. The Edmonton

waterworks system (including the Rossdale and E.L. Smith water treatment plants) achieved EnviroVista Champion status as of June 2011. In 2017, all of our Edmonton water treatment facilities, reservoirs and transmission and distribution operations, our sanitary and stormwater collection operations, Gold Bar, the Evan-Thomas water and wastewater treatment facility in Kananaskis, Alberta, our electricity distribution and transmission operations and our transportation services operations remain ISO 14001 registered. The Company is also in the process of obtaining ISO 14001 registration for its Regina wastewater and Britannia mine run-off treatment operations.

Compliance with future environmental legislation may require material capital and operating expenditures. Failure to comply could result in fines and penalties or the regulator could force the curtailment of operations. There can be no assurances that compliance with or changes to environmental legislation will not materially and adversely impact EPCOR's business, prospects, financial conditions, operations or cash flow.

### **Business Interruption Risks**

A variety of intentional, accidental or natural occurrences could cause interruption of EPCOR's operations including failure of plant equipment, electricity transmission or distribution lines, water, sanitary and stormwater collection systems or natural gas pipelines, or any of the industrial control systems utilized throughout operations. In addition, the quality of raw source water can be affected by such things as hydrocarbons and other inorganic or organic contaminants entering water ways and aquifers. Depending on the type and concentration of the contaminant, their removal may be beyond the capabilities of water treatment plant processes, resulting in the water treatment plant being shut down until the contaminants become diluted to the point where they can be treated within the water treatment plant capabilities.

An extended outage could result in lost revenues or additional costs to resume operations including repair costs.

This risk is managed through inherent redundancy and sound maintenance practices. Our maintenance practices are augmented by an inventory of strategic spare parts, which can reduce down-time considerably in the event of an interruption of operations. We also have emergency response and business continuity plans which we exercise regularly.

Maintenance and capital plans are determined annually based on rigorous assessment of its equipment and by continually monitoring the condition of assets.

Although all of our operations have performed in accordance with expectations, there can be no assurance that they will continue to do so. The Company's business continuity plans aim to enable EPCOR to continue providing critical services to customers in the event of a crisis. The Company's emergency response protocols are designed to ensure EPCOR can expeditiously resume operations following a business interruption. Financial exposures associated with business interruption are partly mitigated through our insurance programs.

### **Failure to Attract, Retain or Develop Top Talent**

Our ability to continuously operate and grow the business is dependent upon attracting, retaining and developing sufficient labor and management resources. As with most organizations, the Company is facing the demographic shift where a large number of employees are expected to retire over the next few years. Failure to secure sufficient qualified technical and leadership talent may impact EPCOR's operations or increase expenses.

We believe that we employ good human resource practices and in 2017, we were named a top 70 employer in Alberta, by Mediacorp Canada Inc. We continue to monitor developments and review our human resource strategies so that we have an adequate supply of labor and management.

### **Water Scarcity Risk**

Water scarcity is the risk of inadequate raw water supply, particularly in the desert region of the Southwestern

U.S. This is primarily related to drought conditions which could potentially impact EPCOR's water operations in Arizona, New Mexico and Texas.

In Arizona in particular, a number of water management and supply augmentation strategies are employed to mitigate this risk including enacting some very progressive policies to protect groundwater supplies. EPCOR actively manages its sources of water including replenishing reserves by injecting water into its wells when opportunity arises and working with regulators on rate rebalancing to mitigate the effects of declining consumption should it occur.

Despite these efforts, continued drought in the U.S. could result in legislated measures to further reduce customer water consumption, potentially impacting financial performance in Arizona, New Mexico and Texas.

### **Electricity Price and Volume Risk**

EPCOR sells electricity to RRO customers under a RRT. All electricity for the RRO customers is purchased in real time from the AESO in the spot market. Under the RRT, the amount of electricity to be economically hedged, the hedging method and the electricity selling prices to be charged to these customers is determined by the EPSP. Under the EPSP, the Company uses financial contracts to economically hedge the RRO requirements and incorporate the price into customer rates for the applicable month. Fixed volumes of electricity are economically hedged using financial contracts-for-differences which are entered into in advance of the month in which the electricity (load) is consumed by the RRO customers. The volume of electricity economically hedged in advance is based on load (usage) forecasts for the consumption month. When consumption varies from forecast consumption patterns (e.g. when the volume of electricity economically hedged is short of actual load requirements or greater than the actual load requirements (long), EPCOR is exposed to prevailing market prices. Exposure to variances in electricity volume can be exacerbated by other events such as unexpected generation plant outages and unusual weather patterns which could impact electricity spot market prices.

Under contracts-for-differences the Company agrees to exchange, with a single creditworthy and adequately secured counterparty, the difference between the AESO electricity spot market price and the fixed contract price for a specified volume of electricity all in accordance with the EPSP. The contracts-for-differences are referenced to the AESO electricity spot price and any movement in the AESO price results in changes in the contract settlement amount.

If the risks of the EPSP were to become untenable, EPCOR could test the market and potentially re-contract the procurement risk under an outsourcing arrangement at a certain cost that would likely increase procurement costs and reduce margins. The Company may enter into additional financial electricity purchase contracts outside the EPSP to further economically hedge the price of electricity.

