Knoxville Utilities Board

Consolidated

Financial Statements and Supplemental Information
June 30, 2018 and 2017

KUB Board of Commissioners

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Knoxville Utilities Board
Index
June 30, 2018 and 2017

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Independent Auditors' Report

Board of Commissioners
Knoxville Utilities Board
Knoxville, Tennessee

We have audited the accompanying financial statements of the Knoxville Utilities Board (KUB), a component unit of the City of Knoxville, Tennessee, as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, which collectively comprise KUB's basic financial statements as listed in the index.

Management's Responsibility for the Financial Statements

KUB's management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to KUB's preparation and fair presentation of the 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 KUB's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the 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 financial statements referred to above present fairly, in all material respects, the financial position of KUB as of June 30, 2018 and 2017, and the changes in financial position and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 13 to the financial statements, effective July 1, 2017, KUB adopted new accounting guidance, Governmental Accounting Standards Board Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. Our opinion is not modified with respect to that matter.

Board of Commissioners
Knoxville Utilities Board
Knoxville, Tennessee

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3 through 27 and the required supplementary information on pages 70 through 74 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise KUB's basic financial statements. The Schedule of Expenditures of Federal Awards and State Financial Assistance, as required by the audit requirements of Title 2 U.S. Code of Federal Regulations (CFR) Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance), is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The Schedule of Expenditures of Federal Awards and State Financial Assistance is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Expenditures of Federal Awards and State Financial Assistance is fairly stated in all material respects in relation to the basic financial statements as a whole.

The supplemental information on Schedule 3 has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 25, 2018, on our consideration of KUB's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering KUB's internal control over financial reporting and compliance.

Coulter & Justus, P.C.

Knoxville, Tennessee
October 25, 2018

Knoxville Utilities Board (KUB), comprised of the Electric Division, Gas Division, Water Division, and Wastewater Division (Divisions), is reported as a component unit enterprise fund in the financial statements of the City of Knoxville. KUB's responsibility is to oversee the purchase, production, distribution, and processing of electricity, natural gas, water, and wastewater services. A seven-member Board of Commissioners (Board) governs KUB. The Board has all powers to construct, acquire, expand, and operate the Divisions. It has full control and complete jurisdiction over the management and operation of the Divisions including setting rates. KUB's accounts are maintained in conformity with the Uniform System of Accounts of the Federal Energy Regulatory Commission (FERC), the Uniform System of Accounts of the National Association of Regulatory Utility Commissioners (NARUC), and the Governmental Accounting Standards Board (GASB), as applicable.

This discussion and analysis is designed to (a) assist the reader in focusing on significant financial issues, (b) provide an overview of KUB's financial activity, (c) identify major changes in KUB's financial position, and (d) identify any financial concerns.

The Management Discussion and Analysis (MD&A) focuses on the fiscal year ending June 30, 2018 activities, resulting changes and current known facts, and should be read in conjunction with KUB's consolidated financial statements.

Consolidated Highlights

System Highlights

As of June 30, 2018, KUB served 459,797 customers. KUB added 3,493 new customers in fiscal year 2018, representing growth of less than one percent.

KUB's electric system experienced a record peak in demand of 1,328 megawatt hours in February 2015. KUB's electric system had a strong year for reliability with only 1.77 hours of service interruption for the average customer in fiscal year 2018. The natural gas system's peak demand occurred January 2018 at 140,204 dekatherms. The previous natural gas system peak was 136,356 dekatherms in February 2015.

The first of three-annual rate increases for each Division previously adopted by the KUB Board went into effect in fiscal year 2018. These rate increases provide additional revenue to help fund each system's respective Century II infrastructure program.

KUB's electric system was impacted by a storm event in May 2017 that resulted in a cost of $1.2 million to the system. KUB received $0.9 million in reimbursements in fiscal year 2018 from the Federal Emergency Management Agency (FEMA) to offset the cost of the 2017 event.

KUB's energy sales in fiscal year 2018 were impacted by a colder winter in Knoxville. Natural gas sales increased approximately 20.8 percent from the prior year, while milder temperatures in the spring and summer months offset electric sales volumes from the cold winter.

KUB's Compressed Natural Gas (CNG) Public Fueling Station opened in fiscal year 2017 to promote clean burning fuel in the Knoxville area. It joined 13 other CNG stations in Tennessee cities.

KUB's electric system received a Diamond level designation by the American Public Power Association's (APPA) Reliable Public Power Provider (RP3) program, the highest level of recognition of the program.

KUB's natural gas system was named to the American Public Gas Association's (APGA) System Operational Achievement Recognition (SOAR) Program, reflecting KUB's focus on system integrity, continuous improvement, safety and employee development.

KUB's treatment plants continue to meet high standards of operation. KUB's Kuwahee, Eastbridge, Loves Creek, and Fourth Creek wastewater treatment plants were awarded Operational Excellence awards from the Tennessee Kentucky Water Environment Association for having one or less permit violations within the 2017 calendar year. The treatment plants additionally won awards at various levels based on performance from the National Association of Clean Water Agencies for peak performance. The Eastbridge wastewater treatment plant achieved a Platinum award for continued outstanding compliance performance over multiple years. Loves Creek wastewater treatment plant won a Gold Award for having zero violations in calendar year 2017. Kuwahee and Fourth Creek wastewater treatment plants won Silver Awards for having one violation in 2017.

KUB continued to maintain Platinum certification with the National Biosolids Partnership following a rigorous review process and independent audit that was conducted in December 2017. (Biosolids are nutrient-rich organic matter produced by wastewater treatment and is a registered fertilizer with the Tennessee Department of Agriculture).

Century II Infrastructure Program

Century II is KUB's proactive long-range program to improve and maintain the electric, natural gas, water and wastewater systems for its customers. It includes maintenance and asset replacement strategies for each system and establishes sustainable replacement cycles. Century II moves KUB into its second century of service by improving each system through sound planning, resource allocation, and continued, but accelerated, investment.

KUB's Century II programs were resumed in 2011, after a break due to the economic recession. At that time, the KUB Board endorsed ten-year funding plans for the electric and water systems, which included a combination of rate increases and debt issues to fully fund the Century II programs. The Board adopted three years of electric and water rate increases to help fund those plans. All three of those rate increases, adopted in 2011, have gone into effect.

In 2013, the Board extended the same long-term funding approach for Century II to include the natural gas and wastewater systems, although the Wastewater Division had maintained a ten-year funding plan since the inception of the federal Consent Decree in 2005. The Board formally endorsed and adopted by resolution ten-year funding plans for the natural gas and wastewater systems, which included a combination of rate increases and debt issues.

In April 2014, KUB management provided the Board an updated assessment of the overall condition of each utility system, including a recommendation for annual rate increases for each division for the next three fiscal years. In June 2014, the Board approved the three annual rate increases for all KUB Divisions, of which all three rate increases have gone into effect.

The natural gas system South Loop project was completed in October 2015, which included the installation of a new 8-mile transmission main in the southwest portion of KUB's service territory. The South Loop provides additional system capacity to meet the increased natural gas demands of the University of Tennessee, in addition to other potential growth opportunities in that portion of KUB's gas service territory.

In fiscal year 2015, KUB concluded the smart grid pilot project, of which a portion of the project was funded by a United States Department of Energy Smart Grid Investment Grant (SGIG). This grant was received by KUB in 2009 as part of the American Reinvestment and Recovery Act (ARRA). Based upon the success of that pilot, KUB formed a plan to move forward with a Century II Grid Modernization initiative, which includes advanced metering for all KUB customers, a telecommunication system linking critical KUB infrastructure, and an increased investment in automation technology to help operate KUB's energy and water distribution systems. Over the course of ten years, KUB plans to spend $124.4 million in this effort. The deployment is funded in large part by debt issues and system revenues. As of June 30, 2018, KUB completed the second year of the advanced meter deployment. KUB replaced approximately 40 percent of its electric meters, installed network communication devices on 33 percent of its gas meters, and replaced 46 percent of its water meters, spending approximately $41.9 million on the Grid Modernization deployment.

In June 2017, the Board adopted the next three annual rate increases for all KUB Divisions. The first of the three approved electric rate increases went into effect in October 2017, generating $10.9 million in additional annual revenue. The remaining two electric rate increases are effective in October 2018 and October 2019 and are expected to provide an additional $11.2 million and $5.7 million in annual revenue, respectively, to assist with the funding of the Electric Division. The first of the three approved gas rate increases went into effect in October 2017, generating $2.2 million in additional annual revenue. The remaining two gas rate increases are effective in October 2018 and October 2019 and are expected to provide an additional $2.3 million each in annual revenue to assist with the funding of the Gas Division. The first of the three approved water rate increases went into effect July 2017 generating $3.1 million of additional annual Water Division revenue, while the July 2018 and July 2019 rate increases are expected to provide an additional $3.1 million and $3.3 million in annual revenue, respectively, to help fund the Water Division. The first of the three approved wastewater rate increases went into effect in July 2017, generating $4.3 million in additional annual revenue. The remaining two rate increases are effective in July 2018 and July 2019 and are expected to provide an additional $4.2 million and $4.5 million in annual revenue, respectively, to assist with the funding of the Wastewater Division.

In fiscal year 2017, KUB completed the transition to a new disinfection system at the Mark B. Whitaker (MBW) Water Treatment plant.

KUB is currently in the process of implementing a Water Plant Redundancy initiative to ensure that high quality, reliable water service will be provided to customers over the long term. KUB maintains a single water treatment plant for its system. In lieu of building a second treatment facility to ensure capacity will be available to meet the needs of current and future water customers, KUB will invest approximately $126 million in various redundant facilities at the site of its existing Mark B. Whitaker Water Treatment Plant over the next 11 years.

For the fiscal year, KUB stayed on track with its overall Century II capital budget and production goals. The electric system replaced 2,418 poles and 15 miles of underground electric cable. In the natural gas system, 6 miles of gas steel main were replaced. In the water system, 6.4 miles of galvanized water main and 6.6 miles of cast iron water main were replaced. In the wastewater system, 16 miles of main were rehabilitated or replaced.

Consent Decree

In February 2005, a Consent Decree was entered into federal court regarding the operation of KUB's wastewater system. Under the terms of the Consent Decree, the remediation of identified sanitary sewer overflows (SSOs) on KUB's wastewater system had to be completed by June 30, 2016. KUB completed all the requirements of the Consent Decree for the collection system two years in advance of the deadline.

The Consent Decree also required KUB to perform an evaluation of the wet weather performance and capacity of its wastewater treatment plants. In July 2007, KUB submitted a Composite Correction Plan (CCP) for its wastewater treatment plants to EPA for review. The development and filing of the CCP was a requirement of the federal order of February 2005. The CCP includes recommended improvements to KUB's Kuwahee and Fourth Creek treatment plants to address wet weather capacity issues noted in prior assessments. The EPA approved the CCP in January 2009 including a recommended schedule of plant improvements that extends beyond the expiration date of the original Consent Decree. An amendment to the Consent Decree incorporating and establishing this schedule was agreed to by all parties and was entered on June 23, 2009. The purpose of the Amendment is to allow KUB to complete a portion of work outlined in the CCP after the Consent Decree deadline of June 30, 2016. The CCP provides for a biologically enhanced high-rate clarification (the BEHRC) secondary treatment system to be installed at the Fourth Creek treatment plant by June 30, 2018 and at the Kuwahee treatment plant by June 30, 2021. KUB successfully completed the installation of the BEHRC system at the Fourth Creek treatment plant ahead of schedule in April 2018. Work is currently ongoing at the Kuwahee treatment plant and remains on schedule for completion before the deadline of June 30, 2021. The total cost of such improvements is estimated to be approximately $58 million.

KUB's funding plan for the Consent Decree includes long-term bonds and a series of rate increases phased in over the term of the order. Bond proceeds fund all types of wastewater capital projects, the majority of which are related to the Consent Decree. As of June 30, 2018, the Wastewater Division had issued $530 million in bonds to fund system capital improvements since the inception of the Consent Decree. The Board approved two 50 percent rate increases, which went into effect in April 2005 and January 2007. The Board also approved an 8 percent rate increase, which was effective in September 2008, two 12 percent rate increases, which were effective in April 2011 and October 2012, three 6 percent rate increases effective October 2014, October 2015 and October 2016 and three 5 percent rate increases effective July 2017, July 2018, and July 2019. KUB anticipates additional bond issues and rate increases over the next decade to help fund wastewater capital improvements.

KUB successfully completed the first cycle of Maintenance Operation Management (MOM) requirements one year before the deadline by inspecting manholes and gravity mains, smoke testing gravity mains, performing required inspections of pump stations and the related force mains, and completing all Corrective Action Plan/Engineering Report (CAP/ER) projects. KUB initiated the second MOM cycle that continues to focus on the prevention of SSOs. As part of the Century II initiative, formally known as the PACE10 program, KUB has installed storage tanks providing 34 million gallons of wastewater storage to control wet weather overflows and rehabilitated or replaced approximately 368.8 miles of collection system pipe. KUB also continues to maintain a proactive operations and maintenance plan for the wastewater collection system including inspection, grease control, and private lateral enforcement. The result of the Pace10/Century II initiative has been an 83 percent reduction in SSOs.

As of June 30, 2018, the Wastewater Division had completed its 14th full year under the Consent Decree, spending $536.9 million on capital investments to meet Consent Decree requirements.

Financial Highlights

Fiscal Year 2018 Compared to Fiscal Year 2017

KUB's consolidated Change in Net Position increased $63.6 million in fiscal year 2018. A restatement to the fiscal year 2018 beginning net position, based on a change in method of accounting for Other Post-Employment Benefits (OPEB), increased the total net position by an additional $4.5 million. The change resulted in a total increase of $68.1 million in KUB's net position. Comparatively, net position increased by $36.1 million in fiscal year 2017.

Operating revenue increased $46 million or 6 percent, the result of additional revenues from system rate increases and a 20.8 percent increase in natural gas sales volumes. Purchased energy expense (power and natural gas) increased $16.4 million or 3.6 percent, the combined effect of $4.1 million increase in purchased power cost and an increase of $12.3 million in purchased gas cost, reflecting higher base wholesale TVA rates and customer demand. Margin from sales (operating revenue less purchased energy expense) was up $29.6 million or 9.6 percent compared with the prior fiscal year.

Operating expenses (excluding purchased power and purchased gas expense) increased $0.1 million. Operating and maintenance (O&M) expenses were $6.5 million or 5 percent lower than the previous year. Depreciation expense increased $5.6 million or 7.8 percent. Taxes and tax equivalents increased $1 million or 3 percent, reflecting higher plant in service levels.

Interest income was $1.9 million more than the prior fiscal year. Interest expense increased $1.5 million or 3.7 percent, reflecting the interest costs on new revenue bonds issued during fiscal year 2018 to fund system capital improvements offset by savings on refunding of outstanding bonds.

Capital contributions decreased $1.5 million, the result of less assets contributed by developers.

Total plant assets (net) increased $72.7 million or 4 percent over the last fiscal year.

Long-term debt represented 50.8 percent of KUB's consolidated capital structure, compared to 51 percent last fiscal year. Capital structure equals long-term debt (including the current and long-term portion of revenue bonds and notes), plus net position.

Fiscal Year 2017 Compared to Fiscal Year 2016

KUB's consolidated net position increased $36.1 million. This increase was $2.1 million more than the prior year's change in net position.

Operating revenue increased $36.1 million or 4.9 percent, the result of lower natural gas sales volumes offset in part by additional revenues from system rate increases and a modest increase in billable wastewater volumes and a 5.2 percent increase in billed water sales. Purchased energy expense (power and natural gas) increased $21.3 million or 4.8 percent, the combined effect of $18.8 million increase in purchased power cost and an increase of $2.5 million in purchased gas cost, reflecting higher TVA rates and natural gas commodity prices. Margin from sales (operating revenue less purchased energy expense) was up $14.8 million or 5 percent compared with the prior fiscal year.

Operating expenses (excluding purchased power and purchased gas expense) increased $13 million or 5.8 percent. Operating and maintenance (O&M) expenses were $7.3 million or 5.9 percent higher than the previous year. Depreciation expense increased $3.7 million or 5.3 percent. Taxes and tax equivalents increased $2 million or 6.5 percent, reflecting higher plant in service levels.

Interest income was $0.8 million more than the prior fiscal year. Interest expense increased $1.3 million or 3.4 percent, reflecting the interest costs on new revenue bonds issued during fiscal year 2017 to fund system capital improvements.

Capital contributions increased $0.8 million, the result of more assets contributed by developers.

Total plant assets (net) increased $82.2 million or 4.7 percent over the last fiscal year.

Long-term debt represented 51 percent of KUB's consolidated capital structure, compared to 50.4 percent last fiscal year. Capital structure equals long-term debt (including the current and long-term portion of revenue bonds and notes), plus net position.

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Knoxville Utilities Board Consolidated Financial Statements

KUB's financial performance is reported under three basic consolidated financial statements: the Statement of Net Position; the Statement of Revenues, Expenses and Changes in Net Position; and the Statement of Cash Flows.

Statement of Net Position

KUB reports its assets, deferred outflows of resources, liabilities, deferred inflows of resources and net position in the Statement of Net Position. Assets are classified as current, restricted, plant in service, or other assets.

Liabilities are classified as current, other, or long-term debt. Net position is classified as net investment in capital assets, restricted, or unrestricted. Net position tells the user what KUB has done with its accumulated earnings, not just the balance.

Net investment in capital assets reflects the book value of all capital assets less the outstanding balances of debt used to acquire, construct, or improve those assets.

Restricted net position includes assets that have been limited to specific uses by KUB's bond covenants or through resolutions passed by the KUB Board.

Unrestricted net position is a residual classification; the amount remaining after reporting net position as either invested in capital or restricted is reported there.

Statement of Revenues, Expenses and Changes in Net Position

KUB reports its revenues and expenses (both operating and non-operating) on the Statement of Revenues, Expenses and Changes in Net Position. In addition, any capital contributions or assets donated by developers are reported on this statement.

Total revenue less total expense equals the change in net position for the reporting period. Net position at the beginning of the period is increased or decreased, as applicable, by the change in net position for the reporting period.

The change in net position for the reporting period is added to the net position segment of the Statement of Net Position.

