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LIBERTY'S RESPONSE TO COMMISSION STAFF'S FOURTH REQUEST FOR INFORMATION

To: Landon J. Lill
State Bar No. 24092700
(512) 936-7228
(512) 936-7268 (facsimile)
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326
TJ.Harris@puc.texas.gov

RE: PUC Dockets: 47177, 47176, 47175, 47174 – Liberty Utilities Response to Commission Staff s 4th Request for Information Liberty Utilities Response to Commission

Landon,
Attached is Liberty Utilities response to the Commission Staff's 4th Request for Information. This letter is to be applied to all four dockets as the requests for information from the Commission Staff regarding all four dockets are identical.

Respectfully submitted,

By: Mark H. Zeppa

Mark H. Zeppa
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STAFF 4-1: Please show that Liberty Utilities (Woodmark) Corp. and Liberty Utilities (Tall Timbers) Corp. meets the leverage test in 16 Texas Administrative Code (TAC) § 24.11(e)(2).

RESPONSE: Liberty Utilities (Sub) Corp., the parent company of Liberty Utilities (Woodmark) Corp. and Liberty Utilities (Tall Timbers) Corp., has a debt to equity ratio of 0.3 which satisfies the leverage test in 16 Texas Administrative Code (TAC) § 24.11(e)(2)(A). See attached financials.

OPUC RFI 1-2 Please provide a detailed listing of all assets included in the application including original costs of asset, service life, date of installation, and accumulated depreciation. Please make sure to provide an indication of which system each asset serves.

RESPONSE: Please see response to Staff 1-35 and Staff 1-58.

Prepared by: Alysia Maya, Rates Analyst

Sponsored by: Gerry Becker, Rates and Regulatory Manager

OPUC RFI 1-3 Please provide copies of all invoices, trending analyses, and documentation utilized to support the claimed asset values.

RESPONSE: Please see attached scans (236 files) 61 files are confidential

Prepared by: Alysia Maya, Rates Analyst

Sponsored by: Gerry Becker, Rates and Regulatory Manager

OPUC RFI 1-4 Please provide all analyses used by Liberty Utilities in arriving at the Base Equivalent Rate, and per unit conversions relied upon in the tariff in determining the fees charged to each customer classification type (such as triplex is .68 per unit).

RESPONSE: For the calculation of the Base Equivalent Rate ("BER"), please see Applicants' response and documents provided in response to Staff RFI 1-1 and, in particular, Schedule VI Rate Design and Fairchild Schedules 1, 8, and 9. Please see also Mr. Fairchild's direct and supplemental direct testimony discussing preparation of the Application and schedules.

For the per unit conversions relied upon in the tariff, Applicants simply brought forward the BER/matrix rate design structure previously approved as just and reasonable by the TCEQ in prior Liberty Utilities (Tall Timbers Sewer) Corp. and Liberty Utilities (Woodmark Sewer) Corp. rate proceedings and included it in the Application. Applicants have made these provisions identical going forward within the two tariffs whereas they contained slight differences previously. Otherwise, the rate design structure was left intact. The specific origins of this rate design structure are unclear, but it has been part of the Applicants' respective tariffs for many years and Applicants' understanding is that it is grounded in the TCEQ wastewater treatment facility design rules and a graphic now found at 30 TAC §217.32(a)(3). This graphic was included with Applicants' Response to Order No. 4 as **Attachment F**. The Applicants are simply trying to get both systems on a similar rate structure going forward utilizing this previously approved concept and uniform terminology.

Prepared by: Gerry Becker, Rates and Regulatory Manager

Sponsored by: Matthew Garlick, President, AZ/TX
Bruce Fairchild, Fincap

OPUC RFI 1-5 Please provide all analyses, facts, and considerations that prove that these systems meet statutory requirements to qualify for multiple systems under a single tariff.

RESPONSE: TWC §13.182(d) requires a Commission preference for rates under a consolidated tariff by region. The implementing rule for that provision is currently found at 16 TAC §24.21(l) stating, "The regulatory authority, where practicable, shall consolidate the rates by regions for applications submitted under TWC §13.187 or §13.1871." This Application was submitted under TWC §13.1871. Separately, TWC §13.145(a)(1) permits consolidation of more than one system under a single tariff if: (1) the systems under the tariff are substantially similar in terms of facilities, quality of service, and cost of service; and (2) the tariff provides for rates that promote water conservation for single-family residences and landscape irrigation. The second factor does not apply to Applicants who are sewer-only providers as they do not have the ability to implement rate control over water consumption. The implementing rule for TWC §13.145(a) is currently found at 16 TAC §24.21(k).

Past TCEQ water/sewer utility rate decisions inform us that substantial similarity does not mean identical and, for cost of service, requires a forward-looking view over time rather than a "snap-shot" view at a single point in time, such as a historic test year. There is a legislative preference for regionalization and, therefore, the bar for consolidation is low. Consolidation under a single tariff here is appropriate and warranted because Liberty Tall Timbers and Liberty Woodmark are part of the Liberty Utilities structure and operated under a shared services model using the same employees, resources, and funding. Service costs for Applicants are substantially similar in terms of facilities, quality of services, and costs of service.

Applicant witnesses have provided information supporting consolidation under these factors in various testimonies and exhibits. Please see all Application schedules supporting requested rates, consolidated revenue requirement/rates, and separated revenue requirements/rates, and the following: Application, Garlick PFT, at LU 000161, Application, Fairchild PFT, at LU 000279, Supplemental Garlick PFT filed on February 17, 2017 (Including MG-4), Supplemental Becker PFT filed on February 17, 2017, and Supplemental Fairchild PFT filed on February 17, 2017. This information may be supplemented later in this proceeding through rebuttal testimony or otherwise. [

Prepared by: Geoffrey P. Kirshbaum, Attorney, Terrill & Waldrop

Sponsored by: Matthew Garlick, President, AZ/TX
Bruce Fairchild, Fincap (check and verify Bruce Ok with this)

OPUC RFI 1-6 Please provide all studies, analysis, negotiations documentation, offers, and information pertaining to alternate service options evaluated by the utility in making decisions to increase capacity of infrastructure.

RESPONSE: Please see response to Tyler 1-32, 1-33, 1-34, 1-35, 1-37, 1-38, 1-39, 1-40, and 1-42. Please see also Application, Garlick PFT, at LU 000161-000198, MG-1, MG-2, and MG-3.

Prepared by: Alysia Maya, Rates Analyst

Sponsored by: Gerry Becker, Rates and Regulatory Manager

OPUC RFI 1-7	Please provide capacities (plant, pump, storage, etc) and line sizes (diameter and length) of all facilities claimed in the application.
RESPONSE:	Please see attached files: RFI 1-7 Pipe Sizes RFI 1-7 LS Capacities of WM_TT Pump Stations [Does this include WWTP capacity info?]

Prepared by: Beecher Vaillancourt, Operations Manager

Sponsored by: Matthew Garlick, President, AZ/TX

OPUC RFI 1-8 Please provide maps of the systems that indicate the location of all facilities claimed in the application.