### **Project Risk**

Our construction and development of water and wastewater treatment facilities, sanitary and stormwater infrastructure and electricity transmission and distribution infrastructure and acquisition activities are subject to various engineering, construction, stakeholder, government and environmental risks. These risks can translate into performance issues, delays and cost overruns. Project delays may defer expected revenues and project cost overruns could make projects uneconomic. Many of the water and wastewater growth projects currently pursued by the Company require design and construction capabilities that are provided by third parties. In order to pursue these projects, strategic partnerships have been established with reputable firms that have an established track record of infrastructure design and construction. Should these partnerships dissolve or are not recognized by the market as a viable approach, the Company's growth plans could potentially be curtailed.

We attempt to mitigate project risks by performing detailed project analysis and due diligence prior to and during construction or acquisition, and by entering into appropriate contracts for various services to be provided as



required. Our ability to complete projects successfully depends upon numerous factors such as weather, civil disobedience, availability of skilled labor, strikes and regulatory matters.

### **Weather and Climate-related Risk**

Weather can have a significant impact on our operations. Melting snow, freeze / thaw cycles and seasonal precipitation in the North Saskatchewan River watershed affect the quality of water entering our Edmonton water treatment plants and the resulting cost of purification.

Extreme weather can cause damage to electricity distribution and transmission equipment and wires, temporarily disrupting the reliable supply of power to customers and can cause unpredictability in the demand for power. Unseasonal temperature changes can cause water main breaks temporarily disrupting the reliable supply of water to customers. Severely cold temperatures can cause natural gas distribution lines to freeze if moisture is present in the natural gas, disrupting service to customers. Extreme weather can cause also cause urban flooding and river flooding. EPCOR is developing a long term Stormwater Integrated Resource Plan for Edmonton that will prioritize infrastructure investments to help mitigate the impact of urban flooding events. EPCOR also has plans to implement measures to mitigate the exposure to river flooding events at two Edmonton drinking water treatment plants and Gold Bar, which are situated in the North Saskatchewan River valley.

A permanent shift in weather patterns due to climate-change, could result in draught conditions reducing raw water supply, or increased precipitation and cooler temperatures during summer months reducing the customer demand for water and electricity, or increased temperatures during winter months reducing customer demand for natural gas.

Climate-related risk could also lead to government policy decisions and new technology development that could reduce demand for the Company's utility products and services.

Financial exposures associated with extreme weather and climate-related are partly mitigated through our insurance programs.

### **Financial Liquidity Risk**

EPCOR's internally generated cash flows from operating activities do not provide sufficient capital to undertake or complete ongoing or future development, enhancement opportunities or acquisition plans and accordingly, the Company requires additional financing from time to time. The ability of the Company to arrange such financing will depend in part upon prevailing market conditions at the time and the Company's business performance. There can be no assurance that debt or equity financing will be available or sufficient to meet these requirements or for other corporate purposes. Furthermore, if financing is available, there can be no assurance that it will be on terms acceptable to the Company. The inability of the Company to access sufficient capital for its operations could have a material adverse effect on the Company's business, prospects and financial condition. Detailed discussion of EPCOR's sources of liquidity is included in Liquidity and Capital Resources in this MD&A.

The Company manages liquidity risk through regular monitoring of cash and currency requirements by preparing short-term and long-term cash flow forecasts and also by matching the maturity profiles of financial assets and liabilities to identify financing requirements. EPCOR's financial risks are governed by a Board-approved financial exposure management policy, which is administered by EPCOR's Treasurer.

### **Counterparty and Credit Risk**

Counterparty and credit risk is the possible financial loss associated with the ability of counterparties to satisfy their contractual obligations to EPCOR.

We manage credit risk and limit exposures through our credit policies and procedures. These include an established credit review, rating and monitoring process, specific terms and limits, appropriate allowance

provisioning and use of credit mitigation strategies, including collateral arrangements.

EPCOR's credit risks are governed by a Board-approved counterparty credit risk management policy, which is administered by EPCOR's Treasurer.

At December 31, 2017, Capital Power back-to-back debt obligation owing to EPCOR was \$174 million, of which \$163 million was repaid to the Company in January 2018 with the remaining \$11 million due to be repaid in June 2018. In the past, significant reliance was placed on the capacity of Capital Power to honor its remaining back-to-back debt obligations to EPCOR. However, with the balance almost entirely repaid, this no longer poses a significant risk to EPCOR.

Exposures to credit risk in our rate-regulated and non-rated-regulated businesses are generally limited to amounts due from customers for services provided but not yet paid for.

Exposure to credit risk for residential RRO customers and commercial customers under default electricity supply rates are generally limited to amounts due from the customers for electricity consumed but not yet paid for. This portfolio is reasonably well diversified with no significant credit concentrations. Historically, credit losses in these customer segments have not been significant and depend in large part on the strength of the economy and the ability of the customers to effectively manage their financial affairs through economic cycles and competitive pressures.

EPCOR's exposure to RRO and default customer credit risk, which is primarily the risk of non-payment for electricity consumed by these end-use customers, is summarized below. The exposures represent the accounts receivable value for this portfolio which is managed at the gross exposure level rather than by individual customer account.