Statement of Cash Flows

KUB reports cash flows from operating activities, capital and related financing activities, and investing activities on the Statement of Cash Flows. This statement tells the user the sources and uses of cash during the reporting period.

The statement indicates the beginning cash balance and ending cash balance and how it was either increased or decreased during the reporting period.

The statement also reconciles cash flow to operating income as it appears on the Statement of Revenues, Expenses and Changes in Net Position.

Condensed Financial Statements

Statement of Net Position

The following table reflects the condensed consolidated Statement of Net Position for KUB compared to the prior two fiscal years.

Statements of Net Position
As of June 30

(in thousands of dollars)	2018	2017	2016
Current, restricted and other assets	$ 424,562	$ 350,320	$ 318,650
Capital assets, net	1,897,995	1,825,293	1,743,105
Deferred outflows of resources	25,544	33,495	34,235
Total assets and deferred outflows of resources	2,348,101	2,209,108	2,095,990
Current and other liabilities	169,966	167,533	159,519
Long-term debt outstanding	1,097,096	1,037,622	972,365
Deferred inflows of resources	14,259	5,268	1,512
Total liabilities and deferred inflows of resources	1,281,321	1,210,423	1,133,396
Net position			
Net investment in capital assets	794,383	786,361	772,012
Restricted	19,436	17,977	16,201
Unrestricted	252,961	194,347	174,381
Total net position	$ 1,066,780	$ 998,685	$ 962,594

Normal Impacts on Statement of Net Position

The following is a description of activities which will normally impact the comparability of the Statement of Net Position presentation.

- Change in net position (from Statement of Revenues, Expenses and Changes in Net Position): impacts (increase/decrease) current and other assets and/or capital assets and unrestricted net position.
- Issuing debt for capital: increases deferred outflows of resources and long-term debt.
- Spending debt proceeds on new capital: reduces current assets and increases capital assets.
- Spending of non-debt related current assets on new capital: (a) reduces current assets and increases capital assets and (b) reduces unrestricted net position and increases net investment in capital assets.
- Principal payment on debt: (a) reduces current and other assets and reduces long-term debt and (b) reduces unrestricted net position and increases net investment in capital assets.
- Reduction of capital assets through depreciation: reduces capital assets and net investment in capital assets.

Impacts and Analysis

Current, Restricted and Other Assets

Fiscal Year 2018 Compared to Fiscal Year 2017

Current, restricted and other assets increased $74.2 million or 21.2 percent. This increase reflects a $36.8 million increase in general fund cash (including cash and cash equivalents, short-term investments, and long-term investments), an increase in the actuarially determined net pension asset of $19.7 million, an increase in accounts receivable of $7.7 million, an increase of $5.3 million in operating contingency reserves and an increase in inventories of $4.7 million. Fiscal year 2017's $3.8 million under recovery of wholesale gas costs was collected from customers in fiscal year 2018 through adjustments to rates via the Purchased Gas Adjustment.

Fiscal Year 2017 Compared to Fiscal Year 2016

Current, restricted and other assets increased $31.7 million or 9.9 percent. This increase reflects a $15 million increase in general fund cash (including cash and cash equivalents, short-term investments, and long-term investments), an increase in inventories of $8 million primarily from Grid Modernization materials, an increase of $3.6 million in operating contingency reserves, a $2.5 million increase in other current assets, and an increase in accounts receivable of $1.5 million. KUB under recovered its wholesale gas costs by $3.7 million in fiscal year 2017 compared to a $2.2 million under recovery in fiscal year 2016. The under recovery of costs will be collected from customers next fiscal year through adjustments to rates via the Purchased Gas Adjustment.

An offset to the increases was the under recovery of $1.4 million in purchased power costs from electric system customers through its Purchased Power Adjustment mechanism in fiscal year 2016, as compared to a $4 million over recovery in fiscal year 2017. Fiscal year 2016's under recovery of costs was collected from customers during fiscal year 2017 through adjustments to rates via the Purchased Power Adjustment.

Capital Assets

Fiscal Year 2018 Compared to Fiscal Year 2017

Capital assets (net) increased $72.7 million or 4 percent. Major capital expenditures (reflected in both plant additions and work in progress) in fiscal year 2018 included $31.3 million for various electric distribution system improvements, $26.7 million related to wastewater Century II projects, $12.4 million for water plant and system improvements, $10.1 million for Grid Modernization and advanced metering, including Supervisory Control and Data Acquisition (SCADA) system upgrades, $8.9 million for utility asset replacements and relocations for the gas and water system to accommodate Tennessee Department of Transportation (TDOT) highway improvement projects and $8.6 million for pole replacements for the electric system.

Fiscal Year 2017 Compared to Fiscal Year 2016

Capital assets (net) increased $82.2 million or 4.7 percent. Major capital expenditures (reflected in both plant additions and work in progress) in fiscal year 2017 included $34.4 million for various electric distribution system improvements, $30.9 million related to wastewater Century II projects, $9.2 million for water plant and system improvements, $8.3 million for pole replacements for the electric system, $7.7 million for water main replacement, $7.3 million for construction of gas mains and service extensions, $6.2 million for utility asset replacements and relocations for the gas and water system to accommodate Tennessee Department of Transportation (TDOT) highway improvement projects, and $5.2 million for trucks and equipment.

Deferred Outflows of Resources

Fiscal Year 2018 Compared to Fiscal Year 2017

Deferred outflows of resources decreased $8 million compared to the prior year, reflecting a decrease in pension outflow of $7.1 million and a $1.5 million decrease in unamortized bonds refunding costs offset by a $0.7 increase in OPEB outflow when compared to the prior fiscal year.

Fiscal Year 2017 Compared to Fiscal Year 2016

Deferred outflows of resources decreased $0.7 million compared to the prior year, reflecting a decrease in pension outflow of $1.2 million offset by a $0.5 million increase in unamortized bonds refunding costs when compared to the prior fiscal year.

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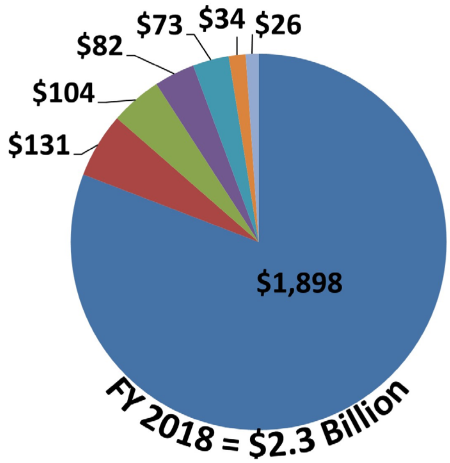

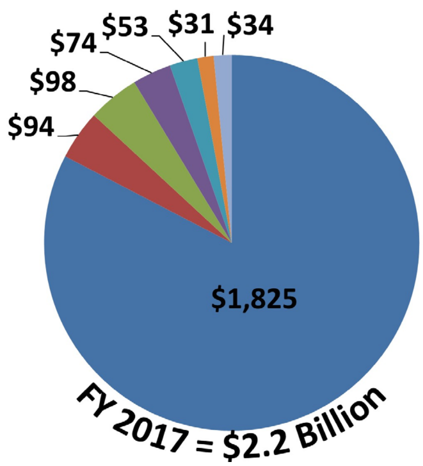

Consolidated Total Assets and Deferred Outflows of Resources (in Millions)

	FY18	FY17
Plant	81%	83%
General Fund	6%	4%
Contingency Fund	4%	5%
Accounts Receivable	4%	3%
Other Assets	3%	2%
Restricted Assets	1%	1%
Deferred Outflows of Resources	1%	2%

Current and Other Liabilities

Fiscal Year 2018 Compared to Fiscal Year 2017

Current and other liabilities increased $2.4 million or 1.5 percent compared to the prior fiscal year. This reflects an increase in the current portion of revenue bonds of $2.8 million, an increase of $1.7 million in accrued expenses, an increase of $1.6 million in customer advances for construction and an increase in accrued interest on revenue bonds of $1.1 million. KUB over recovered $4.7 million in wholesale power costs from its customers in fiscal year 2018, as compared to a $4 million over recovery in fiscal year 2017. This over recovery of costs will be flowed back to KUB's electric customers during the next fiscal year through adjustments to rates via the Purchased Power Adjustment. KUB over recovered $1.5 million in wholesale gas costs from its customers in fiscal year 2018, as compared to an under recovery in fiscal year 2017. This over recovery of costs will be flowed back to KUB's gas customers during the next fiscal year through adjustments to rates via the Purchased Gas Adjustment.

These increases were offset by a decline in accounts payable of $5.6 million. The outstanding balance on TVA conservation loans declined by $1.8 million, as KUB ceased issuance of any new loans in fiscal year 2016.

Fiscal Year 2017 Compared to Fiscal Year 2016

Current and other liabilities increased $8 million or 5 percent compared to the prior fiscal year. This reflects an increase of $6.5 million in accounts payable, an increase in the current portion of revenue bonds of $3 million, and an increase in accrued interest on revenue bonds of $0.2 million. Purchased power cost was also over recovered by $4 million. The over recovery of costs will be flowed back to KUB's electric customers during fiscal year 2018 through adjustments to rates via the Purchased Power Adjustment.

These increases were offset by a decline in the actuarially determined net pension obligation of $5 million and accrued expenses were $0.9 million lower than the prior fiscal year. The outstanding balance on TVA conservation loans declined by $2.2 million as KUB ceased issuance of any new loans in fiscal year 2016.

Long-term Debt

Fiscal Year 2018 Compared to Fiscal Year 2017

Long-term debt increased $59.5 million or 5.7 percent. Revenue bonds totaling $97 million were sold in August 2017 and were offset by the scheduled repayment of debt and bond refunding issuances. During the fiscal year, $34.7 million of bond debt was repaid, which included principal payments from the August 2017 revenue bond issuance.

Fiscal Year 2017 Compared to Fiscal Year 2016

Long-term debt increased $65.3 million or 6.7 percent. Revenue bonds totaling $97 million were sold in July 2016. Also in July 2016, revenue refunding bonds of $20.9 were sold and in March 2017, $48.8 million in revenue refunding bonds were sold to refinance bonds sold in 2009 and 2005, respectively. The additional issuances offset by the defeased bonds and schedule debt repayments accounted for the change in long-term debt. During the fiscal year, $31.9 million of bond debt was repaid, which included additional principal payments required from the July 2016 revenue bond issuance.

Deferred Inflows of Resources

Fiscal Year 2018 Compared to Fiscal Year 2017

Deferred inflows increased $9 million compared to the prior fiscal year primarily due to differences in pension inflows.

Fiscal Year 2017 Compared to Fiscal Year 2016

Deferred inflows increased $3.8 million compared to the prior fiscal year due to differences in pension inflows.

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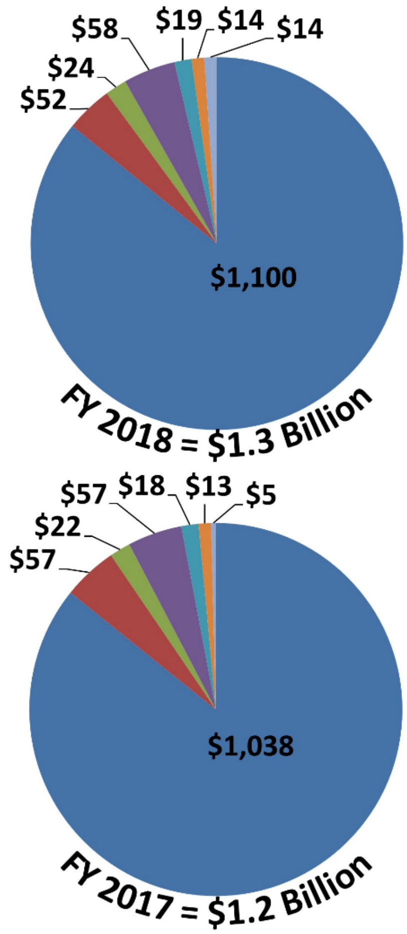

Consolidated Total Liabilities and Deferred Inflows of Resources (in Millions)

	FY18	FY17
Bond Debt	86%	86%
Payables	4%	5%
Misc Current	2%	2%
Other Liabilities	5%	5%
Customer Deposits	1%	1%
Interest Accrued	1%	1%
Deferred Inflows of Resources	1%	<1%

Net Position

Fiscal Year 2018 Compared to Fiscal Year 2017

Unrestricted net position increased $58.6 million or 30.2 percent compared to the previous fiscal year, reflecting a $36.8 million increase in general fund cash. Net investment in capital assets increased $8 million or 1 percent, the result of net capital assets increasing $72.7 million and a $62.3 million increase in current portion of revenue bonds and total long-term debt. Restricted net position increased $1.5 million compared to the prior year.

Fiscal Year 2017 Compared to Fiscal Year 2016

Net position increased by $36.1 million in fiscal year 2017. Unrestricted net position increased $20 million or 11.4 percent compared to the previous fiscal year, reflecting a $15 million increase in general fund cash. Net investment in capital assets increased $14.3 million or 1.9 percent, the result of net capital assets increasing $82.2 million and a $68.3 million increase in current portion of revenue bonds and total long-term debt. Restricted net position increased $1.8 million compared to the prior year.

Statement of Revenues, Expenses and Changes in Net Position

The following table reflects the condensed consolidated Statement of Revenues, Expenses and Changes in Net Position for KUB compared to the prior two fiscal years.

Statements of Revenues, Expenses and Changes in Net Position
For the Years Ended June 30

(in thousands of dollars)	2018	2017	2016
Operating revenues	$ 815,544	$ 769,496	$ 733,362
Less: Purchased energy expense	477,038	460,594	439,301
Margin from sales	338,506	308,902	294,061
Operating expenses			
Treatment	15,951	16,211	16,618
Distribution and collection	63,868	65,309	59,536
Customer service	13,327	14,151	13,893
Administrative and general	30,891	34,897	33,239
Depreciation	77,666	72,022	68,370
Taxes and tax equivalents	34,504	33,483	31,440
Total operating expenses	236,207	236,073	223,096
Operating income	102,299	72,829	70,965
Interest income	4,063	2,140	1,388
Interest expense	(41,962)	(40,470)	(39,143)
Other income/(expense)	(1,296)	(416)	(408)
Change in net position before capital contributions	63,104	34,083	32,802
Capital contributions	467	2,008	1,170
Change in net position	$ 63,571	$ 36,091	$ 33,972

Normal Impacts on Statement of Revenues, Expenses and Changes in Net Position

The following is a description of activities which will normally impact the comparability of the Statement of Revenues, Expenses and Changes in Net Position presentation.

- Operating revenue is largely determined by volume of sales for the fiscal year. Any change (increase/decrease) in retail rates would also be a cause of change in operating revenue.
- Purchased energy expense is determined by volume of power purchases from TVA and volume of natural gas purchases for the fiscal year. Also, any change (increase/decrease) in wholesale power and/or gas rates would result in a change in purchased energy expense.
- Operating expenses (distribution, customer service, administrative and general) are normally impacted by changes in areas including, but not limited to, labor cost (staffing, wage rates), active employee and retiree medical expenses, and system maintenance.
- Depreciation expense is impacted by plant additions and retirements during the fiscal year.
- Taxes and equivalents are impacted by plant additions/retirements, changes in property tax rates, and gross margin levels.

- Interest income is impacted by level of interest rates and investments.

- Interest expense on debt is impacted by level of outstanding debt and the interest rate(s) on the outstanding debt.

- Other income/(expenses) is impacted by miscellaneous non-operating revenues and expenses.

- Capital contributions are impacted by a donation of facilities/infrastructure to KUB by developers and governmental agencies. The contributions are recognized as revenue and recorded as plant in service based on the fair market value of the asset(s).

Impacts and Analysis

Change in Net Position

Fiscal Year 2018 Compared to Fiscal Year 2017

KUB's consolidated Change in Net Position increased $63.6 million in fiscal year 2018. A restatement to the fiscal year 2018 beginning net position, based on a change in method of accounting for OPEB, increased the total net position by an additional $4.5 million. The change resulted in a total increase of $68.1 million in KUB's net position. Comparatively, net position increased by $36.1 million in fiscal year 2017.

Fiscal Year 2017 Compared to Fiscal Year 2016

KUB's consolidated net position increased $36.1 million. This increase was $2.1 million more than the prior year's change in net position.

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Margin from Sales

Fiscal Year 2018 Compared to Fiscal Year 2017

Operating revenue was $46 million or 6 percent higher than the previous fiscal year. Both electric and natural gas sales were impacted by a colder winter than the previous fiscal year. Electric Division operating revenue increased $13.6 million due to the result of additional revenue from KUB's electric rate increase, the flow through of TVA rate adjustments, and the flow through of prior year over recovered purchased power costs to electric customers. Gas Division revenue increased $22.6 million for the fiscal year, the result of a 20.8 percent increase in billed sales due to the colder winter and additional revenue generated from the gas rate increase. Water Division revenue increased $3.6 million, the net result of additional revenue from the water rate increase and a 2.1 percent decline in billed water sales volumes. Wastewater Division revenue was $6.2 million higher than the previous year due to additional revenue from the wastewater rate increase offset by a 0.2 percent decrease in billable wastewater volumes.

Wholesale energy expense increased $16.4 million or 3.6 percent. Purchased power expense increased $4.1 million compared to last year, reflecting higher wholesale rates from TVA. Purchased gas expense was $12.3 million higher, reflecting higher customer demand for the fiscal year.

Margin from sales (operating revenue less purchased energy expense) increased $29.6 million compared to the previous year. The increase reflects additional revenue from the electric, natural gas, water, and wastewater rate increases and higher natural gas sales volumes.

Fiscal Year 2017 Compared to Fiscal Year 2016

Operating revenue was $36.1 million or 4.9 percent higher than the previous fiscal year. Both electric and natural gas sales were impacted by another extremely mild winter. Electric Division operating revenue increased $24.5 million due to the result of additional revenue from KUB's one percent electric rate increase, the flow through of TVA rate adjustments, and the flow through of prior year under recovered purchased power costs to electric customers. Gas Division revenue increased $3.4 million for the fiscal year, the net result of 2.5 percent lower billed sales due to the warmer winter offset by additional revenue generated from the gas rate increase. Water Division revenue increased $3.3 million, the result of additional revenue from the water rate increase and a 5.2 percent increase in billed water sales volumes. Wastewater Division revenue was $4.8 million higher than the previous year due to additional revenue from the wastewater rate increase offset by a 0.3 percent decrease in billable wastewater volumes.