RESPONSE: Please see attached file:
OPUC 1-8 TallTimbers-WoodmarkUtilitiesWMc.pdf

Prepared by: Bhaskar Kolluri, Project Manager

Sponsored by: Matthew Garlick, President, AZ/TX

OPUC RFI 1-9 Please provide plat maps of the subdivisions served by the systems that indicate all current and future planned lots. Please provide number of lots to be built out in each subdivision/section.

RESPONSE: Please see attached files

OPUC 1-9 TT WM 6
OPUC 1-9 WM 7
OPUC 1-9 WM 9
OPUC 1-9 WM 10
OPUC 1-9 WM 11
OPUC 1-9 WM 12
OPUC 1-9 WM CCN Map
OPUC 1-9 WM8
OPUC 1-9 TT 1
OPUC 1-9 TT & WM Full Map
OPUC 1-9 TT 2
OPUC 1-9 TT 3
OPUC 1-9 TT 4
OPUC 1-9 TT 5
OPUC 1-9 TT 13
OPUC 1-9 TT 14
OPUC 1-9 TT CCN Map

Prepared by: Beecher Vaillancourt, Operations Manager

Sponsored by: Matthew Garlick, President, AZ/TX

OPUC RFI 1-10 Please provide all regulatory Commission orders whereby the affiliated transactions/cost allocation of the parent company has been reviewed by other regulatory agencies of Liberty Utilities Affiliates.

RESPONSE: OPUC RFI 1-10 was clarified through conference with counsel for OPUC. Pursuant to the clarification received, please see attached files:
OPUC 1-10 Liberty Calpeco Decision 16-12-024 Application 15-05-008.pdf
OPUC 1-10 Liberty Energy North Order No 25797 June 2015.pdf
OPUC 1-10 Liberty Georgia GRAM Order 2015 Docket 34734.pdf
OPUC 1-10 Liberty Litchfield Decision 74437.pdf
OPUC 1-10 Liberty Pine Bluff Order No 8 Docket 14-020-U.pdf
OPUC 1-10 Liberty Black Mountain Decision 75510.pdf
OPUC 1-10 Liberty BV-RR (15-0367 et al.) Decision No. 75809.pdf

Prepared by: Alysia Maya, Rates Analyst

Sponsored by: William Killeen, Director, Regulatory Strategy

Consolidated Financial Statements of

Liberty Utilities (Sub) Corp.

For the years ended December 31, 2017 and 2016

INDEPENDENT AUDITORS' REPORT

To the Board of Directors of

Algonquin Power & Utilities Corp.

We have audited the accompanying consolidated financial statements of **Liberty Utilities (Sub) Corp.**, which comprise the consolidated balance sheets as at December 31, 2017 and 2016, and the consolidated statements of operations, equity and cash flows for the years then ended, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the consolidated financial statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with United States generally accepted accounting principles, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of **Liberty Utilities (Sub) Corp.** as at December 31, 2017 and 2016, and the results of its operations and its cash flows for the years then ended in conformity with United States generally accepted accounting principles.

Ernst & Young LLP

Chartered Professional Accountants
Licensed Public Accountants
Toronto, Canada
April 23, 2018

Liberty Utilities (Sub) Corp.
Consolidated Balance Sheets

(thousands of U.S. dollars)	December 31, 2017	December 31, 2016
ASSETS		
Utility plant		
Utility plant	$ 307,369	$ 287,323
Less accumulated depreciation	(94,627)	(86,001)
	212,742	201,322
Construction work-in-progress	$ 11,911	$ 22,918
Utility plant, net (note 4)	224,653	224,240
Intangible assets (note 5)	17,922	18,593
Goodwill	1,189	1,189
Regulatory assets (note 6)	2,466	2,611
Restricted cash	9,455	9,951
Long-term investment and note receivable (note 7)	2,820	2,701
Other assets (note 11)	29	—
Current assets		
Cash and cash equivalents	—	556
Accounts receivable, net (note 3)	9,289	7,864
Current portion of regulatory assets (note 6)	379	478
Prepaid expenses	875	484
	10,543	9,382
	$ 269,077	$ 268,667

See accompanying notes to consolidated financial statements

Liberty Utilities (Sub) Corp.
Consolidated Balance Sheets

(thousands of U.S dollars)	December 31, 2017	December 31, 2016
LIABILITIES AND SHAREHOLDER'S EQUITY		
Shareholder's equity		
Shareholder's capital (note 12)	$ 143,748	$ 143,748
Accumulated deficit	(13,549)	(23,859)
Accumulated other comprehensive loss	(117)	(117)
Total shareholder's equity	130,082	119,772
Long-term debt (note 9)	34,672	39,966
Deferred tax liability (note 8)	12,705	26,695
Regulatory liabilities (note 6)	9,673	—
Advances in aid of construction (note 14)	26,396	33,370
Contingent consideration	1,036	1,036
Other long-term liabilities (note 10)	10,673	10,209
Pension benefits (note 11)	—	38
Current liabilities		
Accounts payable	16,333	1,066
Accrued liabilities	5,559	24,408
Interest payable	21	46
Due to related parties (note 13)	13,923	5,836
Regulatory liabilities (note 6)	2,700	—
Current portion of other long-term liabilities (note 10)	169	380
Current portion of advances in aid of construction (note 14)	135	524
Current portion of long-term debt (note 9)	5,000	5,321
	43,840	37,581
Commitments and contingencies (note 15)		
	$ 269,077	$ 268,667

See accompanying notes to consolidated financial statements

Liberty Utilities (Sub) Corp.
Consolidated Statements of Operations

(thousands of U.S. dollars)	Year ended December 31, 2017	2016
Revenue		
Water reclamation and distribution	$ 54,786	$ 52,019
Expenses		
Operations and maintenance	25,393	24,221
Depreciation of utility plants	13,226	12,032
Amortization of intangible assets	671	669
Other amortization	357	261
Taxes other than income taxes	2,235	2,207
	41,882	39,390
Operating income	12,904	12,629
Interest expense	3,354	3,616
Other income	(1,177)	(1,344)
Write down of long lived assets and other losses	4,071	121
	6,248	2,393
Earnings before income taxes	6,656	10,236
Income tax expense (recovery) (note 8)		
Current	12	12
Deferred	(3,666)	3,861
	(3,654)	3,873
Net income	$ 10,310	$ 6,363
Other comprehensive income		
Change in unrealized pension, net of tax expense for the year ended December 31, 2017 of $nil (2016: $34)	—	56
Comprehensive income	**$ 10,310**	$ 6,419

See accompanying notes to consolidated financial statements

Liberty Utilities (Sub) Corp.
Consolidated Statements of Equity

(thousands of U.S. dollars)	Shareholder's capital	Accumulated deficit	Accumulated other comprehensive loss	Total
Balance, December 31, 2015	$ 143,748	$ (30,222)	$ (173)	$ 113,353
Net income	—	6,363	—	6,363
Other comprehensive income:				
Change in pension obligation, net of income tax	—	—	56	56
Balance, December 31, 2016	$ 143,748	$ (23,859)	$ (117)	$ 119,772
Net income	—	10,310	—	10,310
Other comprehensive income:				
Change in pension obligation, net of income tax	—	—	—	—
Balance, December 31, 2017	$ 143,748	$ (13,549)	$ (117)	$ 130,082