(\$ millions) December 31,	2017	2016
RRO and default supply customers <sup>1</sup>	\$ 126	\$ 116

<sup>1</sup> EPCOR monitors credit risk for this portfolio at the gross exposure level rather than by individual customer account.

The year-over-year increase in exposure primarily relates to higher customer rates.

EPCOR is also exposed to the risk of non-payment for water, natural gas, sanitary and stormwater services provided to rate-regulated and non-rate regulated end-use customers, as summarized below. Exposures represent a 60-day potential accounts receivable value for this portfolio.

(\$ millions) December 31,	2017	2016
Unrated customers	\$ 107	\$ 65
Rated customers <sup>1</sup>	22	22

<sup>1</sup> Rated customers have investment grade credit ratings which are based on the Company's internal criteria and analyses, which take into account, among other factors, the investment grade ratings of external credit rating agencies when available.

While electricity is considered an essential service, EPCOR may experience credit losses in the future should economic conditions deteriorate.

## Billing Error Risk

The customer consumption data used to bill utility customers is voluminous and the sources and types of customer billing data are varied, requiring large, complex systems to process customer billings. In addition, the Company relies on third parties to provide customer meter data in certain circumstances and to produce bills for its U.S. customers. All of this contributes to the potential for billing errors caused by poor customer consumption data quality, billing system computational errors, incorrect customer rates being used or transactions and

adjustments being applied incorrectly to customer accounts. The Company applies numerous manual and automated controls to ensure the quality of customer billings including a routine to identify various exceptions in the electricity meter data used to produce bills.

### **Foreign Exchange Risk**

The Company is exposed to foreign exchange risk on foreign currency denominated transactions, firm commitments, monetary assets and liabilities denominated in a foreign currency and on its net investments in foreign entities.

The Company's financial exposure management policy attempts to minimize economic and material transactional exposures arising from movements in the Canadian dollar relative to the U.S. dollar or other foreign currencies. The Company's direct exposure to foreign exchange risk arises on capital expenditure commitments denominated in U.S. dollars or other foreign currencies and U.S. operations. The Company coordinates and manages foreign exchange risk centrally, by identifying opportunities for naturally occurring opposite movements and then dealing with any material residual foreign exchange risks. The Company's exposure to foreign exchange risk on its investment in foreign entities is partially mitigated by foreign-denominated financing.

The Company may use foreign currency forward contracts to fix the functional currency of its non-functional currency cash flows thereby reducing its anticipated U.S. dollar denominated transactional exposure. The Company looks to limit foreign currency exposures as a percentage of estimated future cash flows.

### **Conflicts of Interest**

Certain conflicts of interest could arise as a result of EPCOR's relationship with the City, EPCOR's sole common shareholder and regulator for water and wastewater treatment and sanitary and stormwater collection utility rates in Edmonton.

### **General Economic Conditions, Business Environment and Other Risks**

The following factors could materially and adversely impact EPCOR's business, prospects, financial condition, results of operations or cash flows: fluctuations in interest rates, product supply and demand, market competition, risks associated with technology, general economic and business conditions, EPCOR's ability to make capital investments and the amounts of capital investments, risks associated with existing and potential future lawsuits and other regulations, assessments and audits (including income tax) against EPCOR and its subsidiaries, political and economic conditions in the geographic regions in which EPCOR and its subsidiaries operate, difficulty in obtaining necessary regulatory approvals, a significant decline in EPCOR's reputation and such other risks and uncertainties described from time to time in EPCOR's reports and filings with the Canadian Securities authorities.

The following table outlines our estimated sensitivity to specific risk factors as at December 31, 2017. Each sensitivity factor provides a range of outcomes assuming all other factors are held constant and current risk management strategies are in place. Under normal circumstances, such sensitivity factors will not be held constant but rather, will change at the same time as other factors are changing. In addition, the degree of sensitivity to each factor will change as the Company's mix of assets and operations subject to these factors changes.

(\$ millions, except as otherwise noted)			
	Change	Annual cash flow	Annual net income
Increase in RRO customers	+2.0%	+0.7	+0.7
Decrease in RRO customers	-2.0%	-0.7	-0.7
Increase in Water Services segment water volumes	+5.0%	+15	+15
Decrease in Water Services segment water volumes	-5.0%	-15	-15
Increase in U.S. Operations segment water volumes	+5.0%	+3	+3
Decrease in U.S. Operations segment water volumes	-5.0%	-3	-3

## Litigation Update

The Company is not involved in any material litigation at this time.

## CONTROLS AND PROCEDURES

For purposes of certain Canadian securities regulations, EPCOR is a venture issuer. As such, it is exempt from certain of the requirements of National Instrument 52-109 Certification of Disclosure in Issuers' Annual and Interim Filings. The Chief Executive Officer and Chief Financial Officer have reviewed the annual information form, annual financial statements and annual MD&A, for the year ended December 31, 2017. Based on their knowledge and exercise of reasonable diligence, they have concluded that these materials fairly present in all material respects the financial condition, results of operations and cash flows of the Company for the periods presented.

## FUTURE ACCOUNTING STANDARD CHANGES

A number of new standards, amendments to standards and interpretations have been issued by the International Accounting Standards Board (IASB) and the International Financial Reporting Interpretations Committee, the application of which is effective for periods beginning on or after January 1, 2018. Those which may be relevant to the Company and may impact the accounting policies of the Company are set out below. The Company does not plan to adopt these standards early.