Wholesale energy expense increased $21.3 million or 4.8 percent. Purchased power expense increased $18.8 million compared to last year, reflecting higher wholesale rates from TVA. Purchased gas expense was $2.5 million higher, reflecting higher commodity prices for natural gas offset by overall lower customer demand for the fiscal year.

Margin from sales (operating revenue less purchased energy expense) increased $14.8 million compared to the previous year. The increase reflects additional revenue from the electric, natural gas, water, and wastewater rate increases offset by lower natural gas sales volumes.

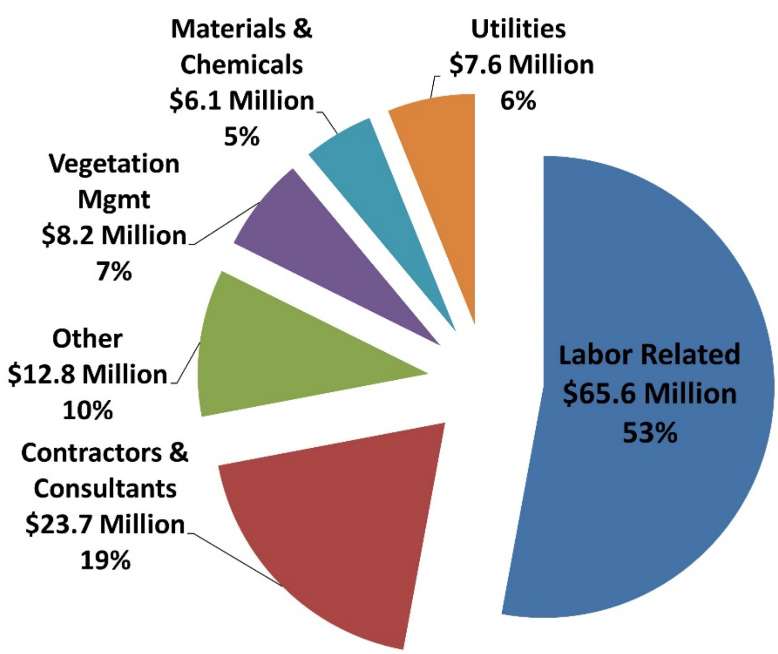
Operating Expenses

Fiscal Year 2018 Compared to Fiscal Year 2017

Operating expenses (excluding wholesale purchased energy expense) increased $0.1 million compared to fiscal year 2017. Operating expenses include operations and maintenance (O&M) expense, depreciation, and taxes/tax equivalents. O&M expenses can be further classified as treatment, distribution and collection, customer service, and administrative and general.

- Treatment expenses were $0.3 million lower than the prior year, reflecting lower outside contractor and consultant expenses for the wastewater system.
- Distribution and collection expenses decreased $1.4 million or 2.2 percent, primarily due to less outside contractor use and lower labor related expenses.
- Customer service expenses decreased $0.8 million or 5.8 percent, primary due to less outside contractor use.
- Administrative and general expenses decreased $4 million or 11.5 percent, primarily due to a decrease in labor related expenses.

FY 2018 Consolidated O&M Expense = $124 Million



- Depreciation expense increased $5.6 million or 7.8 percent. KUB added $156.7 million in assets during fiscal year 2017. A full year of depreciation expense was recorded on these capital investments and a partial year of depreciation expense was incurred on $145.3 million in assets placed in service during fiscal year 2018.

- Taxes and tax equivalents increased $1 million or 3 percent due to increased plant in service levels. Tax equivalent payments to taxing jurisdictions in which KUB's utility systems are located are based on a combination of net plant values and margin from energy sales.

Fiscal Year 2017 Compared to Fiscal Year 2016

Operating expenses (excluding wholesale purchased energy expense) increased $13 million or 5.8 percent compared to fiscal year 2016. Operating expenses include operations and maintenance (O&M) expense, depreciation, and taxes/tax equivalents. O&M expenses can be further classified as treatment, distribution and collection, customer service, and administrative and general.

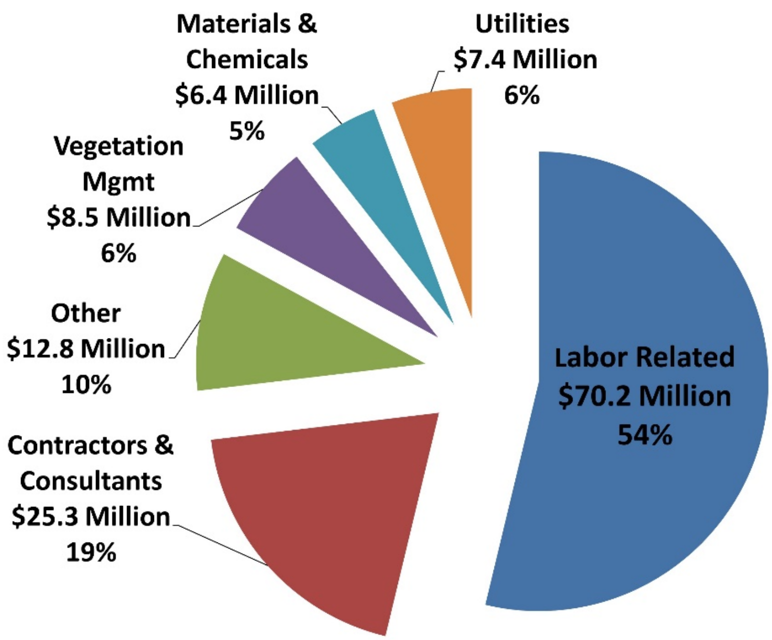
- Treatment expenses were $0.4 million lower than the prior year, reflecting lower outside contractor and consultant expenses for the wastewater system.

- Distribution and collection expenses increased $5.8 million or 9.7 percent, primarily due to increased labor related expenses, outside contractor use, and costs related to storm events.

- Customer service expenses rose $0.2 million or 1.9 percent.

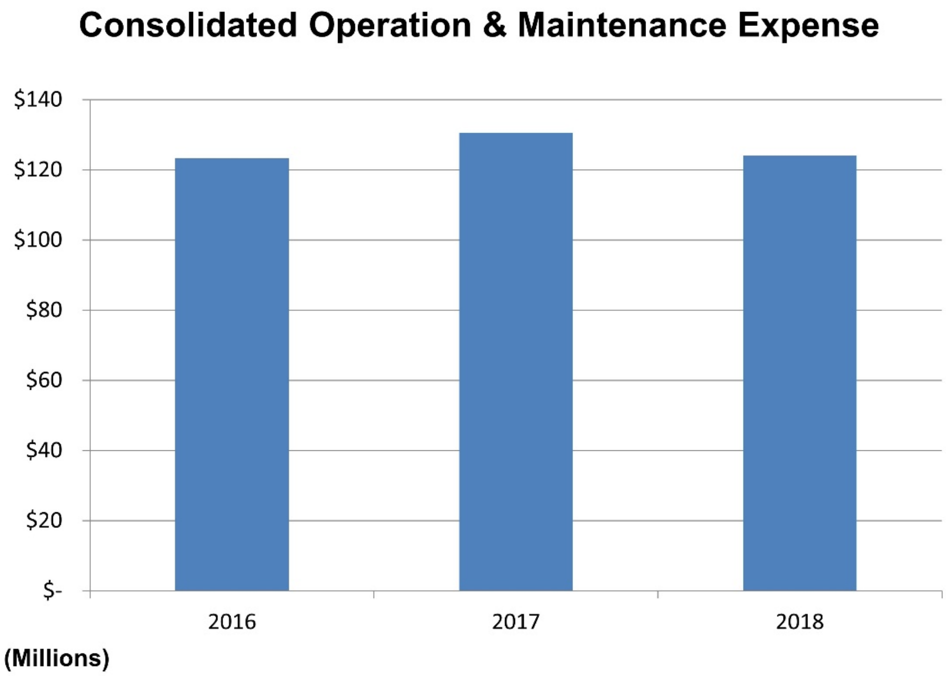
- Administrative and general expenses increased $1.7 million or 5 percent, primarily due to an increase in labor related expenses.

FY 2017 Consolidated O&M Expense = $130.6 Million



- Depreciation expense increased $3.7 million or 5.3 percent. KUB added $213.7 million in assets during fiscal year 2016. A full year of depreciation expense was recorded on these capital investments and a partial year of depreciation expense was incurred on $156.7 million in assets placed in service during fiscal year 2017.

- Taxes and tax equivalents increased $2 million or 6.5 percent due to increased plant in service levels. Tax equivalent payments to taxing jurisdictions in which KUB's utility systems are located are based on a combination of net plant values and margin from energy sales.



Other Income and Expense

Fiscal Year 2018 Compared to Fiscal Year 2017

Interest income increased $1.9 million compared to the prior fiscal year, reflecting increases in short-term interest rates over the prior fiscal year.

Interest expense increased $1.5 million or 3.7 percent, reflecting the net effect of interest expense from new revenue bonds sold during the fiscal year and savings on refunding of outstanding bonds.

Other income (net) decreased $0.9 million, primarily due to the prior year recognition of $0.9 million in non-operating income for the reimbursement by FEMA to offset the cost of restoration expenses related to the May 2017 storm.

Capital contributions by developers were $1.5 million lower due to less donated assets compared to the prior fiscal year.

Fiscal Year 2017 Compared to Fiscal Year 2016

Interest income increased $0.8 million compared to the prior fiscal year, reflecting modest increases in short-term interest rates over the prior fiscal year.

Interest expense increased $1.3 million or 3.4 percent, reflecting interest expense from new bonds issued during fiscal year 2017.

Other income (net) was consistent with the prior fiscal year. Future reimbursements by FEMA of $0.9 million were recognized as non-operating income in fiscal year 2017 for the May 2017 storm.

Capital contributions by developers were $0.8 million higher than last fiscal year.

Capital Assets

Capital Assets
As of June 30
(Net of Depreciation)

(in thousands of dollars)		**2018**		**2017**		**2016**
Production Plant (Intakes)	$	57	$	58	$	58
Pumping and Treatment Plant		204,756		196,884		194,450
Distribution and Collection Plant						
Mains and metering	$	825,318	$	804,007	$	755,850
Services and meters		129,275		108,974		92,121
Electric station equipment		54,695		53,178		56,487
Poles, towers and fixtures		127,343		113,640		104,867
Overhead conductors		99,761		90,886		84,937
Line transformers		61,446		60,424		59,587
Other accounts		185,945		196,598		195,751
Total Distribution & Collection Plant	**$**	1,483,783	**$**	1,427,707	**$**	1,349,600
General Plant		55,713		58,881		55,791
Total Plant Assets	**$**	1,744,309	**$**	1,683,530	**$**	1,599,899
Work In Progress		153,686		141,763		143,206
Total Net Plant	$	1,897,995	$	1,825,293	$	1,743,105

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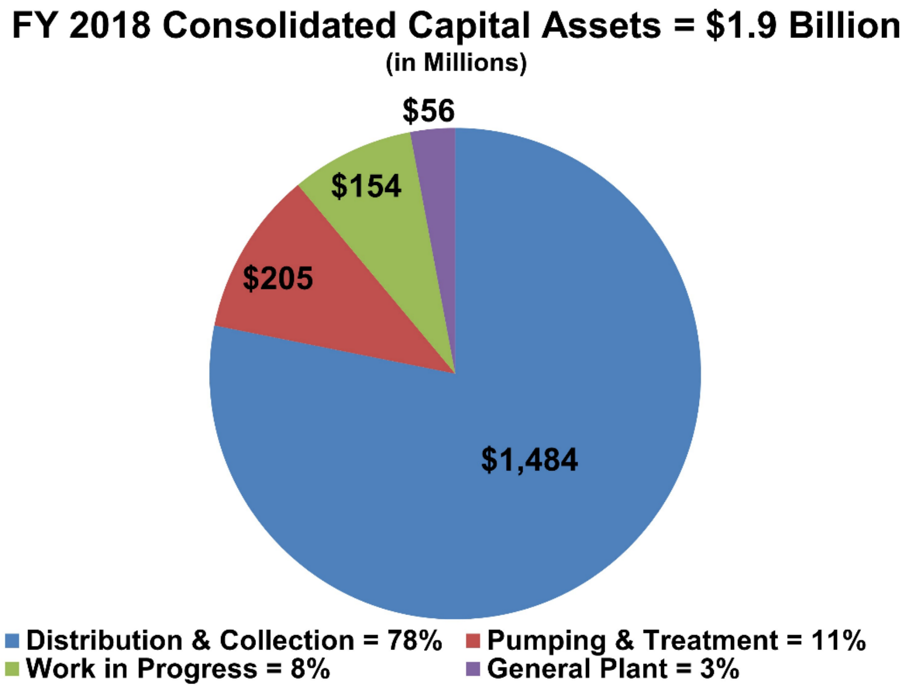
Fiscal Year 2018 Compared to Fiscal Year 2017

As of June 30, 2018, KUB had $1.9 billion invested in capital assets, as reflected in the schedule of capital assets, which represents a net increase (including additions, retirements, and depreciation) of $72.7 million or 4 percent over the end of the last fiscal year.

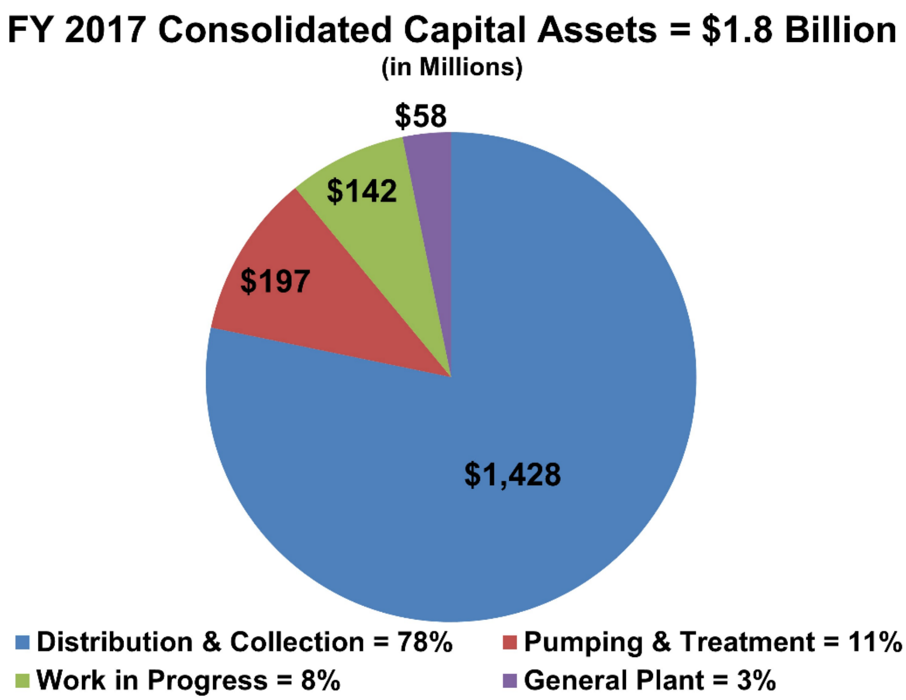


Major capital asset additions during the year were as follows:

- $31.3 million for various electric distribution system improvements
- $26.7 million related to wastewater Century II projects
  - $12.9 million for wastewater treatment plant upgrades
  - $7.2 million for sewer mini-basin rehabilitation and replacement
  - $4.9 million for sewer trunk line rehabilitation and replacement
  - $1.7 million for pump station construction and improvements
- $12.4 million for water plant and system improvements
- $10.1 million for Grid Modernization and advanced metering, including SCADA system upgrades, for the electric, gas and water systems
- $8.9 million for replacement and relocation of utility assets for the gas and water system to accommodate TDOT highway improvement projects
- $8.6 million for pole replacements for the electric system

Fiscal Year 2017 Compared to Fiscal Year 2016

As of June 30, 2017, KUB had $1.8 billion invested in capital assets, as reflected in the schedule of capital assets, which represents a net increase (including additions, retirements, and depreciation) of $82.2 million or 4.7 percent over the end of the last fiscal year.



Major capital asset additions during the year were as follows:

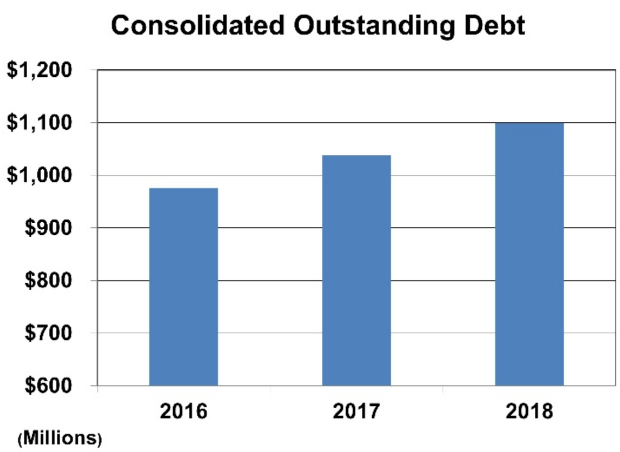
- $34.4 million for various electric distribution system improvements
- $30.9 million related to wastewater Century II projects
  - $12.4 million for wastewater treatment plant upgrades
  - $10.6 million for sewer trunk line rehabilitation and replacement
  - $5.3 million for sewer mini-basin rehabilitation and replacement
  - $2.6 million for pump station construction and improvements
- $9.2 million for water plant and system improvements
- $8.3 million for pole replacements for the electric system
- $7.7 million for main replacement for the water system
- $7.3 million for construction of gas mains and service extensions
- $6.2 million for replacement and relocation of utility assets for the gas and water system to accommodate TDOT highway improvement projects
- $5.2 million for trucks and equipment

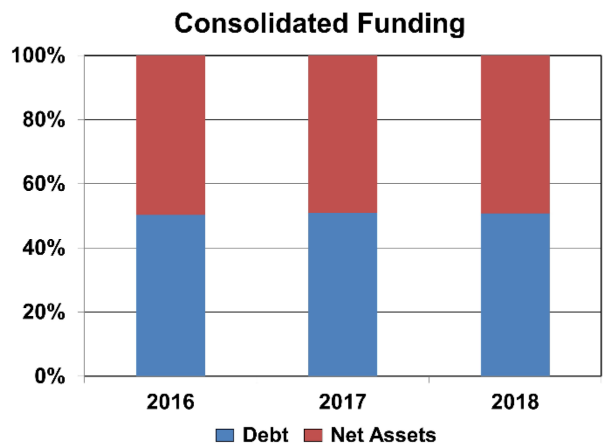
Debt Administration

KUB's outstanding debt was $1.1 billion at June 30, 2018. Debt as a percentage of capital structure was 50.8 percent in 2018, 51 percent in 2017, and 50.4 percent at the end of fiscal year 2016.