See accompanying notes to consolidated financial statements

Liberty Utilities (Sub) Corp.
Consolidated Statements of Cash Flows

(thousands of U.S. dollars)	Year ended December 31, 2017	2016
Cash provided by (used in):		
Operating Activities		
Net earnings	$ 10,310	$ 6,363
Items not affecting cash:		
Depreciation of utility plants	13,226	12,032
Amortization of intangible assets	671	669
Other amortization, net	449	334
Pension expense	(67)	(47)
Cost of equity funds used for construction purposes	(354)	(547)
Equity income	(118)	(125)
Write down of long lived assets	4,071	121
Deferred taxes	(3,666)	3,861
Changes in non-cash operating items (note 16)	4,660	7,237
	29,182	29,898
Financing Activities		
Decrease in long-term debt	(5,707)	(5,169)
Increase in other long-term liabilities	6,353	1,337
Decrease in other long-term liabilities	(323)	(1,214)
	323	(5,046)
Investing Activities		
Decrease (Increase) in restricted cash	496	(982)
Additions to utility plants	(30,557)	(23,314)
	(30,061)	(24,296)
(Decrease) increase in cash and cash equivalents	(556)	556
Cash and cash equivalents, beginning of year	556	—
Cash and cash equivalents, end of year	$ —	$ 556

Supplemental disclosure of cash flow information:	**2017**	**2016**
Cash paid during the period for interest expense	$ 2,838	$ 3,591
Non-cash transactions: Utility plants in accruals	$ 14,550	$ 17,677

See accompanying notes to consolidated financial statements

Liberty Utilities (Sub) Corp. ("LUS" or the "Company"), formerly known as Liberty Water Co., is the owner and holding company for 21 water supply and wastewater collection treatment utilities in the United States of America providing water supply and wastewater collection treatment services to approximately 80,000 customers in the states of Arizona, Texas, Missouri, and Illinois. The Company is owned by Liberty Utilities Co. ("LUC" or the "Parent").

The regulated utility operating companies owned by the Company are subject to rate regulation generally overseen by the public utility commissions of the states in which they operate.

1. Significant accounting policies

(a) Basis of preparation

The accompanying consolidated financial statements and notes have been prepared in accordance with generally accepted accounting principles in the United States ("U.S. GAAP") and follow disclosure required under Regulation S-X provided by the U.S. Securities and Exchange Commission.

The Company's operating results are subject to seasonal fluctuations that could materially impact quarter-to-quarter operating results and as thus, one quarter's operating results are not necessarily indicative of a subsequent quarter's operating results. The Company's revenues fluctuate depending on demand for water. During drier, hotter periods of the year, which occurs generally in the summer, demand for water is generally higher than during cooler, wetter periods of the year.

(b) Basis of consolidation:

The accompanying consolidated financial statements and notes have been prepared in accordance with generally accepted accounting principles in the United States ("U.S. GAAP") and are presented in U.S. dollars.

(c) Accounting for rate regulated operations:

The utility operating companies owned by the Company are subject to rate regulation generally overseen by the public utility commissions of the states in which they operate ("the Regulator"). The Regulator provides the final determination of the rates charged to customers. The Company's utility operating companies are accounted for under the principles of U.S. Financial Accounting Standards Board ASC Topic 980 Regulated Operations ("ASC 980"). Under ASC 980, regulatory assets and liabilities that would not be recorded under U.S. GAAP for non-regulated entities are recorded to the extent that they represent probable future revenues or expenses associated with certain charges or credits that will be recovered from or refunded to customers through the rate making process. Included in Note 6, Regulatory matters, are details of regulatory assets and liabilities and their current regulatory treatment.

In the event the Company determines that its net regulatory assets are not probable of recovery, it would no longer apply the principles of the current accounting guidance for rate-regulated enterprises and would be required to record an after-tax, non-cash charge or credit against income for any remaining regulatory assets or liabilities, respectively. The impact could be material to the Company's reported financial condition and results of operations.

The Company's accounts are maintained in accordance with the Uniform System of Accounts prescribed by the National Association of Regulatory Utility Commissioners.

(d) Cash and cash equivalents

Cash and cash equivalents include all highly liquid instruments with an original maturity of three months or less.

1. **Significant accounting policies (continued)**

(e) Restricted cash

Cash reserves segregated from the Company's cash balances are maintained in accounts administered by a separate agent and disclosed separately as restricted cash in these consolidated financial statements. The Company cannot access restricted cash without the prior authorization of parties not related to LUS.

(f) Accounts receivable

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The Company maintains an allowance for doubtful accounts for estimated losses inherent in its accounts receivable portfolio. In establishing the required allowance, management considers historical losses adjusted to take into account current market conditions and customers' financial condition, the amount of receivables in dispute, and the receivables aging and current payment patterns. Account balances are charged against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. The Company does not have any off-balance sheet credit exposure related to its customers.

(g) Utility plant

Utility plant are recorded at cost. Project development costs, including expenditures for preliminary surveys, plans, investigations, environmental studies, regulatory applications and other costs incurred for the purpose of determining the feasibility of capital expansion projects, are capitalized either as utility plant or regulatory asset when it is determined that recovery of such costs through regulated revenue of the completed project is probable.

The costs of acquiring or constructing utility plant assets include the following: materials, labour, contractor and professional services, construction overhead directly attributable to the capital project (where applicable), and allowance for funds used during construction ("AFUDC").

AFUDC represents the cost of borrowed funds (allowance for borrowed funds used during construction) and a return on other funds (allowance for equity funds used during construction). Under ASC 980, an allowance for funds used during construction projects that are included in rate base is capitalized. This allowance is designed to enable a utility to capitalize financing costs during periods of construction of property subject to rate regulation. The interest capitalized that relates to debt reduces interest expense on the consolidated statements of operations. The AFUDC capitalized that relates to equity funds is recorded as other income on the consolidated statements of operations.

	2017	2016
AFUDC capitalized on regulated property:		
Allowance for borrowed funds	$ 36	$ 49
Allowance for equity funds	354	547
Total	$ 390	$ 596

Improvements that increase or prolong the service life or capacity of an asset are capitalized. Maintenance and repair costs are expensed as incurred.

Depreciation of utility plant in service is based on the estimated useful lives of the depreciable assets in each category and is determined using the straight-line method.

(in thousands of U.S. dollars)

1. **Significant accounting policies (continued)**

g. Utility plant (continued)

The ranges of estimated useful lives and the weighted average useful lives are summarized below:

	Range of useful lives		Weighted average useful lives	
	2017	**2016**	**2017**	**2016**
Utility Plant	8-50	8-50	36	36
Equipment, office furniture and improvements	5-5	5-5	5	5

Contributions in aid of construction ("CIAC") represent amounts contributed by customers and governments for the cost of utility plant assets. It also includes amounts initially recorded as advances in aid of construction (note 14) but where the advance repayment period has expired. These contributions are recorded as a reduction in the cost of utility plant assets, with subsequent depreciation calculated to give effect to the net cost.