IFRS 9 - *Financial Instruments* (IFRS 9), which replaces IAS 39 - *Financial Instruments: Recognition and Measurement*, includes a new classification and measurement approach for financial assets that reflects the business model in which they are held and the characteristics of their contractual cash flows. IFRS 9 contains three principal classification categories for financial assets including (i) measured at amortized cost, (ii) fair value through other comprehensive income and (iii) fair value through profit or loss. IFRS 9 also replaces the "incurred loss" model under IAS 39 with a forward looking "expected credit loss" (ECL) model for recognition of impairment on financial instruments. The effective date for implementation of IFRS 9 has been set for annual periods beginning on or after January 1, 2018.

Based on the assessment of the Company's existing financial instruments, the Company does not expect any material impact on the accounting for its financial instruments as a result of the adoption of IFRS 9. The Company expects to record an adjustment to the provision of allowance of doubtful accounts on its trade receivables resulting from the application of the methodology of the calculation prescribed by the new standard. As per the Company's existing policy, the allowance for doubtful accounts is calculated on the overdue balances of trade receivables only, whereas the new impairment model requires the Company to calculate the lifetime ECL on the initial recognition of trade receivables, instead of on the overdue balances only. Accordingly, the Company will be required to recognize the lifetime ECL on all outstanding trade receivables. As the Company has very short credit periods for trade receivables, the Company does not expect any material impact due to implementation of the new requirements in IFRS 9.

The Company will also change the classification of its beneficial interest in the sinking fund with the City, which is currently classified as available-for-sale investment. Since the available-for-sale classification is no longer available under IFRS 9 the Company will re-designate its beneficial interest in sinking fund at fair value through profit or loss. This change is not expected to have a material impact.

IFRS 15 - *Revenue from Contracts with Customers* (IFRS 15), which replaces IAS 11 - *Construction Contracts* and IAS 18 - *Revenue* and related interpretations, is effective for annual periods commencing on or after January 1, 2018. IFRS 15 introduces a new single revenue recognition model for contracts with customers and two approaches to recognizing revenue: at a point in time or over time. The model features a contract-based five-step analysis of transactions to determine whether, how much and when revenue is recognized.

There are two methods by which the new standard can be adopted: (1) a full retrospective approach with a restatement of all prior periods presented, or (2) a modified retrospective approach with a cumulative-effect adjustment recognized in retained earnings as of the date of adoption. The Company will adopt IFRS 15 using the modified retrospective approach with the cumulative effect of the adjustment, if any, recognized as of January 1, 2018, subject to allowable and elected practical expedients.

The Company has performed detailed analysis on each revenue stream that is within the scope of the new standard through review of the underlying contracts with customers to determine the impact of IFRS 15 on the consolidated financial statements. A significant portion of the Company's revenue is generated from providing utility goods and services. The Company will continue to recognize utility revenue over time as the Company's customers simultaneously receive and consume the utility goods and services as they are provided.

The Company is finalizing its review and quantification of IFRS 15 application to contributions from customers and developers. Contributions, which may be in the form of physical assets or financial contributions, help fund infrastructure that will be used by the utility to provide ongoing services to customers. Such contributions are currently recorded as deferred revenue when received and are amortized and recognized as revenue on a straight-line basis over the estimated economic useful lives of the assets to which they relate. The Company is finalizing its review of all contributions recognized as deferred revenue to identify the contributions which will fall under the scope of IFRS 15, including the quantification of the impact of any change in the accounting treatment to contributions that fall within the scope of the new standard. Preliminary analysis suggests that contributions received where the utility will have an ongoing performance obligation with the contributor will fall under the scope of IFRS 15, with the fair value of contributed assets to be recognized as revenue over the period which related services will be provided. However, contributions where the utility has no ongoing performance obligation with the contributor will likely fall outside the scope of IFRS 15, and as a result, the Company is assessing whether a change in accounting treatment is required for these contributions.

The Company is also finalizing its review and quantification of the impact of IFRS 15 on the recognition and presentation of energy sales and energy purchases and system access fees. Any potential adjustments would relate only to the classification of these amounts under IFRS 15 and would not have a material impact on the adjustment recorded under the modified retrospective approach.

For the Energy Services segment, the Company currently recognizes gross revenue from sales of energy, which include collection of third party distribution and transmission charges. All related distribution and transmission costs are recognized as operating expenses under energy purchases and system access fees. The Company is finalizing its position regarding whether the third party distribution and transmission charges to customers will constitute consideration received for fulfillment of a performance obligation or are a flow through charge.

In the Distribution and Transmission segment, the Company currently recognizes gross revenues which include collection of provincial transmission system access service charges. All provincial transmission system access service costs are recognized as operating expenses under energy purchases and system access fees. The

Company is finalizing its position as to whether the provincial transmission system access service costs charged to customers will constitute consideration received for fulfillment of a performance obligation or are a flow through.

For all other contracts with customers, the Company does not expect the implementation of IFRS 15 to have material changes in the timing or amounts of revenues recognized.