Outstanding Debt
As of June 30

(in thousands of dollars)	2018	2017	2016
Revenue bonds	$ 1,099,795	$ 1,037,500	$ 976,430
Total outstanding debt	$ 1,099,795	$ 1,037,500	$ 976,430





KUB will pay $425.4 million in principal payments over the next ten years, representing 38.7 percent of outstanding bonds.

Fiscal Year 2018 Compared to Fiscal Year 2017

As of June 30, 2018, KUB had $1.1 billion in outstanding debt (including the current portion of revenue bonds) compared to $1.04 billion last year, an increase of $62.3 million. The increase is attributable to new revenue bonds issued during the fiscal year offset by the scheduled repayment of debt. KUB's weighted average cost of debt as of June 30, 2018 was 3.81 percent (3.60 percent including the impact of Build America Bonds rebates).

KUB sold $40 million in electric system revenue bonds in August 2017 for the purpose of funding electric system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.08 percent.

KUB sold $12 million in gas system revenue bonds in August 2017 for the purpose of funding gas system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.07 percent.

KUB sold $20 million in water system revenue bonds in August 2017 for the purpose of funding water system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.05 percent.

KUB sold $25 million in wastewater system revenue bonds in August 2017 for the purpose of funding wastewater system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.08 percent.

KUB's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2018, Standard & Poor's rated the revenue bonds of the Water Division AAA, the Electric and Wastewater Divisions AA+ and the revenue bonds of the Gas Division AA. Moody's Investors Service rated the bonds of the Water Division Aa1 and the Electric, Gas and Wastewater Divisions Aa2.

Fiscal Year 2017 Compared to Fiscal Year 2016

As of June 30, 2017, KUB had $1.04 billion in outstanding debt (including the current portion of revenue bonds) compared to $976.4 million last year, an increase of $61.1 million. KUB's weighted average cost of debt as of June 30, 2017 was 3.85 percent (3.62 percent including the impact of Build America Bonds rebates).

KUB sold $40 million in electric system revenue bonds in July 2016 for the purpose of funding electric system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.75 percent.

KUB sold $23.4 million in electric system revenue refunding bonds in March 2017 for the purpose of refinancing existing electric system bonds at lower interest rates. KUB will realize a total debt service savings of $3.2 million over the life of the bonds ($2.8 million on a net present value basis). The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.18 percent.

KUB sold $12 million in gas system revenue bonds in July 2016 for the purpose of funding gas system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.78 percent.

KUB sold $8.1 million in gas system revenue refunding bonds in March 2017 for the purpose of refinancing existing gas system bonds at lower interest rates. KUB will realize a total debt service savings of $1.2 million over the life of the bonds ($1 million on a net present value basis). The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.09 percent.

KUB sold $25 million in water system revenue bonds in July 2016 for the purpose of funding water system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.72 percent.

KUB sold $20.9 million in water system revenue refunding bonds in July 2016 for the purpose of refinancing existing debt at lower interest rates. KUB will realize a total debt service savings of $2.5 million over the life of the bonds ($2.2 million on a net present value basis). The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.07 percent.

KUB sold $5.3 million in water system revenue refunding bonds in March 2017 for the purpose of refinancing existing debt at lower interest rates. KUB will realize a total debt service savings of $0.7 million over the life of the bonds ($0.6 million on a net present value basis). The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.14 percent.

KUB sold $20 million in wastewater system revenue bonds in July 2016 for the purpose of funding wastewater system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.72 percent.

KUB sold $12 million in wastewater system revenue refunding bonds in March 2017 for the purpose of refinancing existing wastewater system bonds at lower interest rates. KUB will realize a total debt service savings of $1.4 million over the life of the bonds ($1.3 million on a net present value basis). The true interest cost of the bonds, which were sold through a competitive bidding process, was 1.95 percent.

KUB's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2017, Standard & Poor's rated the revenue bonds of the Water Division AAA, the Electric and Wastewater Divisions AA+ and the revenue bonds of the Gas Division AA. Moody's Investors Service rated the bonds of the Electric, Gas and Wastewater Divisions Aa2.

As part of the rating process for the $25 million in water revenue bonds and $20.9 million in water revenue refunding bonds, Moody's upgraded its rating on KUB's water system bonds to Aa1 from Aa2. Aa1 is the second to highest bond credit rating assigned by Moody's Investors Service. In its formal rating report, Moody's stated "the upgrade to Aa1 reflects the well-managed financial operations of the water system that continues to provide for solid debt service coverage and liquidity, a mature service area, and a manageable debt profile." The AAA bond rating from Standard and Poor's was reaffirmed. In its formal rating report on the water bonds, Standard and Poor's noted "based on our financial management assessment we view KUB to be '1' on a scale of 1-6, with '1' being the strongest."

Impacts on Future Financial Position

KUB anticipates a net increase of 3,550 customers during fiscal year 2019.

In June 2017, the KUB Board adopted the next three years of rate increases for all four utility Divisions to help fund the ongoing Century II infrastructure programs for each system. The second of those rate increases go into effect during fiscal year 2019.

The second approved electric rate increase will be effective October 2018. The rate increase will provide $11.2 million in additional annual Electric Division revenue.

The second approved natural gas rate increase will be effective October 2018. The rate increase will result in $2.3 million in additional annual Gas Division revenue.

The second approved water rate increase will be effective July 2018. The rate increase will result in additional annual Water Division revenue of $3.1 million.

The second approved wastewater rate increase will be effective July 2018. The rate increase will provide additional annual Wastewater Division revenue of $4.2 million.

KUB sold $40 million in electric system revenue bonds in August 2018 for the purpose of funding electric system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.42 percent.

KUB sold $8 million in gas system revenue bonds in August 2018 for the purpose of funding gas system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.49 percent.

KUB sold $20 million in water system revenue bonds in August 2018 for the purpose of funding water system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.46 percent.

KUB sold $12 million in wastewater system revenue bonds in August 2018 for the purpose of funding wastewater system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.49 percent.

All ratings by Standard & Poor's and Moody's Investors Service were reaffirmed as part of the issuance process for the aforementioned bonds.

KUB long-term debt includes $123.8 million of Build America Bond (BABs). The BABs were sold on a taxable basis with the United States Treasury providing a rebate to KUB for a percentage of the interest cost. The interest rebates were subject to federal sequestration during the fiscal year and were reduced by 6.6 percent. Any future actions by Congress may also affect the anticipated rebates for future fiscal years.

The Pension Plan actuarial valuation for the Plan year ending December 31, 2017 resulted in an actuarially determined contribution of $3,156,661 for the fiscal year ending June 30, 2019, based on the Plan's current funding policy. Subsequent to June 30, 2018, the actuarial valuation for the Plan year ending December 31, 2018 was completed. The actuarial valuation resulted in an actuarially determined contribution of $2,585,824 for the fiscal year ending June 30, 2020, based on the Plan's current funding policy. For the Plan year ending December 31, 2018, the Plan's actuarial funded ratio was 107.84 percent.

The OPEB Plan actuarial valuation as of January 1, 2017 resulted in an actuarially determined contribution of zero for the fiscal year ending June 30, 2019, based on the Plan's current funding policy. Subsequent to June 30, 2018, the actuarial valuation as of January 1, 2018 was completed. The actuarial valuation resulted in an actuarially determined contribution of $311,324 for the fiscal year ending June 30, 2020, based on the Plan's current funding policy. The Plan's actuarial funded ratio was 102.78 percent.

GASB Statement No. 83, *Certain Asset Retirement Obligations,* is effective for fiscal years beginning after June 15, 2018. GASB Statement No. 84, *Fiduciary Activities*, is effective for fiscal years beginning after December 15, 2018. GASB Statement No. 87, *Leases*, is effective for fiscal years beginning after December 15, 2019. GASB Statement No. 88, *Certain Disclosure Related to Debt, Including Direct Borrowings and Direct Placements,* is effective for fiscal years beginning after June 15, 2018. GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period,* is effective for fiscal years beginning after December 15, 2019. KUB has not elected early implementation of these standards and has not completed the process of evaluating the impact of these statements on its financial statements.

No other facts, decisions, or conditions are currently known which would have a significant impact on KUB's financial position or results of operations during fiscal year 2018.

Financial Contact

KUB's financial statements are designed to present users (citizens, customers, investors, and creditors) with a general overview of KUB's financial position and results of operations for the fiscal years ending June 30, 2018 and 2017. If you have questions about the statements or need additional financial information, contact KUB's Chief Financial Officer at 445 South Gay Street, Knoxville, Tennessee 37902.

Knoxville Utilities Board
Consolidated Statements of Net Position
June 30, 2018 and 2017

	2018	2017
Assets and Deferred Outflows of Resources		
Current assets:		
Cash and cash equivalents	$ 128,217,924	$ 78,955,536
Short-term investments	2,485,400	14,967,295
Short-term contingency fund investments	30,057,546	43,754,509
Other current assets	2,862,353	3,395,190
Accrued interest receivable	123,231	78,019
Accounts receivable, less allowance of uncollectible accounts of $681,624 in 2018 and $652,627 in 2017	82,097,279	74,433,839
Inventories	23,191,810	18,475,991
Prepaid expenses	866,295	868,425
Gas storage	7,037,629	7,884,634
Total current assets	276,939,467	242,813,438
Restricted assets:		
Bond funds	33,506,454	30,864,965
Other funds	21,446	31,434
TVA contract proceeds	-	74,619
Total restricted assets	33,527,900	30,971,018
Plant in service	2,616,728,074	2,522,407,685
Less accumulated depreciation	(872,419,331)	(838,877,792)
	1,744,308,743	1,683,529,893
Retirement in progress	2,855,990	2,070,321
Construction in progress	150,829,851	139,692,725
Net plant in service	1,897,994,584	1,825,292,939
Other assets:		
Net pension asset	19,778,372	123,941
Net OPEB asset	3,751,068	-
Long-term contingency fund investments	73,744,762	54,728,134
TVA conservation program receivable	4,301,001	6,022,815
Under recovered purchased gas cost	-	3,744,086
Other	12,519,454	11,916,691
Total other assets	114,094,657	76,535,667
Total assets	2,322,556,608	2,175,613,062
Deferred outflows of resources:		
Pension outflow	1,947,863	9,090,810
OPEB outflow	662,384	-
Unamortized bond refunding costs	22,933,336	24,403,793
Total deferred outflows of resources	25,543,583	33,494,603
Total assets and deferred outflows of resources	$ 2,348,100,191	$ 2,209,107,665

The accompanying notes are an integral part of these consolidated financial statements.

Knoxville Utilities Board
Consolidated Statements of Net Position
June 30, 2018 and 2017

	2018	2017
Liabilities, Deferred Inflows, and Net Position		
Current liabilities:		
Current portion of revenue bonds	$ 36,845,000	$ 34,055,000
Sales tax collections payable	1,373,433	1,309,383
Accounts payable	51,528,545	57,143,487
Accrued expenses	22,420,724	20,709,745
Customer deposits plus accrued interest	19,239,531	18,447,639
Accrued interest on revenue bonds	14,092,280	12,994,768
Total current liabilities	145,499,513	144,660,022
Other liabilities:		
TVA conservation program	4,431,219	6,236,061
Accrued compensated absences	8,497,960	9,074,278
Customer advances for construction	4,927,837	3,295,196
Net pension liability - QEBA	280,341	185,077
Over recovered purchased power cost	4,706,715	3,957,673
Over recovered purchased gas cost	1,466,723	-
Other	155,411	124,777
Total other liabilities	24,466,206	22,873,062
Long-term debt:		
Revenue bonds	1,062,950,000	1,003,445,000
Unamortized premiums/discounts	34,146,236	34,177,284
Total long-term debt	1,097,096,236	1,037,622,284
Total liabilities	1,267,061,955	1,205,155,368
Deferred inflows of resources:		
Pension inflow	13,937,341	5,267,517
OPEB inflow	321,637	-
Total deferred inflows of resources	14,258,978	5,267,517
Total liabilities and deferred inflows of resources	1,281,320,933	1,210,422,885
Net position		
Net investment in capital assets	794,382,860	786,361,325
Restricted for:		
Debt service	19,414,174	17,870,197
Other	21,446	106,053
Unrestricted	252,960,778	194,347,205
Total net position	1,066,779,258	998,684,780
Total liabilities, deferred inflows, and net position	$ 2,348,100,191	$ 2,209,107,665

The accompanying notes are an integral part of these consolidated financial statements.

Knoxville Utilities Board
Consolidated Statements of Revenues, Expenses and Changes in Net Position
June 30, 2018 and 2017

	2018	2017
Operating revenues		
Electric	$ 553,212,568	$ 539,569,078
Gas	114,248,463	91,610,079
Water	53,836,154	50,234,004
Wastewater	94,246,807	88,082,619
Total operating revenues	815,543,992	769,495,780
Operating expenses		
Purchased power	421,104,855	417,004,982
Purchased gas	55,933,211	43,589,444
Treatment	15,951,179	16,211,491
Distribution and collection	63,867,520	65,309,186
Customer service	13,327,372	14,150,687
Administrative and general	30,890,738	34,897,376
Provision for depreciation	77,665,810	72,022,197
Taxes and tax equivalents	34,504,209	33,482,117
Total operating expenses	713,244,894	696,667,480
Operating income	102,299,098	72,828,300
Non-operating revenues (expenses)		
Contributions in aid of construction	9,219,259	4,328,656
Interest and dividend income	4,062,762	2,139,753
Interest expense	(41,961,682)	(40,468,883)
Amortization of debt costs	170,641	(204,369)
Write-down of plant for costs recovered through contributions	(9,219,259)	(4,328,656)
Other	(1,466,504)	(211,826)
Total non-operating revenues (expenses)	(39,194,783)	(38,745,325)
Change in net position before capital contributions	63,104,315	34,082,975
Capital contributions	467,468	2,007,985
Change in net position	63,571,783	36,090,960
Net position, beginning of year, as previously reported	998,684,780	962,593,820
Change in method of accounting for OPEB	4,522,695	-
Net position, beginning of year, as restated	1,003,207,475	962,593,820
Net position, end of year	$ 1,066,779,258	$ 998,684,780

The accompanying notes are an integral part of these consolidated financial statements.

Knoxville Utilities Board
Consolidated Statements of Cash Flows
June 30, 2018 and 2017

	2018	2017
Cash flows from operating activities:		
Cash receipts from customers	$ 802,335,926	$ 765,083,462
Cash receipts from other operations	13,706,479	12,678,406
Cash payments to suppliers of goods or services	(557,199,870)	(544,820,189)
Cash payments to employees for services	(58,281,778)	(58,297,150)
Payment in lieu of taxes	(29,925,260)	(29,127,961)
Cash receipts from collections of TVA conservation loan program participants	2,013,974	2,525,020
Cash payments for TVA Conservation loan program	(2,097,002)	(2,571,436)
Net cash provided by operating activities	170,552,469	145,470,152
Cash flows from capital and related financing activities:		
Net proceeds from bond issuance	97,923,109	172,176,578
Principal paid on revenue bonds and notes payable	(34,705,000)	(105,590,000)
Interest paid on revenue bonds and notes payable	(40,864,170)	(40,229,968)
Acquisition and construction of plant	(167,594,705)	(158,857,535)
Changes in bond funds, restricted	(2,641,489)	(1,929,520)
Customer advances for construction	1,695,867	1,071,598
Proceeds received on disposal of plant	5,963,771	242,537
Cash received from developers and individuals for capital purposes	9,219,259	4,328,656
Net cash used in capital and related financing activities	(131,003,358)	(128,787,654)
Cash flows from investing activities:		
Purchase of investment securities	(52,384,101)	(44,751,575)
Maturities of investment securities	58,785,002	25,633,000
Interest received	3,909,645	2,024,860
Other property and investments	(597,269)	420,356
Net cash provided by (used in) investing activities	9,713,277	(16,673,359)
Net increase (decrease) in cash and cash equivalents	49,262,388	9,139
Cash and cash equivalents, beginning of year	78,955,536	78,946,397
Cash and cash equivalents, end of year	$ 128,217,924	$ 78,955,536
Reconciliation of operating income to net cash provided by operating activities		
Operating income	$ 102,299,098	$ 72,828,300
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation expense	80,114,269	74,082,536
Changes in operating assets and liabilities:		
Accounts receivable	(7,663,441)	(1,488,519)
Inventories	(4,715,819)	(7,951,162)
Prepaid expenses	849,135	143,757
TVA conservation program receivable	1,721,814	2,130,377
Other assets	701,622	(2,709,883)
Sales tax collections payable	64,050	70,867
Accounts payable and accrued expenses	(7,795,795)	5,635,936
TVA conservation program payable	(1,804,842)	(2,176,792)
Unrecovered purchased power cost	749,042	5,337,316
Underrecovered gas costs	5,210,809	(1,565,433)
Customer deposits plus accrued interest	791,892	1,311,748
Other liabilities	30,635	(178,896)
Net cash provided by operating activities	$ 170,552,469	$ 145,470,152
Noncash capital activities:		
Acquisition of plant assets through developer contributions	$ 467,468	$ 2,007,985

The accompanying notes are an integral part of these consolidated financial statements.