In accordance with regulator-approved accounting policies, when depreciable property, plant and equipment of the Company is replaced or retired, the original cost plus any removal costs incurred (net of salvage) are charged to accumulated depreciation with no gain or loss reflected in results of operations. Gains and losses will be charged to results of operations in the future through adjustments to depreciation expense.

h. Intangible assets and goodwill:

Customer relationships acquired in business combinations are amortized on a straight-line basis over their estimated life of 40 years.

Goodwill represents the excess of the purchase price of an acquired business over the fair value of the net assets acquired. Goodwill is not included in the rate-base on which regulated utilities are allowed to earn a return and is not amortized.

As at September 30 of each year, the Company assesses qualitative and quantitative factors to determine whether it is more likely than not that the fair value of a reporting unit to which goodwill is attributed is less than its carrying amount. If it is more likely than not that a reporting unit's fair value is less than its carrying amount or if a quantitative assessment is elected, the Company calculates the fair value of the reporting unit. The carrying amount of the reporting unit's goodwill is considered not recoverable if the carrying amount of the reporting unit as a whole exceeds the reporting unit's fair value. An impairment charge is recorded for any excess of the carrying value of the goodwill over the implied fair value. Goodwill is tested for impairment between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount.

i. Impairment of long-lived assets

The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable.

Recoverability of assets expected to be held and used is measured by comparing the carrying amount of an asset to undiscounted expected future cash flows. If the carrying amount exceeds the recoverable amount, the asset is written down to its fair value.

j. Notes receivable:

Notes receivable are financial assets with fixed or determined payments that are not quoted in an active market. Notes receivable are initially recorded at cost, which is generally face value. Subsequent to acquisition, the notes receivable are recorded at amortized cost using the effective interest method. The Company acquired these notes receivable as long-term investments and does not intend to sell these instruments prior to maturity. Interest from long-term investments is recorded as earned.

An allowance for impairment loss on the note receivable is recorded if it is expected that the Company will not collect all principal and interest contractually due. The impairment is measured based on the present value of expected future cash flows discounted at the effective interest rate of the note receivable.

1. **Significant accounting policies (continued)**

k. Meter deposits and hook-up fees:

Meter deposits result from deposits paid for the installation of meters. These amounts are refunded over 10 years.

Hook-up fees are amounts authorized by the Arizona Corporation Commission which the regulated utility must charge to each new connection to the water or wastewater system. The cash amounts are held in restricted bank accounts, until used for certain prescribed purposes, namely expanding the capacity of the respective system. Hook-up fees are typically considered CIAC under regulatory rate making. The funds will be booked to other liabilities until they are spent. At that point it will be converted to CIAC and amortized.

l. Pension and other post-employment plans

The Company has established defined contribution pension plan and defined benefit pension plan for its employees. Employer contributions to the defined contribution pension plans are expensed as employees render service. The Company recognizes the funded status of its defined benefit pension plans on the consolidated balance sheets. The Company's expense and liabilities are determined by actuarial valuations, using assumptions that are evaluated annually as of December 31, including discount rates, assumed rates of return, compensation increases, turnover rates and healthcare cost trend rates. The impact of modifications to those assumptions and modifications to prior services are recorded as actuarial gains and losses in accumulated other comprehensive income ("AOCI") and amortized to net periodic cost over future periods using the corridor method. The costs of the Company's pension for employees are expensed over the periods during which employees render service and are recognized as part of operation and maintenance expenses in the consolidated statements of operations.

m. Recognition of revenue

The Company's revenue is generally derived from rates established by the regulatory commissions in the jurisdictions in which the utility operates. The Company regularly files applications designed to increase water distribution and wastewater treatment rates to allow for a recovery of operating costs and a return on and recovery of regulatory assets. Rate case applications are normally subject to regulatory approval by the various regulatory commissions in the jurisdictions in which the utility operates.

Water reclamation and distribution revenue is recorded when water is processed or delivered to customers. At the end of each month, the water delivered and wastewater collected from the customers from the date of their last meter read to the end of the month is estimated and the corresponding unbilled revenue is calculated. These estimates of unbilled revenue are based on the ratio of billable days versus unbilled days, amount of water procured and collected during that month, historical customer class usage patterns, and current tariffs.

On occasion, a utility is permitted to implement new rates that have not been formally approved by the regulatory commission, which are subject to refund. The Company recognizes revenue based on the interim rate and if needed, establishes a reserve for amounts that could be refunded based on experience for the jurisdiction in which the rates were implemented.

Revenue is recorded net of sales tax.

1. Significant accounting policies (continued)

n. Income taxes

Income taxes are accounted for using the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. A valuation allowance is recorded against deferred tax assets to the extent that it is considered more likely than not that the deferred tax asset will not be realized. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in earnings in the period that includes the date of enactment. Income tax credits are treated as a reduction to current income tax expense in the year the credit arises or future periods to the extent that realization of such benefit is more likely than not.

The organizational structure of LUS and its subsidiaries is complex and the related tax interpretations, regulations and legislation in the tax jurisdictions in which they operate are continually changing. As a result, there can be tax matters that have uncertain tax positions. The Company recognizes the effect of income tax positions only if those positions are more likely than not to be sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely to be realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs.

o. Financial instruments

Accounts receivable and note receivable are measured at amortized cost. Long-term debt is measured at amortized cost using the effective interest method, adjusted for the amortization or accretion of premiums or discounts.

Transaction costs that are directly attributable to the acquisition of financial assets are accounted for as part of the asset's carrying value at inception. Transaction costs related to a recognized debt liability are presented in the consolidated balance sheets as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts and premiums. Deferred financing costs, premiums and discounts on long-term debt are amortized using the effective interest method.

p. Fair value measurements

The Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. The Company determines fair value based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market. When considering market participant assumptions in fair value measurements, the following fair value hierarchy distinguishes between observable and unobservable inputs, which are categorized in one of the following levels:

- Level 1 Inputs: Unadjusted quoted prices in active markets for identical assets or liabilities accessible to the reporting entity at the measurement date.
- Level 2 Inputs: Other than quoted prices included in Level 1, inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the asset or liability.
- Level 3 Inputs: Unobservable inputs for the asset or liability used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date.

q. Commitments and contingencies

Liabilities for loss contingencies arising from claims, assessments, litigation, fines, and penalties and other sources are recorded when it is probable that a liability has been incurred and the amount can be reasonably estimated. Legal costs incurred in connection with loss contingencies are expensed as incurred.

1. Significant accounting policies (continued)

r. Use of estimates

The preparation of consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of these consolidated financial statements and the reported amounts of revenue and expenses during the year. Actual results could differ from those estimates. During the years presented, management has made a number of estimates and valuation assumptions, including the useful lives and recoverability of property, plant and equipment, intangible assets and goodwill; the recoverability of notes receivable and long-term investments; the recoverability of deferred tax assets; assessments of unbilled revenue; pension; timing effect of regulated assets and liabilities; contingencies related to environmental matters; and, the fair value of financial instruments. These estimates and valuation assumptions are based on present conditions and management's planned course of action, as well as assumptions about future business and economic conditions. Should the underlying valuation assumptions and estimates change, the recorded amounts could change by a material amount.