As a result of the adoption of the new standard, the Company will be required to include significant disclosures in the financial statements based on the prescribed requirements. These new disclosures will include information regarding the significant judgments used in evaluating how and when revenues are recognized and information related to contract assets and deferred revenues. In addition, IFRS 15 requires that the Company's revenue recognition policy disclosure includes additional detail regarding the various performance obligations and the nature, amount, timing, and estimates of revenues and cash flows generated from contracts with customers. The Company is in the process of preparing its draft disclosures, which will be required in the first quarter of 2018.

IFRS 16 – *Leases* (IFRS 16), which replaces IAS 17 – *Leases* (IAS 17), is effective for annual periods commencing on or after January 1, 2019. IFRS 16 combines the existing dual model of operating and finance leases under IAS 17 into a single lessee model. Under the new single lessee model, a lessee will recognize lease assets and lease liabilities on the statement of financial position initially measured at the present value of unavoidable lease payments. IFRS 16 will also cause expenses to be higher at the beginning and lower towards the end of a lease, even when payments are consistent throughout the term. Leases for duration of twelve months or less and leases of low value assets are exempted from recognition on the statement of financial position. Lessors will continue with a dual lease classification model and the classification will determine how and when a lessor will recognize lease revenue and what assets will be recorded.

The Company is currently reviewing the contracts that are identified as leases or that could be classified as leases under IFRS 16, in order to evaluate the impact of adoption of IFRS 16 on the consolidated financial statements. Based on preliminary assessment, the Company expects that there will be a material impact on its consolidated statements of financial position requiring the recognition of lease assets and lease obligations with respect to its leases for office space, which are currently classified as operating leases.

IFRIC 23 – *Uncertainty over Income Tax Treatments* is effective for annual periods commencing on or after January 1, 2019. The interpretation provides guidance on the recognition and measurement of current and deferred tax assets and liabilities under IAS 12 – *Income Taxes* when there is uncertainty over income tax treatments. The Company does not expect a material impact on initial application of the interpretation however the interpretation may impact the Company's recognition, measurement and disclosure of uncertain tax treatments in the future.

## **CRITICAL ACCOUNTING ESTIMATES**

In preparing the consolidated financial statements, management necessarily made estimates in determining transaction amounts and financial statement balances. The following are the items for which significant estimates were made in the consolidated financial statements.

### **Electricity Revenues, Costs and Unbilled Consumption**

Due to the time lag between customer electricity consumption and receipt of final billing consumption information from the load settlement agents, the Company must use estimates for determining the amount of electricity consumed but not yet billed. These estimates affect accrued revenues and accrued electricity costs of the Energy Services segment. There are a number of variables and judgments required in the computation of these significant estimates, and the underlying electricity settlement processes within EPCOR and the Alberta electric systems are complex. Such variables and judgments include the number of unbilled sites, and the amount of and rate classification of the unbilled electricity consumed. Owing to the factors above and the statutory delays in final

load settlement determinations and information, adjustments to previous estimates could be material. Estimates for unbilled consumption averaged approximately \$48 million at the end of each month in 2017 (2016 - \$51 million). These estimates varied from \$39 million to \$58 million (2016 - \$35 million to \$68 million). Adjustments of estimated revenues to actual billings were not higher than \$7 million per month in 2017 (2016 - \$5 million).

## **Fair Values**

We are required to estimate the fair value of certain assets or obligations for determining the valuation of certain financial instruments, asset impairments, asset retirement obligations and purchase price allocations for business combinations, and for determining certain disclosures. Significant judgment is applied in the determination of fair values including the choice of discount rates, estimating future cash flows, and determining goodwill. Following are the descriptions of the key fair value methodologies relevant for 2017.

Fair values of financial instruments are based on quoted market prices when these instruments are traded in active markets. In illiquid or inactive markets, the Company uses appropriate price modeling to estimate fair value. Fair values determined using valuation models require the use of assumptions concerning the amounts and timing of future cash flows and discount rates.

The Company reviews the valuation of long-lived assets subject to amortization when events or changes in circumstances may indicate or cause a long-lived asset's carrying amount to exceed the total undiscounted future cash flows expected from its use and eventual disposition. An impairment loss, if any, will be recorded as the excess of the carrying amount of the asset over its fair value, measured by either market value, if available, or estimated by calculating the present value of expected future cash flows related to the asset.

Estimates of fair value for long-lived asset impairments are mainly based on depreciable replacement cost or discounted cash flow techniques employing estimated future cash flows based on a number of assumptions, including the selection of an appropriate discount rate. The cash flow estimates will vary with the circumstances of the particular assets or reporting unit and will primarily be based on the lives of the assets, revenues and expenses, including inflation, and required capital expenditures.

## **Income Taxes**

EPCOR follows the asset and liability method of accounting for income taxes. Income taxes are determined based on estimates of our current taxes and estimates of deferred taxes resulting from temporary differences between the carrying values of assets and liabilities in the financial statements and their tax values. Deferred tax assets are assessed and significant judgment is applied to determine the probability that they will be recovered from future taxable income. For example, in estimating future taxable income, judgment is applied in determining the Company's most likely course of action and the associated revenues and expenses. To the extent recovery is not probable a deferred tax asset is not recognized. Estimates of the provision for income taxes and deferred tax assets and liabilities might vary from actual amounts incurred.