1. Description of Business

Knoxville Utilities Board (KUB), comprised of the Electric Division, Gas Division, Water Division, and Wastewater Division (Divisions), is reported as a component unit enterprise fund in the financial statements of the City of Knoxville. KUB's responsibility is to oversee the purchase, production, distribution, and processing of electricity, natural gas, water, and wastewater services. A seven-member Board of Commissioners (Board) governs KUB. The Board has all powers to construct, acquire, expand, and operate the Divisions. It has full control and complete jurisdiction over the management and operation of the Divisions including setting rates. KUB's accounts are maintained in conformity with the Uniform System of Accounts of the Federal Energy Regulatory Commission (FERC), the Uniform System of Accounts of the National Association of Regulatory Utility Commissioners (NARUC), and the Governmental Accounting Standards Board (GASB), as applicable.

2. Significant Accounting Policies

Basis of Accounting

In conformity with Generally Accepted Accounting Principles (GAAP), KUB follows the provisions of GASB Statement No. 34 (Statement No. 34), *Financial Statements – and Management's Discussion and Analysis – for State and Local Governments* as amended by GASB Statement No. 63 (Statement No. 63), *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources and Net Position.* Statement No. 34 established standards for external financial reporting for all state and local governmental entities. Under Statement No. 63, financial statements include deferred outflows of resources and deferred inflows of resources, in addition to assets and liabilities, and report *net position* instead of net assets. In addition, KUB follows GASB Statement No. 62 (Statement No. 62), *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements* as it relates to certain items for regulatory accounting. Regulatory accounting allows a regulated utility to defer a cost (a regulatory asset) or recognize an obligation (a regulatory liability) if it is probable that through the rate making process, there will be a corresponding increase or decrease in future revenues. Accordingly, KUB has recognized certain regulatory assets and regulatory liabilities in the accompanying Statements of Net Position.

The consolidated financial statements are prepared on the accrual basis of accounting, whereby revenues are recognized when earned and expenses are recognized when incurred. The accounting and financial reporting treatment applied is determined by measurement focus. The transactions are accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities associated with the operations are included on the Statement of Net Position. Net position (i.e., total assets and deferred outflows of resources net of total liabilities and deferred inflows of resources) is segregated into net investment in capital assets, restricted for capital activity and debt service, and unrestricted components.

Recently Adopted New Accounting Pronouncements

In June 2015, the GASB issued GASB Statement No. 75 (Statement No. 75), *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. The Statement addresses reporting by governments that provide OPEB to their employees. Statement No. 75 is effective for fiscal years beginning after June 15, 2017.

In March 2017, the GASB issued GASB Statement No. 85 (Statement No. 85), *Omnibus 2017*. The objective of this Statement is to address practice issues that have been identified during implementation and application of certain GASB Statements. Statement No. 85 is effective for fiscal years beginning after June 15, 2017.

In May 2017, the GASB issued GASB Statement No. 86 (Statement No. 86), *Certain Debt Extinguishment Issues*. The objective of this Statement is to improve consistency in accounting and financial reporting for in-substance defeasance of debt. The Statement provides guidance for transactions in which cash and other monetary assets acquired with existing resources or resources other than the proceeds of refunding debt, are placed in an irrevocable trust for the sole purpose of extinguishing debt. This Statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to financial statements for debt that is defeased in substance. Statement No. 86 is effective for fiscal years beginning after June 15, 2017.

Principles of Consolidation

The consolidated financial statements include the accounts of the Electric, Gas, Water and Wastewater Divisions. All significant intercompany balances and transactions have been eliminated in consolidation.

KUB issues separate financial reports, which include financial statements and required supplementary information, for the Electric, Gas, Water, and Wastewater Divisions. These reports may be obtained by writing Knoxville Utilities Board, P.O. Box 59017, Knoxville, TN 37950-9017.

Plant

Plant and other property are stated on the basis of original cost. The costs of current repairs and minor replacements are charged to operating expense. The costs of renewals and improvements are capitalized. The original cost of utility plant assets retired or otherwise disposed of and the cost of removal less salvage value is charged to accumulated depreciation. When other property is retired, the related asset and accumulated depreciation are removed from the accounts, and the gain or loss is included in the results of operations.

The provision for depreciation of plants in service is based on the estimated useful lives of the assets, which range from three to sixty-seven years, and is computed using the straight-line method. Pursuant to FERC/NARUC, the caption "Provision for depreciation" in the consolidated Statements of Revenues, Expenses and Changes in Net Position does not include depreciation for transportation equipment of $2,448,459 in fiscal year 2018 and $2,060,340 in fiscal year 2017. Under regulatory accounting, interest costs are expensed as incurred with construction of plant assets.

Operating Revenue

Operating revenue consists primarily of charges for services provided by the principal operations of KUB. Operating revenue is recorded when the service is rendered, on a cycle basis, and includes an estimate of unbilled revenue. Revenues are reported net of bad debt expense of $2,158,897 in fiscal year 2018 and $1,524,318 in fiscal year 2017.

Non-operating Revenue

Non-operating revenue consists of revenues that are related to financing and investing types of activities and result from non-exchange transactions or ancillary activities.

Expense

When an expense is incurred for purposes for which there are both restricted and unrestricted assets available, it is KUB’s policy to apply those expenses to restricted assets to the extent such are available and then to unrestricted assets.

Net Position

GASB Statement No. 63 requires the classification of net position into three components – net investment in capital assets; net position-restricted; and net position-unrestricted.

These classifications are defined as follows:

- Net investment in capital assets – This component of net position consists of capital assets, including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt also should be included in this component of net position. If there are significant unspent related debt proceeds at year end, the portion of the debt attributable to the unspent proceeds are not included in the calculation of net investment in capital assets. Rather, that portion of the debt is included in the same net position component as the unspent proceeds.

- Net position-restricted – This component of net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets. Generally, a liability relates to restricted assets if the asset results from a resource flow that also results in the recognition of a liability or if the liability will be liquidated with the restricted assets reported.

- Net position-unrestricted – This component of net position consists of assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or the restricted component of net position.

Contributions in Aid of Construction and Capital Contributions

Contributions in aid of construction are cash collections from customers or others for a particular purpose, generally the construction of new facilities to serve new customers in excess of the investment KUB is willing to make for a particular incremental revenue source. KUB reduces the plant account balances to which contributions relate by the actual amount of the contribution and recognizes the contributions as non-operating revenue in accordance with Statement No. 62.

Capital contributions represent contributions of utility plant infrastructure constructed by developers and others in industrial parks and other developments, and transferred to KUB upon completion of construction and the initiation of utility service. In accordance with GASB Statement No. 33, *Accounting and Financial Reporting for Nonexchange Transactions*, such contributions are recognized as revenues and capital assets upon receipt.

Inventories

Inventories, consisting of plant materials and operating supplies, are valued at the lower of average cost or replacement value.

Change in method of accounting for OPEB

In June 2015, the Governmental Accounting Standards Board (GASB) issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, which addresses reporting by governments that provide OPEB to their employees. This standard was adopted by KUB in 2018 and resulted in a restatement of beginning net position of $4,522,695 to increase the net OPEB asset by $4,522,695 based on revised actuarial assumptions to conform with GASB 75.

OPEB Plan

KUB's employees hired prior to July 1, 1999, who are retired and who (prior to retirement) qualified for retiree medical insurance by meeting the Rule of 80 (age plus years of service) with a minimum of 20 years of service, and were enrolled in medical coverage on their last day are eligible for post-employment health care established by KUB's Board of Commissioners through Resolution No. 1168, as amended, dated October 18, 2007. KUB's policy is to fully fund the annual actuarially determined contributions, which are determined by actuarial valuation. As required by GASB Statement No. 75, KUB measures net OPEB liability as total OPEB liability less the amount of the Plan's fiduciary net position. The amounts reported as of June 30, 2018 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2018 are based on a June 30, 2018 measurement date.

Pension Plan and Qualified Excess Benefit Arrangement

KUB's employees are participants in the Knoxville Utilities Board Pension Plan as authorized by the Charter of the City of Knoxville §1107(J) (Note 10). KUB's policy is to fully fund the annual actuarially determined contributions. As required by GASB Statement No. 68, KUB measures net pension liability as total pension liability less the amount of the Plan's fiduciary net position. The amounts reported as of June 30, 2018 and 2017 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2018 and 2017 are based on a December 31, 2017 and 2016 measurement date, respectively. The net pension asset is $19,778,372 as of June 30, 2018 and $123,941 as of June 30, 2017.

KUB implemented a qualified governmental excess benefit arrangement (QEBA) under IRC section 415(m), which was created by Congress to allow the payment of pension benefits that exceed the IRC section 415(b) limits (and therefore cannot be paid from a qualified retirement plan). The QEBA is a single-employer defined benefit pension plan, administered by KUB (Note 11). As required by GASB Statement No. 73, KUB measures the total pension liability of the QEBA. The amounts reported as of June 30, 2018 and 2017 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2018 and 2017 will be based on the December 31, 2017 and 2016 measurement dates. The total pension liability of the QEBA is $280,341 as of June 30, 2018 and $185,077 as of June 30, 2017.

Investments

Investments are carried at fair value as determined by quoted market prices at the reporting date.

Self-Insurance

KUB has established self-insurance programs covering portions of workers' compensation, employee health, environmental liability, general liability, property and casualty liability, and automobile liability claims. A liability is accrued for claims as they are incurred. When applicable, claims in excess of the self-insured risk are covered by KUB's insurance carrier. Additionally, KUB provides certain lifetime health benefits to eligible retired employees under a self-insurance plan administered by a third party.

Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. These estimates are based on historical experience and various other assumptions that KUB believes are reasonable under the circumstances. However, future events are subject to change and the best estimates and judgments routinely require adjustment. Estimates are used for, but not limited to, inventory valuation, allowance for uncollectible accounts, depreciable lives of plant assets, unbilled revenue volumes, pension trust valuations, OPEB trust valuations, insurance liability reserves, and potential losses from contingencies and litigation. Actual results could differ from those estimates.

Restricted and Designated Assets

Certain assets are restricted by bond resolutions for the construction of utility plant and debt repayment. Certain additional assets are designated by management for contingency purposes and economic development.

Cash Equivalents

For purposes of the Statements of Cash Flows, KUB considers all unrestricted and undesignated highly liquid investments with an original maturity of three months or less when purchased to be cash equivalents.

Deferred Outflows and Inflows of Resources

Deferred outflows of resources are items related to the acquisition of assets or related debt which are amortized over the life of the asset or debt. Deferred inflows of resources are items related to the acquisition of assets or related debt which are amortized over the life of the asset or debt. KUB records costs associated with the gain or loss on refunding of debt as either a deferred outflow or inflow based on the parameters of Statement No. 65. Deferred outflows of resources also include employer pension contributions made subsequent to the measurement date of the net pension liability and before the end of the employer's reporting period in accordance with Statement No. 71. Deferred inflows and deferred outflows also include the net difference between projected and actual earnings on pension plan investments and OPEB plan investments, differences between expected and actual experience, and changes in assumptions in accordance with Statement No. 68 and Statement No. 75.

Debt Premium/Discount

KUB records unamortized premium and discount on debt as a separate line item in the Long Term Debt section of the Financial Statements. Amortization of these amounts is recorded over the life of the applicable debt as amortization expense.

Debt Issuance Costs

In accordance with regulatory accounting, KUB records debt issuance costs as an Other Asset. Amortization of these amounts is recorded over the life of the applicable debt as amortization expense.

Deferred Gain/Loss on Refunding of Debt

KUB records costs associated with the gain or loss on refunding of debt as either a deferred outflow or inflow based on the parameters of Statement No. 65. In accordance with FERC presentation, amortization of these amounts is recorded over the life of the applicable debt as amortization expense.

Compensated Absences

KUB accrues a liability for earned but unpaid paid-time off (PTO) days.

TVA Conservation Program

KUB previously served as a fiscal intermediary for TVA whereby loans were made to KUB customers by TVA to be used in connection with TVA's Energy Right Residential Program. While KUB still holds existing loans on behalf of TVA, no loans were made through this program after October 31, 2015.

Subsequent Events

KUB has evaluated events and transactions through October 25, 2018, the date these financial statements were issued, for items that should potentially be recognized or disclosed. KUB sold $40 million in electric system revenue bonds in August 2018 for the purpose of funding electric system capital improvements in fiscal year 2019. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.42 percent. Annual debt service payments including principal and interest range from $426,345 to $2,190,937 with final maturity in fiscal year 2048. KUB sold $8 million in gas system revenue bonds in August 2018 for the purpose of funding gas system capital improvements in fiscal year 2019. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.49 percent. Annual debt service payments including principal and interest range from $342,571 to $432,319 with final maturity in fiscal year 2048. KUB sold $20 million in water system revenue bonds in August 2018 for the purpose of funding water system capital improvements in fiscal year 2019. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.46 percent. Annual debt service payments including principal and interest range from $868,539 to $1,094,550 with final maturity in fiscal year 2048. KUB sold $12 million in wastewater system revenue bonds in August 2018 for the purpose of funding wastewater system capital improvements in fiscal year 2019. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.49 percent. Annual debt service payments including principal and interest range from $513,941 to $648,756 with final maturity in fiscal year 2048.

Reclassifications

Certain reclassifications have been made to the fiscal year 2017 balances to conform to fiscal year 2018 presentation.

Purchased Power Adjustment

In October 2002, the Board adopted a Purchased Power Adjustment (PPA) to address changes in wholesale power costs. The PPA was established in response to an amendment to KUB's power supply contract under which, among other things, TVA relinquished its regulatory authority over KUB retail electric rates. The PPA allows KUB to promptly adjust retail electric rates in response to wholesale rate changes or adjustments, thus ensuring that KUB will recover the costs incurred for purchased power. These changes in electric costs are reflected as adjustments to the base electric rates established by the Board. The rate-setting authority vested in the Board by the City Charter meets the "self-regulated" provisions of Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, and KUB meets the remaining criteria of Statement No. 62.

TVA implemented a fuel cost adjustment in October 2006 applied on a quarterly basis to wholesale power rates. TVA's quarterly fuel cost adjustment became a monthly fuel cost adjustment effective October 2009. KUB flows changes to wholesale power rates from TVA's fuel cost adjustment mechanism directly through to its retail electric rates via the PPA.

In April 2011, TVA modified its wholesale rate structure to demand and energy billing for its distributors. In response, KUB revised its PPA to include a deferred accounting component to ensure appropriate matching of revenue and expense and cost recovery. KUB will adjust its retail rates on an annual basis to flow any over or under recovery of wholesale power costs through to its customers via the PPA.

Under the PPA mechanism, KUB tracks the actual over/(under) recovered amount in the Over/(Under) Recovered Purchased Power Cost accounts. These accounts are rolled into the PPA rate adjustments thereby assuring that any over/(under) recovered amounts are promptly passed on to the KUB's electric customers. The amount of over/(under) recovered cost was $4,706,715 at June 30, 2018 and $3,957,673 at June 30, 2017.

Purchased Gas Adjustment

In November 1990, the Board implemented a deferred Purchased Gas (Cost) Adjustment (PGA) mechanism, which allows KUB to flow changes in purchased gas costs through to its customers. These changes in gas costs are reflected as adjustments to the base gas rates established by the Board. The rate-setting authority vested in the Board by the City Charter meets the "self-regulated" provisions of GASB Statement No. 62 (Statement No. 62), *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*.

The PGA is intended to ensure that KUB recovers the total cost of natural gas purchased, transported and/or reserved for delivery to its sales and transportation customers on an equitable basis. The PGA is also intended to ensure that no excess or deficient cost recovery from KUB's customers occurs.

Under the PGA mechanism, KUB tracks the actual over/(under) recovered amount in the Over/(Under) Recovered Purchased Gas Cost accounts. These accounts are rolled into the PGA rate adjustment on June 30 of each year thereby ensuring that any over/(under) recovered amounts are passed on to KUB's gas system customers. The amount of over/(under) recovered cost was $1,466,723 at June 30, 2018 and ($3,744,086) at June 30, 2017.

Recently Issued Accounting Pronouncements

In November 2016, the GASB issued GASB Statement No. 83 (Statement No. 83), *Certain Asset Retirement Obligations*. The objective of this Statement is to define asset retirement obligations as a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations is required to perform future asset retirement activities related to its tangible capital assets to recognize a liability based on the guidance in this Statement. Statement No. 83 is effective for fiscal years beginning after June 15, 2018.

In January 2017, the GASB issued GASB Statement No. 84 (Statement No. 84), *Fiduciary Activities*. The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. Statement No. 84 is effective for fiscal years beginning after December 15, 2018.

In June 2017, the GASB issued GASB Statement No. 87 (Statement No. 87), *Leases*. This Statement requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset. Statement No. 87 is effective for fiscal years beginning after December 15, 2019.

In April 2018, the GASB issued GASB Statement No. 88 (Statement No. 88), *Certain Disclosure Related to Debt, Including Direct Borrowings and Direct Placements.* The primary objective of this Statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowing and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. Statement No. 88 is effective for fiscal years beginning after June 15, 2018.

In June 2018, the GASB issued GASB Statement No. 89 (Statement No. 89), *Accounting for Interest Cost Incurred Before the End of a Construction Period.* The objectives of this Statement are to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period, and to simplify accounting for interest cost incurred before the end of a construction period. Statement No. 89 is effective for fiscal years beginning after December 15, 2019.

KUB has not elected early implementation of these standards and has not completed the process of evaluating the impact of these statements on its financial statements.

3. Deposits and Investments

KUB follows the provisions of Statement No. 40 of the Governmental Accounting Standards Board, *Deposit and Investment Risk Disclosures—an amendment of GASB Statement No. 3*. This Statement establishes and modifies disclosure requirements for state and local governments related to deposit and investment risks. KUB classifies its fair value measurements within the fair value hierarchy established by Statement No. 72 of the Governmental Accounting Standards Board, *Fair Value Measurement and Application*.

KUB's investment policy provides the framework for the administration and investment of cash deposits. The investment policy follows Tennessee State law and defines the parameters under which KUB funds should be invested. State law authorizes KUB to invest in obligations of the United States Treasury, its agencies and instrumentalities; certificates of deposit; repurchase agreements; money market funds; and the State Treasurer's Investment Pool.