2. Recently issued accounting pronouncements

(a) Recently adopted accounting pronouncements

The FASB issued ASU 2016-17 Consolidation (Topic 810): Interests Held through Related Parties That Are under Common Control. This update amends the consolidation guidance on how a reporting entity that is the single decision maker of a VIE should treat indirect interests in the entity held through related parties that are under common control with the reporting entity when determining whether it is the primary beneficiary of that VIE. The adoption of this update in the first quarter of 2017 had no impact on the Company's consolidated financial statements.

(b) Recent accounting guidance not yet adopted

The FASB issued ASU 2018-02, Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income to allow a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act. The update is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years . Early application is permitted in any interim period after issuance of the update. The Company is currently assessing the impacts of this update.

The FASB issued ASU 2017-07 Compensation—Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Post-retirement Benefit Cost, to improve the reporting of defined benefit pension cost and post-retirement benefit cost ("net benefit cost") in the financial statements. This update requires the service cost component to be reported in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net benefit cost are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations. The update will also only allow the service cost component to be eligible for capitalization when applicable. The Company will adopt this guidance effective January 1, 2018. Following the effective date of this ASU, the Company expects its regulated operations to only capitalize the service costs component and therefore no regulatory to U.S. GAAP reporting differences are anticipated. The Company intends to apply the practical expedient for retrospective application on the consolidated statement of operations.

The FASB issued ASU 2017-05 Other Income—Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets. The update clarifies the scope of the standard as well as provides additional guidance on partial sales of nonfinancial assets. The update is effective for fiscal years and interim periods beginning after December 15, 2017. Early adoption is permitted however the update must be adopted at the same time as ASU 2014-09. No impact on the consolidated financial statements is expected from the adoption of this update.

2. Recently issued accounting pronouncements (continued)

(b) Recent accounting guidance not yet adopted (continued)

The FASB issued ASU 2017-04 Business Combinations (Topic 350): Intangibles - Goodwill and Other (Topic 350) Simplifying the Test for Goodwill Impairment. The update is intended to simplify how an entity is required to test goodwill for impairment by eliminating Step 2 from the goodwill impairment test. Step 2 measures a goodwill impairment loss by comparing the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill. The standard is effective for fiscal years and interim periods beginning after December 15, 2019.

The FASB issued ASU 2016-18 Statement of Cash Flows (Topic 230): Restricted Cash to eliminate current diversity in practice in the classification and presentation of changes in restricted cash on the statement of cash flows. The standard is effective for fiscal years and interim periods beginning after December 15, 2017. The Company currently present changes in restricted cash as investing activities. The adoption of this standard will change the presentation of restricted cash on the consolidated statements of cash flows.

The FASB issued ASU 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory. The new standard requires the recognition of current and deferred income taxes for an intra-entity transfer of an asset other than inventory. Current GAAP prohibits the recognition of current and deferred income taxes on these transactions until the asset has been sold to an outside party. The standard is effective for fiscal years and interim periods beginning after December 15, 2017. Early adoption is permitted. No impact on the consolidated financial statements is expected from the adoption of this update.

The FASB issued ASU 2016-15 Statement of Cash Flows (Topic 230) Classification of Certain Cash Receipts and Cash Payments in order to eliminate current diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The standard is effective for fiscal years and interim periods beginning after December 15, 2017. Early adoption is permitted. No impact on the consolidated financial statements is expected from the adoption of this Update.

The FASB issued ASU 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments to provide financial statement users with more decision-useful information about the expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. To achieve this objective, the amendments in this update replace the incurred loss impairment methodology in current GAAP with a methodology that reflects expected credit losses. The standard is effective for fiscal years and interim periods beginning after December 15, 2019. Early adoption for fiscal years and interim periods beginning after December 15, 2018 is permitted. The Company is currently in the process of evaluating the impact of adoption of this standard on its consolidated financial statements. The Company does not expect a significant impact on its consolidated financial statements as a result of the adoption of this Update.

The FASB issued ASU 2016-02, Leases (Topic 842) to increase transparency and comparability among organizations utilizing leases. This ASU requires lessees to recognize the assets and liabilities arising from all leases on the balance sheet, but the effect of leases in the statement of operations and the statement of cash flows is largely unchanged. The FASB issued an amendment to ASC Topic 842 which permits companies to elect an optional transition practical expedient to not evaluate existing land easements under the new standard if the land easements were not previously accounted for under existing lease guidance. The FASB also voted to amend ASC Topic 842 to allow companies to elect not to restate their comparative periods in the period of adoption when transitioning to the standard. The standard is effective for fiscal years and interim periods beginning after December 15, 2018. Early adoption is permitted.

The Company is in the process of evaluating the impact of adoption of this standard on its financial statements and disclosures. The Company held training sessions with the finance team and is currently in the process of creating an inventory of its lease contracts and analyzing the terms and conditions under the requirements of this new standard. The Company continues to monitor FASB amendments to ASC Topic 842.

The FASB issued ASU 2016-01, Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities to simplify the measurement, presentation, and disclosure of financial instruments. The standard is effective for fiscal years and interim periods beginning after December 15, 2017. Early adoption is permitted. The presentation of unrealized gains/ losses from the Company's available-for-sale investments will change on the consolidated statement of comprehensive income. Certain disclosures with regards to financial liabilities will change based on the updated requirements.

(in thousands of U.S. dollars)

2. Recently issued accounting pronouncements (continued)

(b) Recent accounting guidance not yet adopted (continued)

The FASB issued a revenue recognition standard codified as ASC 606, Revenue from Contracts with Customers. This issued accounting standard provides accounting guidance for all revenue arising from contracts with customers and affects all entities that enter into contracts to provide goods or services to their customers unless the contracts are in the scope of other U.S. GAAP requirements, such as the leasing literature. The core principal of the accounting guidance is that an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASC 606 is expected to require significantly expanded disclosures regarding the qualitative and quantitative information of the Company's nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. This new revenue standard is required to be applied for fiscal years and interim periods beginning after December 15, 2017 using either a full retrospective approach for all periods presented in the period of adoption or a modified retrospective approach. The Company has not elected to early adopt.

The Company has completed its impact assessment. At this point, the Company expects the adoption of Topic 606 will have an immaterial impact on the consolidated financial statements and the pattern of revenue recognition. The Company also evaluated the disclosure requirements and determined that the disaggregation of revenue information required by the new standard will not have a significant impact on the Company's information gathering processes and procedures as the revenue information required by the standard is consistent with historical revenue information gathered by the Company for financial reporting purposes. The Company intends to adopt the new revenue recognition standard using the modified retrospective method.

3. Accounts receivable

Accounts receivable as of December 31, 2017 include unbilled revenue of $5,493 (December 31, 2016 - $4,779). Accounts receivable as of December 31, 2017 are presented net of allowance for doubtful accounts of $31 (December 31, 2016 - $30).