Estimated fair values and useful lives are used in determining potential impairments for each long-lived asset, which will vary with each asset and market conditions at the particular time. Similarly, income taxes will vary with taxable income and, under certain conditions, with fair values of assets and liabilities. Accordingly, it is not possible to provide a reasonable quantification of the range of these estimates that would be meaningful to readers.

## **Impact of Current Market Conditions on Estimates**

Although the current condition of the economy has not impacted our methods of estimating accounting values, it has impacted the inputs in those determinations and the resulting values. Future cash flow estimates for assessing long-lived assets (cash generating units or CGUs) for impairment were updated to reflect any increased uncertainties of recoverability. The assessments did not result in any impairment losses because a

large portion of the Company's long-lived assets are subject to rate-regulation. Similarly, the assessment of the useful lives of our long-lived assets did not change since many of our distribution and transmission assets and water assets are amortized based on rates approved by the applicable regulator. Our valuation models for estimating the fair value of long-lived asset impairments depend partly on discount rates which were updated to reflect changes in credit spreads and market volatility. Our methods for determining the allowance for doubtful accounts are based on historical rates of bad debts in relation to the aged accounts receivable balances by customer group for RRO and default customer bases. These analyses did not reveal any significant changes in our assessment of the recoverability of accounts receivable at December 31, 2017.

## OTHER COMPREHENSIVE INCOME

For the three and twelve months ended December 31, 2017 and 2016, the Company's transactions in other comprehensive income included the following:

(\$ millions)	Three months ended December 31,		Twelve months ended December 31,	
	2017	2016	2017	2016
Re-measurement of net defined benefit plans	\$ (5)	\$ (1)	\$ (5)	\$ (1)
Fair value gain on available-for-sale investment in Capital Power	-	14	-	43
Fair value loss on available-for-sale beneficial Interest in sinking fund	-	-	(1)	-
Fair value gain on available-for-sale investment in Capital Power reclassified to net income	-	(30)	(1)	(42)
Unrealized gain (loss) on foreign currency translation	2	10	(30)	(11)
<b>Other comprehensive income (loss)</b>	<b>\$ (3)</b>	<b>\$ (7)</b>	<b>\$ (37)</b>	<b>\$ (11)</b>

## QUARTERLY RESULTS

(Unaudited, \$ millions)		
Quarters ended	Revenue	Net income
December 31, 2017	\$ 572	\$ 87
September 30, 2017	534	75
June 30, 2017	474	56
March 31, 2017	455	38
December 31, 2016	474	88
September 30, 2016	504	76
June 30, 2016	479	67
March 31, 2016	475	78

Events for the past eight quarters compared to the same quarter of the prior year that have significantly impacted net income included:

- December 31, 2017, fourth quarter results included lower net system access service collections, lower EPSP margins, higher depreciation expense due to asset additions, lower recognition of a fair value gain on sale of the remaining investment in Capital Power in January 2017 compared with the fair value gains recognized on sales of the investment in the third and fourth quarter of 2016, no favorable fair value adjustments related to interest rate swaps in 2017 and higher financing expenses. Partially offsetting these decreases were higher water, wastewater and electricity distribution customer rates, income from the Drainage operations, higher



income related to industrial services contracts, higher water volumes in U.S. due to above average temperatures, lower income taxes and higher favorable changes in the fair value of contracts-for-differences.

- September 30, 2017, third quarter results included lower EPSP margins, higher depreciation expense due to asset additions, lower income from industrial services contracts primarily due to the termination of the Suncor financing and operating agreements in 2016, no fair value gain on sale of investment in Capital Power, no dividend income due to the sale of Capital Power shares and lower favorable fair value adjustments related to financial electricity purchase contracts. Partially offsetting these decreases were higher water, wastewater and electricity distribution customer rates, higher net system access service collections and no unfavorable fair value adjustments related to interest rate swaps.
- June 30, 2017, second quarter results included lower income related to industrial services contracts, lower EPSP margins, a loss on sale of surplus land, lower water and wastewater volumes due to higher precipitation in the city of Edmonton, higher water treatment costs due to poor river quality conditions in the North Saskatchewan River and no dividend income due to the sale of Capital Power shares. Partially offsetting these decreases were favorable fair value adjustments related to financial electricity purchase contracts in 2017 and unfavorable fair value adjustments related to interest rate swaps in 2016 with no corresponding transaction in the current year, higher water, wastewater and electricity transmission customer rates and higher net system access service collections.
- March 31, 2017, first quarter results included unfavorable fair value adjustments related to financial electricity purchase contracts and no dividend income due to the sale of Capital Power shares, lower net system access collections, lower gains as a result of sales of surplus land in the first quarter of 2016, lower income related to industrial services contracts and lower EPSP margins. Partially offsetting these decreases were higher water, wastewater and electricity distribution and transmission customer rates and an unfavorable fair value adjustment related to interest rate swaps in the first quarter of 2016.
- December 31, 2016, fourth quarter results included the recognition of the fair value gain resulting from the sale of Capital Power shares, greater favorable fair value adjustments related to financial electricity purchase contracts and interest rate swaps and higher water, wastewater and electricity distribution customer rates, partially offset by lower electricity transmission customer rates, lower billing charge rates, higher depreciation and lower income related to industrial services contracts.
- September 30, 2016 third quarter results included greater favorable fair value adjustments related to financial electricity purchase contracts, the recognition of the fair value gain resulting from the sale of the Capital Power shares, and higher water, wastewater and electricity customer rates, partially offset by lower billing charge rates and higher depreciation expense. In addition, 2015 included an impairment of the Capital Power shares.
- June 30, 2016 second quarter results included lower favorable fair value adjustments related to financial electricity purchase contracts and interest rate swaps and excluded any gains related to Capital Power. These decreases were partially offset by higher water, wastewater and electricity customer rates and higher income related to industrial services contracts.
- March 31, 2016 first quarter results included higher water, wastewater and electricity customer rates, gains on sales of surplus lands, higher income related to industrial services contracts, and higher dividend income from Capital Power. This was partially offset by no equity share of income of Capital Power, and lower favorable fair value adjustments on financial electricity purchase contracts.