Interest Rate Risk. KUB's primary investment objectives are to place investments in a manner to ensure the preservation of capital, remain sufficiently liquid to meet all operating requirements, and maximize yield of return. KUB minimizes its exposure to interest rate risk by adhering to Tennessee State law requirements for the investment of public funds. This includes limiting investments to those types described above and limiting maturity horizons. The maximum maturity is four years from the date of investment. KUB also limits its exposure by holding investments to maturity unless cash flow requirements dictate otherwise.

Credit Risk. KUB's investment policy, as required by state law, is to apply the prudent-person rule: Investments are made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable income to be derived, as well as the probable safety of their capital.

Custodial Credit Risk. KUB's investment policy limits exposure to custodial credit risk by restricting investments to a standard set forth by state law. All deposits in excess of federal depository insurance limits are collateralized with government securities held in KUB's name by a third-party custodian bank(s) acting as KUB's agent(s), or through the State of Tennessee's collateral pool. Financial institutions that participate in the collateral pool are subject to special assessment; therefore, the deposits are considered insured. A portion of KUB's investments are generally held in the State of Tennessee Local Government Investment Pool (LGIP). The LGIP is a part of the State Pooled Investment Fund and is sponsored by the State of Tennessee Treasury Department. Tennessee Code Annotated ¶9-4-701 *et seq*. authorizes local governments to invest in the LGIP. None of KUB's investments are exposed to custodial credit risk.

Classification of deposits and investments per Statement of Net Position:

	2018	2017
Current assets		
Cash and cash equivalents	$ 128,217,924	$ 78,955,536
Short-term investments	2,485,400	14,967,295
Short-term contingency fund investments	30,057,546	43,754,509
Other assets		
Long-term contingency fund investments	73,287,077	54,378,356
Restricted assets		
Bond fund	33,506,454	30,864,965
Other funds	21,446	31,434
	$ 267,575,847	$ 222,952,095

The above amounts do not include accrued interest of $457,685 in fiscal year 2018 and $349,778 in fiscal year 2017. Interest income is recorded on an accrual basis.

Investments and maturities of KUB's deposits and investments as held by financial institutions as of June 30, 2018:

	Deposit and Investment Maturities (in Years)		
	Fair Value	Less Than 1	1-5
Supersweep NOW and Other Deposits	$ 131,254,923	$ 131,254,923	$ -
State Treasurer's Investment Pool	8,994,072	8,994,072	-
Agency Bonds	125,573,851	32,542,947	93,030,904
Certificates of Deposits	6,784,036	6,784,036	-
	$ 272,606,882	$ 179,575,978	$ 93,030,904

KUB categorizes its fair value measurements within the fair value hierarchy established by Statement No. 72 of the Governmental Accounting Standards Board, *Fair Value Measurement and Application*. The hierarchy is based on the valuation inputs used to measure the fair value of an asset with a maturity at purchase greater than one year. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

KUB has the following recurring fair value measurements as of June 30, 2018:

- U.S. Agency bonds of $93,030,904, which have a maturity at purchase of greater than one year, are valued using quoted market prices (Level 1 inputs)

KUB measures investments with a maturity at purchase of one year or less at amortized cost, which is considered a fair value equivalent due to their nature. Investments in the State Treasurer's Investment Pool are measured at net asset value (NAV) per share.

4. Accounts Receivable

Accounts receivable consists of the following:

	2018	2017
Wholesale and retail customers		
Billed services	$ 49,764,219	$ 45,629,784
Unbilled services	29,305,291	25,250,090
Other	3,709,393	4,206,592
Allowance for uncollectible accounts	(681,624)	(652,627)
	$ 82,097,279	$ 74,433,839

5. Accounts Payable and Accruals

Accounts payable and accruals consist of the following:

	2018	2017
Trade accounts	$ 51,528,545	$ 57,143,487
Salaries and wages	2,843,932	2,445,767
Advances on pole rental	1,225,693	2,101,729
Self-insurance liabilities	1,822,689	1,891,789
Other current liabilities	16,528,410	14,270,460
	$ 73,949,269	$ 77,853,232

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6. Long-Term Obligations

Electric	Balance June 30, 2017	Additions	Payments	Defeased	Balance June 30, 2018	Amounts Due Within One Year
W-2005 - 3.0 - 4.5%	$ 2,015,000	$ -	$ 2,015,000	$ -	$ -	$ -
Y-2009 - 2.5 - 5.0%	3,600,000	-	1,750,000	-	1,850,000	1,850,000
Z-2010 - 1.45 - 6.35%	22,615,000	-	1,330,000	-	21,285,000	1,355,000
AA-2012 - 3.0 - 5.0%	31,310,000	-	2,670,000	-	28,640,000	2,805,000
BB-2012 - 3.0 - 4.0%	32,550,000	-	700,000	-	31,850,000	725,000
CC-2013 - 3.0 - 4.0%	9,035,000	-	475,000	-	8,560,000	475,000
DD-2014 - 2.0 - 4.0%	38,625,000	-	725,000	-	37,900,000	775,000
EE-2015 - 2.0 - 5.0%	28,275,000	-	150,000	-	28,125,000	150,000
FF-2015 - 2.0 - 5.0%	34,325,000	-	700,000	-	33,625,000	725,000
GG-2016 - 2.0 - 5.0%	40,000,000	-	775,000	-	39,225,000	825,000
HH-2017 - 2.5 - 5.0%	23,445,000	-	55,000	-	23,390,000	1,890,000
II-2017 - 3.0 - 5.0%	-	40,000,000	-	-	40,000,000	700,000
Total bonds	$ 265,795,000	$ 40,000,000	$ 11,345,000	$ -	$ 294,450,000	$ 12,275,000
Unamortized Premium	12,080,941	841,629	891,528	-	12,031,042	-
Total long term debt	$ 277,875,941	$ 40,841,629	$ 12,236,528	$ -	$ 306,481,042	$ 12,275,000
Gas						
P-2010 - 3.3 - 6.2%	$ 11,460,000	$ -	$ 570,000	$ -	$ 10,890,000	$ 595,000
Q-2012 - 2.0 - 4.0%	20,580,000	-	2,125,000	-	18,455,000	2,190,000
R-2012 - 2.0 - 4.0%	9,000,000	-	425,000	-	8,575,000	425,000
S-2013 - 2.0 - 4.0%	10,860,000	-	595,000	-	10,265,000	615,000
T-2013 - 2.0 - 4.6%	23,900,000	-	500,000	-	23,400,000	500,000
U-2015 - 2.0 - 5.0%	11,580,000	-	615,000	-	10,965,000	660,000
V-2016 - 2.125 - 5.0%	11,775,000	-	225,000	-	11,550,000	250,000
W-2017 - 5.0%	8,065,000	-	675,000	-	7,390,000	670,000
X-2017 - 2.0 - 5.0%	-	12,000,000	200,000	-	11,800,000	235,000
Total bonds	$ 107,220,000	$ 12,000,000	$ 5,930,000	$ -	$ 113,290,000	$ 6,140,000
Unamortized Premium	4,671,708	222,730	383,615	-	4,510,823	-
Total long term debt	$ 111,891,708	$ 12,222,730	$ 6,313,615	$ -	$ 117,800,823	$ 6,140,000
Water						
U-2009 - 3.0 - 4.5%	$ 1,875,000	$ -	$ 925,000	$ -	$ 950,000	$ 950,000
W-2011 - 2.0 - 4.0%	22,250,000	-	550,000	-	21,700,000	550,000
X-2012 - 3.0 - 5.0%	8,150,000	-	535,000	-	7,615,000	565,000
Y-2013 - 3.0 - 4.0%	8,690,000	-	300,000	-	8,390,000	320,000
Z-2013 - 2.0 - 5.0%	23,175,000	-	500,000	-	22,675,000	525,000
AA-2014 - 2.0 - 4.0%	7,575,000	-	150,000	-	7,425,000	150,000
BB-2015 - 2.0 - 5.0%	22,735,000	-	865,000	-	21,870,000	885,000
CC-2015 - 2.0 - 4.0%	19,275,000	-	400,000	-	18,875,000	425,000
DD-2016 - 3.0 - 5.0%	24,725,000	-	475,000	-	24,250,000	500,000
EE-2016 - 2.0 - 5.0%	20,875,000	-	100,000	-	20,775,000	100,000
FF-2017 - 3.0 - 5.0%	5,310,000	-	470,000	-	4,840,000	465,000
GG-2017 - 2.125 - 5.0%	-	20,000,000	200,000	-	19,800,000	380,000
Total bonds	$ 164,635,000	$ 20,000,000	$ 5,470,000	$ -	$ 179,165,000	$ 5,815,000
Unamortized Premium	5,357,304	735,453	348,779	-	5,743,978	-
Total long term debt	$ 169,992,304	$ 20,735,453	$ 5,818,779	$ -	$ 184,908,978	$ 5,815,000
Wastewater						
2008 - 4.0 - 6.0%	$ 1,950,000	$ -	$ 1,950,000	$ -	$ -	$ -
2010 - 6.3 - 6.5%	30,000,000	-		-	30,000,000	-
2010C - 1.18 - 6.1%	63,100,000	-	1,500,000	-	61,600,000	1,550,000
2012A - 2.0 - 4.0%	13,755,000	-	985,000	-	12,770,000	970,000
2012B - 1.25 - 5.0%	61,375,000	-	1,000,000	-	60,375,000	1,050,000
2013A - 2.0 - 4.0%	111,095,000	-	635,000	-	110,460,000	660,000
2014A - 2.0 - 4.0%	28,750,000	-	475,000	-	28,275,000	475,000
2015A - 3.0 - 5.0%	129,235,000	-	2,835,000	-	126,400,000	5,010,000
2015B - 3.0 - 5.0%	28,975,000	-	475,000	-	28,500,000	500,000
2016 - 2.0 - 5.0%	19,650,000	-	450,000	-	19,200,000	450,000
2017A - 3.0 - 5.0%	11,965,000	-	1,405,000	-	10,560,000	1,460,000
2017B - 2.0 - 5.0%	-	25,000,000	250,000	-	24,750,000	490,000
Total bonds	$ 499,850,000	$ 25,000,000	$ 11,960,000	$ -	$ 512,890,000	$ 12,615,000
Unamortized Premium	12,067,331	473,638	680,576	-	11,860,393	-
Total long term debt	$ 511,917,331	$ 25,473,638	$ 12,640,576	$ -	$ 524,750,393	$ 12,615,000
Consolidated						
Total bonds	$ 1,037,500,000	$ 97,000,000	$ 34,705,000	$ -	$ 1,099,795,000	$ 36,845,000
Total unamortized premium	34,177,284	2,273,450	2,304,498	-	34,146,236	-
Total long term debt	$ 1,071,677,284	$ 99,273,450	$ 37,009,498	$ -	$ 1,133,941,236	$ 36,845,000

Electric	Balance June 30, 2016	Additions	Payments	Defeased	Balance June 30, 2017	Amounts Due Within One Year
W-2005 - 3.0 - 4.5%	$ 29,480,000	$ -	$ 1,940,000	$ 25,525,000	$ 2,015,000	$ 2,015,000
Y-2009 - 2.5 - 5.0%	5,275,000	-	1,675,000	-	3,600,000	1,750,000
Z-2010 - 1.45 - 6.35%	23,920,000	-	1,305,000	-	22,615,000	1,330,000
AA-2012 - 3.0 - 5.0%	33,850,000	-	2,540,000	-	31,310,000	2,670,000
BB-2012 - 3.0 - 4.0%	33,225,000	-	675,000	-	32,550,000	700,000
CC-2013 - 3.0 - 4.0%	9,485,000	-	450,000	-	9,035,000	475,000
DD-2014 - 2.0 - 4.0%	39,325,000	-	700,000	-	38,625,000	725,000
EE-2015 - 2.0 - 5.0%	28,425,000	-	150,000	-	28,275,000	150,000
FF-2015 - 2.0 - 5.0%	35,000,000	-	675,000	-	34,325,000	700,000
GG-2016 - 2.0-5.0%	-	40,000,000	-	-	40,000,000	775,000
HH-2017 - 2.5-5.0%	-	23,445,000	-	-	23,445,000	55,000
Total bonds	$ 237,985,000	$ 63,445,000	$ 10,110,000	$ 25,525,000	$ 265,795,000	$ 11,345,000
Unamortized Premium	9,728,282	3,222,526	697,187	172,680	12,080,941	-
Total long term debt	$ 247,713,282	$ 66,667,526	$ 10,807,187	$ 25,697,680	$ 277,875,941	$ 11,345,000
Gas						
L-2005 - 3.0 - 4.75%	$ 10,020,000	$ -	$ 725,000	$ 9,295,000	$ -	$ -
N-2007 - 4.0 - 5.0%	550,000	-	550,000	-	-	-
P-2010 - 3.3 - 6.2%	12,000,000	-	540,000	-	11,460,000	570,000
Q-2012 - 2.0 - 4.0%	22,645,000	-	2,065,000	-	20,580,000	2,125,000
R-2012 - 2.0 - 4.0%	9,400,000	-	400,000	-	9,000,000	425,000
S-2013 - 2.0 - 4.0%	11,430,000	-	570,000	-	10,860,000	595,000
T-2013 - 2.0 - 4.6%	24,400,000	-	500,000	-	23,900,000	500,000
U-2015 - 2.0 - 5.0%	11,680,000	-	100,000	-	11,580,000	615,000
V-2016 - 2.125-5.0%	-	12,000,000	225,000	-	11,775,000	225,000
W-2017 - 5.0%	-	8,065,000	-	-	8,065,000	675,000
Total bonds	$ 102,125,000	$ 20,065,000	$ 5,675,000	$ 9,295,000	$ 107,220,000	$ 5,730,000
Unamortized Premium	3,488,853	1,595,609	289,649	123,105	4,671,708	-
Total long term debt	$ 105,613,853	$ 21,660,609	$ 5,964,649	$ 9,418,105	$ 111,891,708	$ 5,730,000
Water						
S-2005 - 3.5 - 5.0%	$ 6,295,000	$ -	$ 465,000	$ 5,830,000	$ -	$ -
T-2007 - 4.0 - 5.5%	750,000	-	750,000	-	-	-
U-2009 - 3.0 - 4.5%	22,625,000	-	875,000	19,875,000	1,875,000	925,000
W-2011 - 2.0 - 4.0%	22,800,000	-	550,000	-	22,250,000	550,000
X-2012 - 3.0 - 5.0%	8,665,000	-	515,000	-	8,150,000	535,000
Y-2013 - 3.0 - 4.0%	8,970,000	-	280,000	-	8,690,000	300,000
Z-2013 - 2.0 - 5.0%	23,675,000	-	500,000	-	23,175,000	500,000
AA-2014 - 2.0 - 4.0%	7,725,000	-	150,000	-	7,575,000	150,000
BB-2015 - 2.0 - 5.0%	22,835,000	-	100,000	-	22,735,000	865,000
CC-2015 - 2.0 - 4.0%	19,650,000	-	375,000	-	19,275,000	400,000
DD-2016 - 3.0-5.0%	-	25,000,000	275,000	-	24,725,000	475,000
EE-2016 - 2.0-5.0%	-	20,875,000	-	-	20,875,000	100,000
FF-2017 - 3.0-5.0%	-	5,310,000	-	-	5,310,000	470,000
Total bonds	$ 143,990,000	$ 51,185,000	$ 4,835,000	$ 25,705,000	$ 164,635,000	$ 5,270,000
Unamortized Premium	2,702,182	3,085,193	270,448	159,623	5,357,304	-
Total long term debt	$ 146,692,182	$ 54,270,193	$ 5,105,448	$ 25,864,623	$ 169,992,304	$ 5,270,000
Wastewater						
2005 B - 3.0 - 5.0%	$ 14,635,000	$ -	$ 1,470,000	$ 13,165,000	$ -	$ -
2008 - 4.0 - 6.0%	6,550,000	-	4,600,000	-	1,950,000	1,950,000
2010 - 6.3 - 6.5%	30,000,000	-	-	-	30,000,000	-
2010C - 1.18 - 6.1%	64,500,000	-	1,400,000	-	63,100,000	1,500,000
2012A - 2.0 - 4.0%	14,595,000	-	840,000	-	13,755,000	985,000
2012B - 1.25 - 5.0%	62,350,000	-	975,000	-	61,375,000	1,000,000
2013A - 2.0 - 4.0%	111,715,000	-	620,000	-	111,095,000	635,000
2014A - 2.0 - 4.0%	29,200,000	-	450,000	-	28,750,000	475,000
2015A - 3.0 - 5.0%	129,360,000	-	125,000	-	129,235,000	2,835,000
2015B - 3.0 - 5.0%	29,425,000	-	450,000	-	28,975,000	475,000
2016 - 2.0 - 5.0%	-	20,000,000	350,000	-	19,650,000	450,000
2017A - 3.0 - 5.0%	-	11,965,000	-	-	11,965,000	1,405,000
Total bonds	$ 492,330,000	$ 31,965,000	$ 11,280,000	$ 13,165,000	$ 499,850,000	$ 11,710,000
Unamortized Premium	11,066,224	1,684,616	600,100	83,409	12,067,331	-
Total long term debt	$ 503,396,224	$ 33,649,616	$ 11,880,100	$ 13,248,409	$ 511,917,331	$ 11,710,000
Consolidated						
Total bonds	$ 976,430,000	$ 166,660,000	$ 31,900,000	$ 73,690,000	$ 1,037,500,000	$ 34,055,000
Total unamortized premium	26,985,541	9,587,944	1,857,384	538,817	34,177,284	-
Total long term debt	$ 1,003,415,541	$ 176,247,944	$ 33,757,384	$ 74,228,817	$ 1,071,677,284	$ 34,055,000

Debt service over remaining term of the debt is as follows:

Fiscal Year	Principal	Interest	Total
2019	$ 36,845,000	$ 41,628,710	$ 78,473,710
2020	38,425,000	40,074,247	78,499,247
2021	40,015,000	38,431,897	78,446,897
2022	41,820,000	36,639,119	78,459,119
2023	43,585,000	34,766,547	78,351,547
2024-2028	224,745,000	148,077,700	372,822,700
2029-2033	206,465,000	109,347,770	315,812,770
2034-2038	180,215,000	75,560,065	255,775,065
2039-2043	185,095,000	40,815,046	225,910,046
2044-2048	97,810,000	8,896,622	106,706,622
2049-2050	4,775,000	248,975	5,023,975
Total	$ 1,099,795,000	$ 574,486,698	$ 1,674,281,698

The Divisions have pledged sufficient revenue, after deduction of all current operating expenses (exclusive of tax equivalents), to meet bond principal and interest payments of revenue bonds when due. Such bond requirements are being met through monthly deposits to the bond funds as required by the bond covenants. As of June 30, 2018 these requirements had been satisfied.