4. Utility plant

Utility plant consists of the following:

	2017	2016
Land	$ **10,103**	$ 6,106
Utility plants	**386,690**	359,253
Contributions in aid of construction (CIAC)	**(89,424)**	(78,036)
	307,369	287,323
Accumulated depreciation	**(115,641)**	(104,691)
Accumulated depreciation, CIAC	**21,014**	18,690
	212,742	201,322
Construction work in progress	**11,911**	22,918
Net utility plant	$ **224,653**	$ 224,240

Water distribution and wastewater assets include expansion costs of $1,000 on which the Company does not currently earn a return.

(in thousands of U.S. dollars)

5. Intangible assets

Intangible assets consist of the following:

	2017	2016
Customer relationships - cost	$ **26,751**	$ 26,751
Accumulated amortization	**(8,829)**	(8,158)
Net book value	$ **17,922**	$ 18,593

6. Regulatory matters

The Company's regulated utility operating companies are subject to regulation by the public utility commissions of the states in which they operate. The respective public utility commissions have jurisdiction with respect to rate, service, accounting procedures, issuance of securities, acquisitions and other matters. These utilities operate under cost-of-service regulation as administered by these state authorities. The Company's regulated utility operating companies are accounted for under the principles of ASC 980. Under ASC 980, regulatory assets and liabilities that would not be recorded under U.S. GAAP for non-regulated entities are recorded to the extent that they represent probable future revenue or expenses associated with certain charges or credits that will be recovered from or refunded to customers through the rate setting process.

At any given time, the Company can have several regulatory proceedings underway. The financial effects of these proceedings are reflected in the consolidated financial statements based on regulatory approval obtained to the extent that there is a financial impact during the applicable reporting period.

In March 2017, the Arizona Corporate Commission approved a rate increase of $152 for Entrada Del Oro Sewer, effective April 1, 2017.

On November 21, 2016, the Arizona Corporation Commission approved a Final Order for the Bella Vista Water System and Rio Rico Water & Sewer System of a combined revenue increase of $1,935 effective November 1, 2016.

On April 22, 2016, the Arizona Corporation Commission approved a Final Order for the Black Mountain Sewer System of a $175 annual revenue increase effective May 1, 2016.

Regulatory assets and liabilities consist of the following:

	2017	2016
Regulatory assets		
Rate case costs (a)	$ **1,384**	$ 1,371
Taxes (b)	**246**	898
Other	**1,215**	820
Total regulatory assets	**2,845**	3,089
Less current regulatory assets	**(379)**	(478)
Non-current regulatory assets	$ **2,466**	$ 2,611
Regulatory liabilities		
Taxes (b)	$ **9,673**	$ —
Other (c)	**2,700**	—
Total regulatory liabilities	**12,373**	—
Less current regulatory liabilities	**(2,700)**	—
Non-current regulatory liabilities	$ **9,673**	$ —

(in thousands of U.S. dollars)

6. Regulatory matters (continued)

(a) Rate case costs

The costs to file, prosecute and defend rate case applications are referred to as rate case costs. These costs are capitalized and amortized over the period of rate recovery granted by the regulator.

(b) Taxes

The income taxes regulatory assets and liabilities represent income taxes recoverable through future revenues required to fund flow-through deferred income tax liabilities and amounts owed to customers for deferred taxes collected at a higher rate than the current statutory rates.

The Tax Cuts and Jobs Act ("the Act') was enacted on December 22, 2017. Among other provisions, the Act reduces the corporate income tax rate from 35% to 21%. An increase to regulatory liability was recorded for excess deferred taxes probable of being refunded to customers of $9,673

(c) Other

Other regulatory assets and liabilities represent probable future revenue or expenses associated with certain charges or credits that will be recovered from or refunded to customers, respectively.

7. Long-term investment and note receivable

Long-term investments consist of the following:

	2017	2016
Silverleaf Resorts loan, interest at 15.48% maturing July 2020	**$ 2,022**	$ 2,022
Other	**798**	679
	$ 2,820	$ 2,701

On July 29, 2010, the Company made an investment in its Hill Country facility, a part of Silverleaf Resorts Inc.'s ("SRI") facilities in Comal County, Texas. The investment of $2,022 was made under an agreement with SRI to increase the capacity of a wastewater treatment facility to support the growth of the utility. This investment has been recorded in utility plant as additional capacity conveyed by SRI together with note receivable for funds advanced by the Company.

The note has a 10-year term and bears interest at 15.48%. The note is repayable in cash to the extent expansion does not form part of the rate base of the utility during the 10-year term. To the extent that the cost of the expansion becomes part of the rate base of the utility, the note will be assigned as payment to SRI for the expansion costs with the excess received in cash.

The above note is secured by the underlying assets of the facility.

(in thousands of U.S. dollars)

8. Income taxes

The provision for income taxes in the consolidated statements of operations represents an effective tax rate different than the statutory rate of 36.03% (2016 - 38,89%). The differences are as follows:

	2017	2016
Expected income tax expense at statutory rate	**$ 2,399**	$ 3,981
Increase (decrease) resulting from:		
Allowance for equity funds used during construction	**67**	122
U.S. tax reform	**(4,435)**	—
Adjustment relating to prior periods	**(1,659)**	(346)
State taxes	**12**	12
Rate change	**(36)**	104
Other	**(2)**	—
Income tax expense	**$ (3,654)**	$ 3,873

On December 22, 2017, the US Tax Cuts and Jobs Act of 2017 (the Act) was signed into legislation. The Act includes a broad range of legislative changes including a reduction of the US federal corporate income tax rate from 35% to 21% effective January 1, 2018, limitations on the deductibility of interest and 100% expensing of qualified property. The Act provides an exemption to regulated utilities from the limitations on the deductibility of interest and also does not permit regulated utilities to immediately expense 100% of the cost of new investments in qualified property.

As a result of the Act being enacted during 2017, the Company is required to revalue its deferred income tax assets and liabilities based on the rates they are expected to reverse at in the future, which is generally 21% for federal tax purposes. The company was able to make reasonable estimates of the impact of the Act and has recorded provisional amounts for the remeasurement of deferred taxes. The Company has also reduced its regulated net deferred income tax liabilities by a provisional amount of $9,673 and recorded an equivalent increase to net regulatory liability since the benefit of lower taxes is probable of being returned to customers by order of the applicable regulator (note 6 (b)).

The Company is still analyzing certain aspects of the Act, which could potentially affect the measurement of these balances or potentially give rise to new deferred tax amounts. Further adjustments, if any, will be recorded by the Company during the measurement period in 2018 as permitted by SEC Staff Accounting Bulletin 118, Income tax Accounting Implications of the Tax Cuts and Jobs Act.