## Fourth Quarter Business Segment Information

The business segment information for the corresponding period has been revised to correspond with the new business segments. Additionally the comparative information relating to operating expenses has also been revised, where applicable, to conform to current year presentation.

Three months ended December 31, 2017

	Water Services	Distribution & Transmission	Energy Services	US Operations	Other	Intersegment Elimination	Consolidated
External revenues and other income	\$ 155	\$ 129	\$ 227	\$ 57	\$ 7	\$ -	\$ 575
Inter-segment revenue	-	54	3	-	-	(57)	-
Total revenues and other income	155	183	230	57	7	(57)	575
Energy purchases and system access fees	-	58	201	-	1	(52)	208
Other raw materials and operating charges	24	13	-	11	1	(1)	48
Staff costs and employee benefits expenses	31	19	6	8	13	(1)	76
Depreciation and amortization	37	24	2	12	3	-	78
Franchise fees and property taxes	8	20	-	3	-	-	31
Other administrative expenses	10	4	7	4	9	(3)	31
Operating expenses	110	138	216	38	27	(57)	472
Operating income (loss) before corporate charges	45	45	14	19	(20)	-	103
Corporate income (charges)	(10)	(7)	(4)	(1)	22	-	-
Operating income	35	38	10	18	2	-	103
Finance recoveries (expenses)	(20)	(15)	(1)	(9)	12	-	(33)
Income tax recovery	1	-	-	13	3	-	17
Net income	\$ 16	\$ 23	\$ 9	\$ 22	\$ 17	\$ -	\$ 87
Capital additions	\$ 98	\$ 69	\$ 1	\$ 42	\$ 4	\$ -	\$ 214

Three months ended December 31, 2016 (revised)

	Water Services	Distribution & Transmission	Energy Services	US Operations	Other	Intersegment Elimination	Consolidated
External revenues and other income	\$ 105	\$ 106	\$ 209	\$ 53	\$ 4	\$ -	\$ 477
Inter-segment revenue	-	41	3	-	-	(44)	-
Total revenues and other income	105	147	212	53	4	(44)	477
Energy purchases and system access fees	-	26	184	-	-	(39)	171
Other raw materials and operating charges	29	13	-	12	-	(2)	52
Staff costs and employee benefits expenses	22	21	7	8	10	(1)	67
Depreciation and amortization	18	24	1	10	4	-	57
Franchise fees and property taxes	5	18	-	2	-	-	25
Other administrative expenses	6	5	8	5	8	(2)	30
Operating expenses	80	107	200	37	22	(44)	402
Operating income (loss) before corporate charges	25	40	12	16	(18)	-	75
Corporate income (charges)	(6)	(7)	(3)	(3)	19	-	-
Operating income	19	33	9	13	1	-	75
Finance recoveries (expenses)	(15)	(13)	(1)	(9)	16	-	(22)
Fair value gain on available-for-sale investment in Capital Power reclassified from other comprehensive income	-	-	-	-	30	-	30
Income tax recovery (expense)	2	-	-	(1)	4	-	5
Net income	\$ 6	\$ 20	\$ 8	\$ 3	\$ 51	\$ -	\$ 88
Capital additions	\$ 45	\$ 84	\$ 2	\$ 25	\$ 5	\$ -	\$ 161

## FORWARD - LOOKING INFORMATION

Certain information in this MD&A is forward-looking within the meaning of Canadian securities laws as it relates to anticipated financial performance, events or strategies. When used in this context, words such as “will”, “anticipate”, “believe”, “plan”, “intend”, “target”, and “expect” or similar words suggest future outcomes.

The purpose of forward-looking information is to provide investors with management’s assessment of future plans and possible outcomes and may not be appropriate for other purposes. Material forward-looking information within this MD&A, including related material factors or assumptions and risk factors, are noted in the table below:

Forward-looking Information	Material Factors or Assumptions	Risk Factors
The Company expects to have sufficient liquidity to finance its plans and fund its obligations in 2018.	EPCOR is able to generate the expected cash flow from operations and various means of funding remain available to the Company.	EPCOR’s operations do not generate the expected level of cash flow and / or circumstances arise limiting or restricting the Company’s ability to access funds through the various means otherwise available.
EPCOR’s projected cash requirements for capital project for 2018 includes \$725 million to \$825 million for investment in existing businesses and new business development.	EPCOR is able to complete its 2018 capital expenditure program on time and on budget and no material unplanned business or asset acquisitions are closed in the year.	EPCOR is successful in closing an unplanned acquisition or unforeseen circumstances result in construction delays.
EPCOR’s projected cash requirements for 2018 include \$166 million for common share dividends.	EPCOR is able to generate the expected cash flow from operations and various means of funding remain available to the Company.  The EPCOR Board of Directors does not revise the dividend to the City.	EPCOR is not able to generate the expected cash flow from operations and various means of funding are not available to the Company.  The Board of Directors approves a revised dividend to the City.