During fiscal year 2006, KUB's Electric Division issued Series W 2005 bonds in part to retire certain existing debt and fund electric system capital improvements. Concurrent with the issuance of these bonds, KUB transferred funds to an irrevocable trust to pay a portion of the Series U 2001 bonds, as such amounts mature. During fiscal year 2009, KUB's Electric Division issued Series Y 2009 bonds to fund electric system capital improvements. During fiscal year 2011, KUB's Electric Division issued series Z 2010 bonds to fund electric system capital improvements. The bonds were issued as federally taxable Build America Bonds with a 35 percent interest payment rebate to be received from the United States Government for each interest payment. Effective October 1, 2017 these bonds became subject to a 6.6 percent reduction in rebate payment amounts due to the United States Government sequestration. The sequestration is effective until intervening Congressional action, at which time the sequestration rate is subject to change. During fiscal year 2012, KUB's Electric Division issued Series AA 2012 bonds to retire a portion of outstanding Series V 2004 bonds. During fiscal year 2013, KUB's Electric Division issued Series BB 2012 bonds to fund electric system capital improvements. KUB's Electric Division also issued Series CC 2013 bonds to retire a portion of outstanding Series X 2006 bonds. During fiscal year 2015, KUB's Electric Division issued Series EE 2015 bonds to retire a portion of outstanding Series Y 2009 bonds. KUB's Electric Division also issued Series DD 2014 and Series FF 2015 to fund electric system capital improvements. During fiscal year 2017, KUB's Electric Division issued Series GG 2016 bonds to fund electric system capital improvements. KUB's Electric Division also issued Series HH 2017 bonds to retire a portion of outstanding Series W 2005 bonds. During fiscal year 2018, KUB's Electric Division issued Series II 2017 bonds to fund electric system capital improvements. In prior years, certain revenue bonds were defeased by placing the proceeds of new bonds in an irrevocable trust to provide for all future debt service payments on the old bonds. Accordingly, the liability for the defeased bonds, $27.5 million at June 30, 2018, and the trust account assets are not included in the financial statements.

During fiscal year 2011, KUB's Gas Division issued Series P 2010 bonds to fund gas system capital improvements. The bonds were issued as federally taxable Build America Bonds with a 35 percent interest payment rebate to be received from the United States Government for each interest payment. Effective October 1, 2017, these bonds became subject to a 6.6 percent reduction in rebate payment amounts due to the United States Government sequestration. The sequestration is effective until intervening Congressional action, at which time the sequestration rate is subject to change. During fiscal year 2012, KUB's Gas Division issued Series Q 2012 bonds to retire Series K

2004 bonds. During fiscal year 2013, KUB's Gas Division issued Series R 2012 bonds to fund gas system capital improvements. KUB's Gas Division also issued Series S 2013 bonds to retire Series M 2006 outstanding bonds. During fiscal year 2014, KUB's Gas Division issued Series T 2013 to fund gas system capital improvements. During fiscal year 2015, KUB's Gas Division issued Series U 2015 bonds to retire Series N 2007 outstanding bonds. During fiscal year 2017, KUB's Gas Division issued Series V 2016 bonds to fund gas system capital improvements. KUB's Gas Division also issued Series W 2017 bonds to retire outstanding Series L 2005 bonds. During fiscal year 2018, KUB's Gas Division issued Series X 2017 bonds to fund gas system capital improvements.

During fiscal year 2010, KUB's Water Division issued Series U 2009 bonds to fund water system capital improvements. During fiscal year 2012, KUB's Water Division issued Series W 2011 bonds to fund water system capital improvements. KUB's Water Division also issued Series X 2012 bonds to retire Series Q 2004 bonds. During fiscal year 2013, KUB's Water Division issued Series Y 2013 bonds to retire a portion of outstanding Series R 2005 bonds. During fiscal year 2014, KUB's Water Division issued Series Z 2013 bonds to fund water system capital improvements. During fiscal year 2015, KUB's Water Division issued Series BB 2015 bonds to retire a portion of outstanding Series T 2007 bonds. KUB's Water Division also issued Series AA 2014 and Series CC 2015 bonds to fund water system capital improvements. During fiscal year 2017, KUB's Water Division issued Series DD 2016 bonds to fund water system capital improvements. KUB's Water Division also issued Series EE 2016 bonds to retire a portion of outstanding Series U 2009 bonds. KUB's Water Division also issued Series FF 2017 bonds to retire outstanding Series S 2005 bonds. During fiscal year 2018, KUB's Water Division issued GG 2017 bonds to fund water system capital improvements. In prior years, certain revenue bonds were defeased by placing the proceeds of new bonds in an irrevocable trust to provide for all future debt service payments on the old bonds. Accordingly, the liability for the defeased bonds, $19.9 million at June 30, 2018, and the trust account assets are not included in the financial statements.

During fiscal year 2009, KUB's Wastewater Division issued Series 2008 bonds to fund wastewater system capital improvements. During fiscal year 2010, KUB's Wastewater Division issued Series 2010 bonds to fund capital improvements. These bonds were issued as federally taxable Build America Bonds with a 35 percent interest payment rebate to be received from the United States Government for each interest payment. Effective October 1, 2017, these bonds became subject to a 6.6 percent reduction in rebate payment amounts due to the United States Government sequestration. The sequestration is effective until intervening Congressional action, at which time the sequestration rate is subject to change. During fiscal year 2011, KUB's Wastewater Division issued Series 2010C bonds to fund capital improvements. These bonds were issued as federally taxable Build America Bonds with a 35 percent interest payment rebate to be received from the United States Government for each interest payment. Effective October 1, 2017, these bonds became subject to a 6.6 percent reduction in rebate payment amounts due to the United States Government sequestration. The sequestration is effective until intervening Congressional action, at which time the sequestration rate is subject to change. During fiscal year 2012, KUB's Wastewater Division issued Series 2012A bonds to retire Series 2004A bonds. During fiscal year 2013, KUB's Wastewater Division issued Series 2012B bonds to fund wastewater system capital improvements. KUB's Wastewater Division also issued Series 2013A bonds to retire a portion of outstanding Series 2005A bonds. During fiscal year 2015, KUB's Wastewater Division issued Series 2015A bonds to retire a portion of outstanding Series 2005A, Series 2007, and Series 2008 bonds. KUB's Wastewater Division also issued Series 2014A and Series 2015B bonds to fund wastewater system capital improvements. During fiscal year 2017, KUB's Wastewater Division issued Series 2016 bonds to fund wastewater system capital improvements. KUB's Wastewater Division also issued Series 2017A bonds to retire outstanding Series 2005B bonds. During fiscal year 2018, KUB's Wastewater Division issued Series 2017B bonds to fund wastewater system capital improvements.

Other liabilities consist of the following:

	Balance June 30, 2017	Increase	Decrease	Balance June 30, 2018
TVA conservation program	$ 6,236,061	$ 329,922	$ (2,134,764)	$ 4,431,219
Accrued compensated absences	9,074,278	16,585,797	(17,162,115)	8,497,960
Customer advances for construction	3,295,196	2,792,954	(1,160,313)	4,927,837
Other	124,777	247,352	(216,718)	155,411
	$ 18,730,312	$ 19,956,025	$ (20,673,910)	$ 18,012,427

	Balance June 30, 2016	Increase	Decrease	Balance June 30, 2017
TVA conservation program	$ 8,412,853	$ 469,575	$ (2,646,367)	$ 6,236,061
Accrued compensated absences	9,061,226	15,234,380	(15,221,328)	9,074,278
Customer advances for construction	2,247,599	2,267,651	(1,220,054)	3,295,196
Other	303,673	193,396	(372,292)	124,777
	$ 20,025,351	$ 18,165,002	$ (19,460,041)	$ 18,730,312

7. Lease Commitments

KUB has non-cancelable operating lease commitments for office equipment, property, and vehicles, summarized for the following fiscal years:

2019	$ 326,280
2020	229,300
Total operating minimum lease payments	$ 555,580

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8. Capital Assets

Capital asset activity was as follows:

	Balance June 30, 2017	Increase	Decrease	Balance June 30, 2018
Production Plant (Intakes)	$ 742,503	$ -	$ -	$ 742,503
Pumping and Treatment Plant	305,202,535	15,992,521	(2,620,577)	318,574,479
Distribution and Collection Plant				
Mains and metering	994,257,571	43,058,700	(4,366,076)	1,032,950,195
Services and meters	177,936,752	29,715,666	(5,479,886)	202,172,532
Electric station equipment	154,663,731	5,396,733	(1,681,763)	158,378,701
Poles, towers and fixtures	160,365,582	18,548,854	(2,021,696)	176,892,740
Overhead conductors	143,937,397	13,259,176	(2,031,041)	155,165,532
Line transformers	99,293,217	3,464,337	(762,671)	101,994,883
Other accounts	307,402,309	7,617,156	(26,274,336)	288,745,129
Total Distribution & Collection Plant	$ 2,037,856,559	$ 121,060,622	$ (42,617,469)	$ 2,116,299,712
General Plant	178,606,088	8,201,012	(5,695,720)	181,111,380
Total Plant Assets	$ 2,522,407,685	$ 145,254,155	$ (50,933,766)	$ 2,616,728,074
Less Accumulated Depreciation	(838,877,792)	(80,244,970)	46,703,431	(872,419,331)
Net Plant Assets	$ 1,683,529,893	$ 65,009,185	$ (4,230,335)	$ 1,744,308,743
Work In Progress	141,763,046	155,166,276	(143,243,481)	153,685,841
Total Net Plant	$ 1,825,292,939	$ 220,175,461	$ (147,473,816)	$ 1,897,994,584

	Balance June 30, 2016	Increase	Decrease	Balance June 30, 2017
Production Plant (Intakes)	$ 742,503	$ -	$ -	$ 742,503
Pumping and Treatment Plant	297,973,884	10,152,622	(2,923,971)	305,202,535
Distribution and Collection Plant				
Mains and metering	934,793,860	68,837,071	(9,373,360)	994,257,571
Services and meters	160,978,776	24,804,848	(7,846,872)	177,936,752
Electric station equipment	152,233,167	3,292,850	(862,286)	154,663,731
Poles, towers and fixtures	148,060,617	13,309,400	(1,004,435)	160,365,582
Overhead conductors	136,774,702	9,610,604	(2,447,909)	143,937,397
Line transformers	96,843,152	3,281,186	(831,121)	99,293,217
Other accounts	300,410,274	8,641,296	(1,649,261)	307,402,309
Total Distribution & Collection Plant	$ 1,930,094,548	$ 131,777,255	$ (24,015,244)	$ 2,037,856,559
General Plant	168,612,148	14,760,666	(4,766,726)	178,606,088
Total Plant Assets	$ 2,397,423,083	$ 156,690,543	$ (31,705,941)	$ 2,522,407,685
Less Accumulated Depreciation	(797,524,421)	(74,213,237)	32,859,866	(838,877,792)
Net Plant Assets	$ 1,599,898,662	$ 82,477,306	$ 1,153,925	$ 1,683,529,893
Work In Progress	143,206,489	154,828,582	(156,272,025)	141,763,046
Total Net Plant	$ 1,743,105,151	$ 237,305,888	$ (155,118,100)	$ 1,825,292,939

9. Risk Management

KUB is exposed to various risks of loss related to active and retiree medical claims; injuries to workers; theft of, damage to, and destruction of assets; environmental damages; and natural disasters. Claims expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. These losses include an estimate of claims that have been incurred but not reported.

These liabilities are included in accrued expenses in the Statement of Net Position. The liability is KUB's best estimate based on available information. At June 30, 2018 and June 30, 2017, the amount of these liabilities was $1,822,689 and $1,891,789, respectively, resulting from the following changes:

	2018	2017
Balance, beginning of year	$ 1,891,789	$ 1,758,352
Current year claims and changes in estimates	15,713,124	16,041,816
Claims payments	(15,782,224)	(15,908,379)
Balance, end of year	$ 1,822,689	$ 1,891,789

10. Pension Plan

Description of Plan

The Knoxville Utilities Board Pension Plan (the Plan) is a governmental plan as defined by the Employee Retirement Income Security Act of 1974 (ERISA or the Act), is not subject to any of the provisions of the Act, and was revised January 1, 2017 to include all prior approved amendments. The Plan is a single-employer contributory, defined benefit pension plan established by Knoxville Utilities Board Resolution No. 980 dated February 18, 1999, effective July 1, 1999, as authorized by the Charter of the City of Knoxville §1107(J). The Plan is designed to provide retirement, disability and death benefits to KUB employees. KUB administers the Plan through an Administrative Committee consisting of seven KUB employees that are appointed by KUB's President and CEO. Any amendments to the Plan involving costs not approved in the operating budget must be adopted by KUB's Board of Commissioners, upon recommendation by KUB's President and CEO. All other amendments to the Plan may be approved by KUB's President and CEO upon 60 days notification to the Board's Audit and Finance Committee. The Plan issues a financial report, which includes financial statements and required supplementary information. The report may be obtained by writing the Knoxville Utilities Board Retirement System, P.O. Box 59017, Knoxville, TN 37950-9017.

Effective January 1, 2011, KUB closed the Plan such that persons employed or re-employed by KUB on or after January 1, 2011, are not eligible to participate, but that eligible employees hired prior to January 1, 2011, who have not separated from service, shall continue as Participants and to accrue benefits under the Plan.

Participants in the Plan consisted of the following as of December 31:

	2017	2016
Inactive plan members:		
Terminated vested participants	34	43
Retirees and beneficiaries	602	605
Active plan members	629	662
Total	1,265	1,310

Retirement Benefits

The Plan provides three benefit arrangements for KUB participants, retirees, and beneficiaries.

The Plan provides pension benefits through the Career Equity Program ("CEP") for eligible employees hired on or after January 1, 1999, and for eligible former "City System Plan A" participants who elected CEP coverage as of July 1, 1999. The guaranteed pension benefit payable to a participant who has completed five or more years of service (or reached the normal retirement date, if earlier) upon termination of KUB employment shall be a lump sum equal to the participant's average compensation times their benefit percentage, as defined in the Plan document, or an annuity may be chosen by the participant.

In addition, the Plan provided retirement benefits through "Plan A" for former City System Plan A participants who elected not to participate in the CEP. Plan A is a closed plan and is not available to KUB employees hired after July 1, 1999. Plan A provides for early retirement benefits with 25 years of service and normal retirement benefits at age 62 or later. Benefits provided to Plan A participants include several different forms of monthly annuity payments.

The Plan also provides retirement benefits through "Plan B" for former "City System Plan B" participants. Plan B is a closed plan providing benefits to participants not covered by Social Security. Benefits provided to Plan B participants include several different forms of monthly annuity payments available to participants.

Effective January 1, 2012, KUB began to provide for additional monthly supplements, which are not subject to cost of living adjustments, to certain former employees and surviving dependents of former employees who are eligible for and have elected coverage under the KUB retiree medical plan and are eligible for Medicare. This was done to compensate for the elimination of drug coverage under the KUB retiree medical plan and to assist such individuals in obtaining prescription drug coverage under Medicare Part D.

Contributions

Participation in Plan A requires employee contributions of 3% of the first $4,800 of annual earnings and 5% of annual earnings in excess of $4,800. KUB contributions are determined by the enrolled actuary of the Plan and equal the amount necessary to provide the benefits under the Plan determined by the application of accepted actuarial methods and assumptions. The method of funding shall be consistent with Plan objectives.

Plan Funding

KUB maintains a Funding Policy for the Plan in accordance with Tennessee State Law. The primary goal of the Policy is to document the method KUB has adopted to provide assurance that future KUB and employee contributions and current Plan assets will be sufficient to fund all benefits expected to be paid to current active, inactive and retired Plan participants and their beneficiaries. Per the Funding Policy, KUB fully funds its annual Actuarially Determined Contribution.

Investments

The Plan's investments are held by State Street Bank and Trust Company (the "Trustee"). The Plan's policy in regard to the allocation of invested assets is established by the Retirement System Investment Committee and approved by the KUB Board of Commissioners and may only be amended by the KUB Board of Commissioners. It is the policy of the Retirement System Investment Committee to pursue an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The following was the Plan's adopted asset allocation policy as of December 31, 2017:

Asset Class	Target Allocation
Domestic equity – large cap	20% - 50%
Domestic equity – mid cap	0% - 15%
Domestic equity – small cap	0% - 15%
Domestic equity – convertible securities	0% - 10%
Non-U.S. equity	0% - 20%
Real estate equity	0% - 10%
Fixed income – aggregate bonds	5% - 25%
Fixed income – long-term bonds	10% - 25%
Cash and deposits	0% - 5%

Contributions of $3,756,283 and $4,816,913 for 2016 and 2015, respectively, were made during the Plan sponsor's fiscal years ending June 30, 2018 and 2017, respectively. The fiscal year 2018 contribution was determined as part of the January 1, 2016 valuation using the Individual Entry Age Normal funding method. The objective under this method is to fund each participant's benefits under the Plan as payments which are level as a percentage of salary, starting on the original participation date (employment date) and continuing until the assumed retirement, termination, disability or death.

Net Pension Liability

The below summarizes the disclosures of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27*("GASB 68"), which requires measurement of the net pension liability as total pension liability less the amount of the Plan's fiduciary net position. The amounts reported as of June 30 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2018 and 2017 will be based on the December 31, 2017 and 2016 measurement date, respectively.