(in thousands of U.S. dollars)

8. Income taxes (continued)

The tax effect of temporary differences between the financial statement carrying amounts of assets and liabilities and their respective tax bases that give rise to significant portions of the deferred tax assets and deferred tax liabilities as at December 31,2017 and 2016 are presented below:

		2017		2016
Deferred tax assets:				
Net operating loss carry-forward	$	**8,595**	$	9,551
Tax credits		**220**		381
Total deferred tax assets		**8,815**		9,932
Deferred tax liabilities:				
Utility plant depreciation		**(19,390)**		(28,644)
Intangible assets amortization		**(4,233)**		(6,861)
Other		**2,103**		(1,122)
Total deferred tax liabilities		**(21,520)**		(36,627)
Net deferred liabilities	$	**(12,705)**	$	(26,695)

Deferred income taxes are classified in the consolidated financial statements as:

		2017		2016
Non-current deferred income tax liability	$	**(12,705)**	$	(26,695)

9. Long-term debt

Long-term debt consists of the following as of December 31:

	Weighted average coupon	Maturity		Par value		2017		2016
Senior unsecured utility notes	**5.61%**	**2017 - 2020**	**$**	**40,000**	**$**	**39,672**	$	45,287
Less current portion						**(5,000)**		(5,321)
					$	**34,672**	$	39,966

Long-term debt issued at a subsidiary level relating to a specific operating facility is generally collateralized by the respective facility with no other recourse to the Company. The funds are primarily restricted for use on capital projects related to the respective utility plant.

The senior unsecured utility notes contain certain covenants and restrictions such as income available for debt service, revenue objective, debt service coverage, and capitalization ratio. The Company is in compliance with these covenants as at December 31, 2017.

On February 8, 2017, the $707 Bella Vista Water unsecured notes were fully repaid.

Principal payments due in the next three years and thereafter are as follows:

	2018		2019		2020		Thereafter		Total
$	5,000	$	5,000	$	30,000	$	—	$	40,000

As of December 31, 2017, the Company had accrued $21 in interest expense (2016 - $53). Interest paid on the long-term debt in 2017 was $2,838 (2016 - $3,591).

(in thousands of U.S. dollars)

10. Other long-term liabilities

Other long-term liabilities consist of the following:

		2017		2016
Meter deposits	$	**1,759**	$	1,623
Hook-up fees		**9,083**		8,966
		10,842		10,589
Less current portion		**(169)**		(380)
	$	**10,673**	$	10,209

Hook-up fees represent deposits on future line extension developments.

11. Pension benefits

The Company provides defined contribution pension plans to its employees. The Company's contributions for 2017 were $224 (2016 - $223).

The Company initiated a defined benefit cash balance pension plan covering substantially all its new employees and current employees at its water utilities, under which employees are credited with a percentage of base pay plus a prescribed interest rate credit.

(in thousands of U.S. dollars)

11. Pension benefits (continued)

(a) Net pension obligation

The following table sets forth the projected benefit obligations, fair value of plan assets, and funded status of the Company's plans as of December 31:

	Pension benefits	
	2017	**2016**
Change in projected benefit obligation		
Projected benefit obligation, beginning of year	$ **1,512**	$ 1,204
Service cost	**374**	374
Interest cost	**64**	54
Actuarial (gain)/loss	**95**	(70)
Benefits paid	**(160)**	(50)
Projected benefit obligation, end of year	**1,885**	1,512
Change in plan assets		
Fair value of plan assets, beginning of year	**1,474**	1,029
Actual loss on plan assets	**175**	80
Employer contributions	**425**	415
Benefits paid	**(160)**	(50)
Fair value of plan assets, end of year	**1,914**	1,474
Unfunded status	**29**	(38)
Amounts recognized in the consolidated balance sheet consist of:		
Non-current assets (liabilities)	**29**	(38)
Net amount recognized	$ **29**	$ (38)

The accumulated benefit obligation for the pension plans was $1,661 and $1,347 as of December 31, 2017 and 2016, respectively.

The amounts recognized in AOCI before taxes were as follows:

	Pension benefits
Balance, January 1, 2016	$ 167
Current year net actuarial loss	(77)
Balance at December 31, 2016	90
Current year net actuarial loss	—
Balance at December 31, 2017	$ 90

The net actuarial loss for the defined benefit pension plans that will be amortized from AOCI into net periodic benefit cost over the next fiscal year is $nil.

(in thousands of U.S. dollars)

11. Pension benefits (continued)

(b) Assumptions

Assumptions used to determine net benefit cost for 2017 and 2016 were as follows:

	Pension benefits 2017	Pension benefits 2016
Discount rate	**3.70%**	3.73%
Expected return on assets	**5.50%**	5.50%
Rate of compensation increase	**3.00%**	3.00%

Assumptions used to determine net benefit obligation 2017 and 2016 were as follows:

	Pension benefits 2017	Pension benefits 2016
Discount rate	**3.36%**	3.70%
Rate of compensation increase	**3.00%**	3.00%

The mortality assumption for December 31, 2017 was updated to the projected generationally scale MP-2017, adjusted to reflect the ultimate improvement rates in the 2017 Social Security Administration intermediate assumptions.

In selecting an assumed discount rate, the Company uses a modeling process that involves selecting a portfolio of high-quality corporate debt issuances (AA- or better) whose cash flows (via coupons or maturities) match the timing and amount of the Company's expected future benefit payments. The Company considers the results of this modeling process, as well as overall rates of return on high-quality corporate bonds and changes in such rates over time, to determine its assumed discount rate.

The rate of return assumptions are based on projected long-term market returns for the various asset classes in which the plans are invested, weighted by the target asset allocations.

(c) Benefit costs

The following table lists the components of net benefit costs for the pension plans recorded as part of operations and maintenance expenses in the consolidated statements of operations.

	Pension benefits 2017	Pension benefits 2016
Service cost	**$ 374**	$ 374
Interest cost	**64**	54
Expected return on plan assets	**(81)**	(60)
Net benefit cost	**$ 357**	$ 368

(d) Plan assets

The Company's investment strategy for its pension plan assets is to maintain a diversified portfolio of assets with the primary goal of meeting long-term cash requirements as they become due.

The Company's target asset allocation is 50% in equity securities and 50% in debt securities.

(in thousands of U.S. dollars)

11. Pension benefits (continued)

(d) Plan assets (continued)

The fair values of investments as of December 31, 2017, by asset category, are as follows

Asset Class		Level 1	Percentage
Equity securities	$	957	50%
Debt securities	$	957	50%

As at December 31, 2017, the funds do not hold any material investments in Algonquin Power and Utilities Corp, LUS's indirect parent company.

(e) Cash flows

The Company expects to contribute $447 to its pension plan in 2018.

The expected benefit payments over the next ten years are as follows:

	2018	2019	2020	2021	2022	2023-2027
Pension plan	$ 336	$ 127	$ 145	$ 194	$ 216	$ 1,249

12. Shareholders' capital

The Company is authorized to issue 10,000 common shares. The holders of the common shares are entitled to dividends, if, as and when declared by the Board of Directors to one vote per share at meetings of the holders of common shares; and upon liquidation, dissolution, or winding up of the Company to receive pro rata the remaining property and assets of the Company; subject to the rights of any shares having priority over the common shares, of which none are authorized or outstanding.