The following table provides a comparison between actual results and future-oriented-financial information previously disclosed:

Material 2017 Objectives Previously Disclosed		Actual Result	Explanation of Material Differences from Objectives
<b>Drainage will be transferred under the proposed terms, including the estimated transfer date:</b>			
If Drainage is transferred, EPCOR will assume assets and liabilities.	Assets and liabilities of approximately \$3.3 billion and \$0.7 billion, respectively.	Assets and liabilities of \$3.7 billion and \$2.8 billion respectively (including \$0.6 billion of debt).	The original disclosure only referenced the assumption of Drainage debt related to the transaction. The actual result includes all liabilities assumed in the transaction.
The Company will pay \$75 million to the City over a period of time to be determined by the City to compensate the City for stranded costs related to the transfer.	\$75 million to be paid over time.	Consideration for the transfer included \$75 million of transition cost compensation of which \$8 million was paid on the transfer date, with the remaining \$67 million due over the next five years.	No difference.
EPCOR will become responsible for future capital costs and assume responsibility for current drainage-related City debt through a back-to-back agreement with the City.	Approximately \$600 million to \$650 million in current Drainage-related City debt through a back-to-back agreement with the City.	\$593 million contractual obligation for Drainage-related City debt through a back-to-back agreement with the City.	The actual back-to-back debt was slightly less than anticipated in the original disclosure.
EPCOR expects to increase the dividend paid to the City, subject to Board and Shareholder approval.	Increase the dividend paid to the City by \$20 million in 2018 and by a prorated amount in 2017.	Consistent with EPCOR's commitment to the City, EPCOR's Shareholder approved and increased the EPCOR dividend from \$146 million to \$153 million in 2017 with a further increase to \$166 million in 2018.	No difference.

Material 2017 Objectives Previously Disclosed		Actual Result	Explanation of Material Differences from Objectives
2017 projected cash requirements for investment in existing businesses and new business development.	\$500 million to \$650 million	\$566 million capital expenditures and \$68 million business acquisitions	Within the range

Whether actual results, performance or achievements will conform to the Company's expectations and predictions is subject to a number of known and unknown risks and uncertainties, which could cause actual results to differ from expectations and are discussed in the Risk Factors and Risk Management section above.

Readers are cautioned not to place undue reliance on forward-looking statements as actual results could differ materially from the plans, expectations, estimates or intentions expressed in the forward-looking statements. Except as required by law, EPCOR disclaims any intention and assumes no obligation to update any forward-looking statement even if new information becomes available, as a result of future events or for any other reason.

#### GLOSSARY

<b>ACC</b> means Arizona Corporation Commission	<b>Gold Bar</b> means Gold Bar Wastewater Treatment Facility
<b>AESO</b> means Alberta Electric System Operator	<b>HSE</b> means Health, Safety and Environment
<b>Alectra</b> means Alectra Utilities Corporation	<b>Hughes</b> means Hughes Gas Resources, Inc.
<b>AUC</b> means the Alberta Utilities Commission	<b>IASB</b> means International Accounting Standards Board
<b>Blue Water</b> means Blue Water Project 130 L.P.	<b>IFRS</b> means International Financial Reporting Standards
<b>Capital Power</b> means Capital Power Corporation and its directly and indirectly owned subsidiaries including Capital Power L.P., except otherwise noted or the context otherwise indicates	<b>MCC</b> means Municipally Controlled Corporation
<b>CCWSC</b> means Cross County Water Supply Corporation	<b>MGA</b> means <i>Bill 21: the Modernized Municipal Government Act</i>
<b>Collingwood</b> means Town of Collingwood	<b>NRGL</b> means Natural Resource Gas Limited
<b>Collus PowerStream</b> means Collus Powerstream Utility Service Corp.	<b>OEB</b> means Ontario Energy Board
<b>Drainage</b> means Drainage Utility Services	<b>PBR</b> means Performance Based Regulation

<b>ECL</b> means Expected Credit Loss	<b>RRC</b> means Railroad Commission of Texas
<b>E.L. Smith WTP</b> means E.L. Smith Water Treatment Plant	<b>RRO</b> means Regulated Rate Option
<b>EPEA</b> means <i>Environmental Protection and Enhancement Act</i>	<b>RRT</b> means Rate Regulated Tariff
<b>EPSP</b> means Energy Price Setting Plan	<b>SAIDI</b> means System Average Interruption Duration Index
<b>ERM</b> means Enterprise Risk Management	<b>U.S. EPA</b> means U.S. Environmental Protection Agency

#### **ADDITIONAL INFORMATION**

Additional information relating to EPCOR, including the Company's 2017 Annual Information Form, is available on SEDAR at [www.sedar.com](http://www.sedar.com).