Number of common shares outstanding is as follows

	2017
Common shares, beginning of year	**2,343**
Shares issued during the year	—
Common shares, end of year	**2,343**

13. Related party transactions

Due to related parties represent advances for current operating costs and reimbursement for management and accounting services provided by entities related to LUS as well as other third party costs incurred by entities related to LUS on behalf of the Company. These amounts do not bear interest and have no fixed repayment terms. Total amounts allocated for the year ended December 31, 2017 are included in the operations and maintenance expenses and were $2,638 (2016: $2,641).

Periodically there are advances due to and from related parties to manage working capital. Such advances do not bear interest and are due on demand. As of December 31, 2017, the amounts payable to related parties total $13,923 (December 31, 2016 - $5,836).

(in thousands of U.S. dollars)

14. Advances in aid of construction

The Company has various agreements with real estate development companies (the "developers") conducting business within the Company's service territories, whereby funds are advanced to the Company by the developers to assist with funding some or all of the costs of the development. These amounts are recorded as advances in aid of construction on the consolidated balance sheets.

In many instances, developer advances are subject to refund but the refund is non-interest bearing. Refunds of developer advances are made over periods ranging from 10 years. Advances not refunded within the prescribed period are not required to be repaid. After the prescribed period has lapsed, any remaining unpaid balance is transferred to CIAC and recorded as an offsetting amount to the cost of utility plant. In 2017, $9,143 (2016 - 16,943) was transferred from advances in aid of construction to CIAC (note 4).

15. Commitments and contingencies

(a) Contingencies

The Company is involved in various claims and litigation arising out of the ordinary course and conduct of its business. Although such matters cannot be predicted with certainty, management does not consider the the Company's exposure to such litigation to be material to these consolidated financial statements. Accruals for any contingencies related to these items are recorded in the consolidated financial statements at the time it is concluded that its occurrence is probable and the related liability is estimable.

(b) Commitments

The Company has outstanding purchase commitments for capital project commitments and operating leases.

Detailed below are estimates of future commitments that exist at December 31, 2017:

	Year 1	Year 2	Year 3	Year 4	Year 5	Thereafter	Total
Capital projects	$ 1,938	$ —	$ —	$ —	$ —	$ —	$ 1,938
Operating leases	249	73	—	—	—	—	322
Total	$ 2,187	$ 73	$ —	$ —	$ —	$ —	$ 2,260

16. Non-cash operating items

The changes in non-cash operating items consist of the following:

	2017	2016
Accounts receivable	**$ (1,425)**	$ (490)
Related party balances	**8,087**	4,945
Prepaid expenses	**(391)**	137
Accounts payable and accrued liabilities	**(478)**	4,120
Net regulatory assets	**(1,133)**	(1,475)
	$ 4,660	$ 7,237

(in thousands of U.S. dollars)

17. Financial instruments

(a) Fair value of financial instruments

	December 31, 2017		December 31, 2016	
	Carrying amount	**Fair Value**	**Carrying amount**	**Fair Value**
Notes receivable	$ **2,022**	$ **2,643**	$ 2,022	$ 2,872
Long-term debt	$ **39,672**	$ **42,707**	$ 45,287	$ 49,599

The Company has determined that the carrying value of its short-term financial assets and liabilities approximates fair value as of December 31, 2017 and December 31, 2016 due to the short-term maturity of these instruments.

Notes receivable fair values (Level 2) have been determined using a discounted cash flow method, using estimated current market rates for similar instruments adjusted for estimated credit risk as determined by management.

The Company's Level 2 fair value of long-term debt has been determined using a discounted cash flow method and current interest rates.

Advances in aid of construction have a carrying value of $26,531 as of December 31, 2017 (2016 - $33,894). Portions of these non-interest bearing instruments are payable annually through 2027, including new customer connections, customer consumption levels, and future rate increases. However, amounts not paid by the contract expiration dates become non-refundable. Their relative fair values cannot be accurately estimated because future refund payments depend on several variables, the fair value of these amounts would be less than their carrying value due to the non-interest bearing feature.

Fair value estimates are made at a specific point in time, using available information about the financial instrument. These estimates are subjective in nature and often cannot be determined with precision.

The Company's accounting policy is to recognize transfers between levels of the fair value hierarchy on the date of the event or change in circumstances that caused the transfer. There was no transfer into or out of Level 1, Level 2 or Level 3 during the year ended December 31, 2017 or 2016.

(b) Risk management

In the normal course of business, the Company is exposed to financial risks that potentially impact its operating results. The Company employs risk management strategies with a view of mitigating these risks to the extent possible on a cost effective basis. The Company does not enter into derivative financial agreements for speculative purposes.

This note provides disclosures relating to the nature and extent of the Company's exposure to risks arising from financial instruments, including credit risk and liquidity risk, and how the Company manages those risks.

Credit risk

Credit risk is the risk of an unexpected loss if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Company's financial instruments that are exposed to concentrations of credit risk are primarily cash and cash equivalents and accounts receivable. The Company limits its exposure to credit risk with respect to cash equivalents by ensuring available cash is deposited with its senior lenders all of which have a credit rating of A or better.

Credit risk related to the accounts receivable balance of $9,289 is spread over thousands of customers. The Company has processes in place to monitor and evaluate this risk on an ongoing basis including background credit checks and security deposits from new customers. In addition, the state regulators allow for a reasonable bad debt expense to be incorporated in the rates and therefore recovered from rate payers.

(in thousands of U.S. dollars)

17. Financial instruments (continued)

(b) Risk management (continued)

Credit risk (continued)

In addition, the Company continuously monitors the creditworthiness of the counterparties to its foreign exchange, interest rate, and energy derivative contracts prior to settlement, and assesses each counterparty's ability to perform on the transactions set forth in the contracts. The counterparties consist primarily of financial institutions. This concentration of counterparties may impact our overall exposure to credit risk, either positively or negatively, in that the counterparties may be similarly affected by changes in economic, regulatory or other conditions.

As of December 31, 2017, the Company's maximum exposure to credit risk for these financial instruments was as follows:

		2017
Cash and cash equivalents and restricted cash	$	9,455
Accounts receivable		9,320
Allowance for doubtful accounts		(31)
Long-term investment and note receivable		2,820
	$	21,564

Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company's approach to managing liquidity risk is to ensure, to the extent possible, that it will always have sufficient liquidity to meet liabilities when due.

The Company's liabilities mature as follows:

	Due less than 1 year	Due 2-3 years	Due 4-5 years	Due after 5 years	Total
Long-term debt obligations	$ 5,000	$ 35,000	$ —	$ —	$ 40,000
Advances in aid of construction	135	—	—	26,396	26,531
Interest on long-term debt obligations	2,100	3,360	—	—	5,460
Purchase obligations	35,815	—	—	—	35,815
Other obligations	169	—	—	10,673	10,842
Total obligations	$ 43,219	$ 38,360	$ —	$ 37,069	$ 118,648

18. Subsequent events

The Company has evaluated subsequent events from the balance sheet date through April 23, 2018, the date at which the financial statements were available to be issued, and determined that there are no other item to be disclosed.