GASB 68 requires certain disclosures related to the net pension liability of the Plan as disclosed below:

	2017	2016
Total pension liability	$ 207,598,733	$ 204,390,738
Plan fiduciary net position	(227,377,105)	(204,514,679)
Plan's net pension (asset) liability	$ (19,778,372)	$ (123,941)
Plan fiduciary net position as a percentage of the total pension liability	109.50%	100.06%

Changes in Net Pension Liability are as follows:

		Total Pension Liability (a)		Increase (Decrease) Plan Fiduciary Net Position (b)		Net Pension Liability (Asset) (a) - (b)
Balances at December 31, 2016	$	204,390,738	$	204,514,679	$	(123,941)
Changes for the year:						
Service cost		4,607,486		-		4,607,486
Interest		15,015,282		-		15,015,282
Differences between Expected and Actual Experience		(1,087,161)		-		(1,087,161)
Changes of Assumptions		(357,633)		-		(357,633)
Contributions - employer		-		4,286,597		(4,286,597)
Contributions - rollovers		-		1,482,701		(1,482,701)
Contributions - member		-		5,931		(5,931)
Net investment income		-		32,442,458		(32,442,458)
Benefit payments		(14,969,979)		(14,969,979)		-
Administrative expense		-		(385,282)		385,282
Net changes		3,207,995		22,862,426		(19,654,431)
Balances at December 31, 2017	$	207,598,733	$	227,377,105	$	(19,778,372)

Actuarial Assumptions
The total pension liability was determined by an actuarial valuation as of December 31, 2017 and 2016, using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial cost method	Individual entry age
Asset valuation method	5-year smoothed market
Amortization method	Level dollar closed period with 25 years remaining as of January 1, 2016 and 26 years remaining as of January 1, 2015
Discount rate	7.5%
Salary increase	From 2.80% to 5.15% for January 1, 2016 and January 1, 2015, based on years of service
Mortality	Sex distinct RP-2000 Combined Mortality projected to 2024 using Scale AA
Inflation	2.8 %

The actuarial assumptions used in the December 31, 2017 and 2016 valuation were based on the results of an actuarial experience study for the period January 1, 2009 through December 31, 2013.

The long-term expected rate of return on Plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Plan's target asset allocation as of December 31, 2017 and 2016 are summarized in the following table. The real rate of return reported for fixed income is for aggregate fixed income. The Plan has both aggregate and long duration fixed income.

	Long Term Expected Real Rate of Return	
Asset Class	**2017**	**2016**
Domestic equity	5.0%	5.6%
Non-U.S. equity	6.6%	7.2%
Real estate equity	5.6%	6.3%
Debt securities	1.4%	1.6%
Cash and deposits	0.7%	0.6%

Discount rate
The discount rate used to measure the total pension liability was 7.5 percent as of January 1, 2017 and 2016. The projection of cash flows used to determine the discount rate assumed that participant contributions will be made at the current contribution rate and that KUB contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the net pension liability to changes in the discount rate
The following presents the net pension liability of the Plan as of December 31, 2017, calculated using the discount rate of 7.5 percent, as well as what the Plan’s net pension liability would be if it were calculated using a discount rate that is one percent lower (6.5 percent) or one percent higher (8.5 percent) than the current rate:

	1% Decrease (6.5%)	**Current Discount Rate (7.5%)**	**1% Increase (8.5%)**
Plan's net pension liability	$ (2,624,670)	$ (19,778,372)	$ (34,742,817)

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Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended June 30, 2018, KUB recognized pension expense of ($15,659).

The impact of experience gains or losses and assumptions changes on the Total Pension Liability are recognized in the pension expense over the average expected remaining service life of all active and inactive members, determined as of the beginning of the measurement period. As of December 31, 2016, this average was 5.00 years. During the measurement year, there was an experience gain of $1,087,161 with $217,432 of that recognized in the current year and in each of the next four years, resulting in a deferred inflow of $869,729. Unrecognized experience gains from prior periods were $2,921,210 of which $824,819 was recognized as a reduction in pension expense in the current year and resulted in a deferred inflow of $2,096,391.

During the measurement year, there were no benefit changes. There was a gain due to assumption changes of $357,633 with $71,526 of that recognized in the current year and in each of the next four years, resulting in a deferred inflow of $286,107. Unrecognized assumption change gains from prior periods were $2,346,307 of which $586,577 was recognized as a reduction in pension expense in the current year and resulted in a deferred inflow of $1,759,730.

The impact of investment gains or losses is recognized over a period of five years. During the measurement year, there was an investment gain of $17,456,614. $3,491,323 of that gain was recognized in the current year and an identical amount will be recognized in each of the next four years. Net unrecognized investment losses from prior periods were $6,682,351 of which $1,642,445 was recognized as an increase in pension expense in the current year. The combination of unrecognized investment gains this year along with the net unrecognized investment losses from prior periods results in a net difference between projected and actual earnings on pension plan investments as of December 31, 2017 of ($8,925,384). The following table summarizes the current balances of deferred outflows and deferred inflows of resources along with the net recognition over future years. In addition, KUB recorded a deferred outflow of resources of $1,878,146 at June 30, 2018 for employer contributions made between December 31, 2017 and June 30, 2018.

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	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ -	$ 2,966,120
Changes in assumptions	-	2,045,837
Net difference between projected and actual earnings on pension plan investments	-	8,925,385
Contributions subsequent to measurement date	1,878,146	-
Total	$ 1,878,146	$ 13,937,342

$1,878,146 reported as deferred outflows of resources resulting from contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2019. Other amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:

Year ended June 30:	
2019	$ (3,549,235)
2020	(1,954,655)
2021	(4,653,172)
2022	(3,780,280)
Thereafter	-

For the year ended June 30, 2017, KUB recognized pension expense of $4,674,543.

The impact of experience gains or losses and assumptions changes on the Total Pension Liability are recognized in the pension expense over the average expected remaining service life of all active and inactive members, determined as of the beginning of the measurement period. As of December 31, 2015, this average was 5.00 years. During the measurement year, there was an experience gain of $2,233,762 with $446,752 of that recognized in the current year and in each of the next four years, resulting in a deferred inflow of $1,787,010. Unrecognized experience gains from prior periods were $1,512,267 of which $378,067 was recognized as a reduction in pension expense in the current year and resulted in a deferred inflow of $1,134,200.

During the measurement year, there were no benefit changes. There was a gain due to assumption changes of $2,932,884 with $586,577 of that recognized in the current year and in each of the next four years, resulting in a deferred inflow of $2,346,307.

The impact of investment gains or losses is recognized over a period of five years. During the measurement year, there was an investment loss of $802,197. $160,439 of that loss was recognized in the current year and an identical amount will be recognized in each of the next four years. Net unrecognized investment losses from prior periods were $7,522,599 of which $1,482,006 was recognized as an increase in pension expense in the current year. The combination of unrecognized investment losses this year along with the net unrecognized investment losses from prior periods results in a net difference between projected and actual earnings on pension plan investments as of December 31, 2016 of $6,682,351. The following table summarizes the current balances of deferred outflows and deferred inflows of resources along with the net recognition over future years. In addition, KUB recorded a deferred outflow of resources of $2,408,459 at June 30, 2017 for employer contributions made between December 31, 2016 and June 30, 2017.

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ -	$ 2,921,210
Changes in assumptions	-	2,346,307
Net difference between projected and actual earnings on pension plan investments	6,682,351	-
Contributions subsequent to measurement date	2,408,459	-
Total	$ 9,090,810	$ 5,267,517

11. Qualified Excess Benefit Arrangement

Description

In fiscal year 2017, KUB implemented a qualified governmental excess benefit arrangement (QEBA) under IRC section 415(m), which was created by Congress to allow the payment of pension benefits that exceed the IRC section 415(b) limits (and therefore cannot be paid from a qualified retirement plan). The QEBA is a single-employer defined benefit pension plan, administered by KUB. The number of participants in any given year for the QEBA is determined by the number of KUB Pension Plan participants who exceed the current year's section 415(b) limitations, as calculated by the KUB Pension Plan actuary. The amount of QEBA benefit will be the amount specified by the terms of the KUB Pension Plan without regard to Section 415(b) limitations minus the amount payable from the KUB Pension Plan as limited by Section 415(b). QEBA benefits are not subject to cost of living adjustments.

As of June 30, 2018, there are 602 active employees eligible for the KUB Pension Plan who are potentially eligible to receive QEBA benefits. There are no inactive employees or retirees currently in the QEBA. The KUB Pension Plan was closed effective January 1, 2011, such that persons employed or re-employed by KUB on or after January 1, 2011, are not eligible to participate, but that eligible employees hired prior to January 1, 2011, who have not separated from service, shall continue as Participants and accrue benefits under the KUB Pension Plan. The KUB Pension Plan was amended to include the provision of QEBA benefits, therefore, amendments to the QEBA require the same authority as amendments to the KUB Pension Plan. As required by federal tax law, the QEBA is unfunded within the meaning of the federal tax laws. KUB may not pre-fund the QEBA to cover future liabilities beyond the current year. KUB has established procedures to pay for these benefits on a pay-as-you-go basis, funded by KUB. There are no assets accumulated in a trust that meets the GASB's criteria.

Implementation of GASB 73

In fiscal year 2016, KUB adopted GASB Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68* ("GASB 73"). GASB 73 extends a similar approach of financial reporting to plans meeting specific criteria that are not administered through trusts that GASB 68 established for pension plans. GASB 73 requires measurement of the total pension liability of the QEBA. The amounts reported as of June 30 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2018 and 2017 will be based on the December 31, 2017 and 2016 measurement dates, respectively.

GASB 73 requires certain disclosures related to the total pension liability of the QEBA, as disclosed below:

	2017	2016
Total pension liability	$280,341	$185,077
Deferred outflows	(69,716)	-
Deferred inflows	-	-
Net impact on Statement of Net Position	$210,625	$185,077
Covered payroll	$43,309,374	$44,437,747
Total pension liability as a % of covered payroll	0.65%	0.42%

Changes in total pension liability of the QEBA are as follows:

	Increase (Decrease) Total Pension Liability
Balances at December 31, 2016	$ 185,077
Changes for the year:	
Service cost	584
Interest	7,535
Changes of Benefits	-
Differences between Expected and Actual Experience	13,684
Changes of Assumptions	73,461
Contributions – employer	-
Contributions – rollovers	-
Contributions – member	-
Net investment income	-
Benefit payments	-
Net changes	95,264
Balances at December 31, 2017	$ 280,341

Actuarial Assumptions
The total pension liability of the QEBA was determined by an actuarial valuation as of January 1, 2017 and projected to December 31, 2017, using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial cost method	Individual entry age
Asset valuation method	5-year smoothed market
Amortization method	Level dollar closed period with 24 years remaining as of January 1, 2017 and 25 years remaining as of January 1, 2016
Salary increase	From 2.80% to 5.15% for January 1, 2017 and January 1, 2016, based on years of service
Mortality	Sex distinct RP-2000 Combined Mortality projected to 2024 using Scale AA
Inflation	2.8 percent

The actuarial assumptions used in the January 1, 2017 valuation were based on the results of an actuarial experience study for the period January 1, 2009 through December 31, 2013.

Discount rate
The QEBA is not funded. In accordance with paragraph 31 of GASB 73, the discount rate is based on the Bond Buyer 20-Bond GO index. This rate was 3.44% at December 31, 2017.

Sensitivity of the total pension liability to changes in the discount rate
The following presents the total pension liability of the QEBA as of December 31, 2017, calculated using the discount rate of 3.44 percent, as well as what the QEBA's total pension liability would be if it were calculated using a discount rate that is one percent lower (2.44 percent) or one percent higher (4.44 percent) than the current rate:

	1% Decrease (2.44%)	Current Discount Rate (3.44%)	1% Increase (4.44%)
QEBA's total pension liability	$ 307,013	$ 280,341	$ 257,483

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended June 30, 2018, KUB recognized pension expense of $29,527 for the QEBA. This amount is not expected to be the same as KUB's contribution to the QEBA ($3,979), but instead represents the change in the net impact on KUB's Statement of Net Position plus employer contributions [$210,625 - $185,077 + $3,979].

The impact of experience gains or losses and assumption changes on the total pension liability are recognized in the pension expense over the average expected remaining service life of all active and inactive members, determined as of the beginning of the measurement period. As of December 31, 2016, this average was 5 years. During the measurement year, there was an experience loss of $13,684 with approximately $2,737 recognized in the current year and each of the next four years, resulting in a deferred outflow of $10,947.

During the measurement year, there were no benefit changes. There was an increase in the total pension liability due to assumption changes of $73,461 with approximately $14,692 recognized in the current year and each of the next four years, resulting in a deferred outflow of $58,769.

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The table below summarizes the current balances of deferred outflows and deferred inflows of resources along with the net recognition over future years:

	Deferred Outflows of Resources		Deferred Inflows of Resources	
Differences between expected and actual experience	$	10,947	$	-
Changes in assumptions		58,769		-
Total	$	69,716	$	-

Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:

Year ended June 30:		
2019	$	17,429
2020		17,429
2021		17,429
2022		17,429
Thereafter		-

For the year ended June 30, 2017, KUB recognized pension expense of $185,077 for the QEBA. This amount is not expected to be the same as KUB's contribution to the QEBA ($0), but instead represents the change in the net impact on KUB's Statement of Net Position plus employer contributions.

The impact of experience gains or losses and assumption changes on the total pension liability are recognized in the pension expense over the average expected remaining service life of all active and inactive members, determined as of the beginning of the measurement period. As of December 31, 2015, this average was 5 years. During the measurement year, there were no assumption changes or experience gains or losses. The benefit change of $0.2 million is due to the implementation of the QEBA. Benefit changes are reflected immediately in the total pension liability of the QEBA.

12. Defined Contribution Plan

The KUB Asset Accumulation 401(k) Plan (the "401(k) Plan") is a defined contribution 401(k) employee retirement savings plan covering eligible KUB employees established by the KUB Board of Commissioners in accordance with the Charter of the City of Knoxville, Tennessee. The 401(k) Plan's assets are held in trust under an agreement between KUB and Fidelity Management Trust Company. Employees hired prior to January 1, 2011 may participate and receive a matching contribution of 50 percent of their own contribution up to a maximum match of 3 percent. Employees hired on or after January 1, 2011 have an enhanced 401(k) due to the closure of the Defined Benefit Pension Plan. They may participate and receive a matching contribution of 50 percent of their own contribution up to a maximum match of 3 percent. They also receive a nonelective KUB contribution of from 3 percent to 6 percent, depending on years of service, whether they contribute or not.

Matching contributions were previously remitted to the KUB Pension Plan (a separate defined benefit plan) in the name of the participant for employees hired prior to January 1, 2011. As of December 9, 2015, these Pension match assets moved from the KUB Pension Plan to the 401(k) Plan. Effective December 9, 2015, all matching contributions are remitted to the 401(k) Plan. The match and nonelective contributions for employees hired on or after January 1, 2011 are paid directly by KUB. KUB funded 401(k) matching contributions and nonelective contributions of $2,174,711 and $1,963,541, respectively, for the years ended June 30, 2018 and 2017.

13. Other Post-Employment Benefits (OPEB)

Description of Trust

The Knoxville Utilities Board Other Post Employment Benefits Trust (the Trust) is a single-employer Other Post Employment Benefits Plan (OPEB Plan) established by the Knoxville Utilities Board of Commissioners through Resolution No. 1168, as amended, dated October 18, 2007. The applicable documentation was submitted to the State Funding Board and, in December 2007, the State Funding Board approved the Trust. The Trust was also approved by the Internal Revenue Service in June 2008. KUB administers the Trust through a Board of Trustees consisting of seven KUB employees that are appointed by KUB's President and CEO. Any amendments to the Trust involving costs not approved in the operating budget must be approved by KUB's Board of Commissioners, upon recommendation by KUB's President and CEO. All other amendments to the Trust may be approved by KUB's President and CEO upon 60 days notification to the Board's Audit and Finance Committee. The investment of all deposits to the Trust is governed by an Investment Policy, which was adopted by the KUB Board and approved by the State Funding Board. The Trust issues a financial report, which includes financial statements and required supplementary information. The report may be obtained by writing the Knoxville Utilities Board Retirement System, P.O. Box 59017, Knoxville, TN 37950-9017.

Effective July 1, 1999, KUB closed the OPEB Plan such that persons employed or re-employed by KUB on or after July 1, 1999, are not eligible to participate, but that eligible employees hired prior to July 1, 1999, who are retired and who (prior to retirement) qualified for retiree medical insurance by meeting the "Rule of 80", the sum of age and at least 20 years of qualified service equal or exceed 80, accrue benefits under the Plan.

Participants in the OPEB Plan consisted of the following as of June 30:

	2018	2017
Retirees	562	567
Dependents of retirees	561	580
Eligible active employees	309	334
Total	1,432	1,481

Benefits

Other post-employment benefits may include, but shall not be limited to, medical, prescription drugs, dental, vision, hearing, Medicare Part B or Part D premiums, life insurance, long-term care, and long-term disability. Only medical and pharmacy are currently provided to eligible retirees.

Contributions and Plan Funding

The primary goal of the Funding Policy for the Trust is to document the method KUB has adopted to provide assurance that future KUB and retiree contributions and current Trust assets will be sufficient to fund all benefits expected to be paid to Trust beneficiaries. Per the Funding Policy, KUB's current practice is to fully fund its annual Actuarially Determined Contribution, which is determined by actuarial valuation.

Contributions are authorized by the terms of the Trust as established by KUB Resolution No. 1168, as amended, as approved by the Tennessee State Funding Board. KUB shall have the right at any time to amend, in whole or in part, the provisions of this Trust; however, no such amendment shall authorize or permit the assets of the Trust to be used for or diverted to purposes other than those expressed in the Declaration of Trust.

It shall be the sole and exclusive responsibility of KUB to determine the level of contributions KUB will make to the Trust for the purpose of financing other post-employment benefits accrued by its respective participants. Neither the Trust, nor the Trust's Board shall be responsible for collecting or otherwise determining the level of contributions needed by KUB to finance any other post-employment benefits offered by KUB. The assets of the Trust shall be expended solely to make payments for other post-employment benefits pursuant to and in accordance with the terms of the Trust and to pay the cost of administration.

Based on the date of retirement, certain retired plan members are required to contribute specified amounts monthly to maintain health insurance. Those who retired prior to July 1983 have no required monthly premiums for themselves or dependents. The retirees, or their surviving dependents, who retired between August 1983 and January 1998 are required to pay $250 per month for pre-Medicare family health insurance. For individuals who retired after January 1998 the required monthly premium for pre-Medicare health insurance is $250 for single coverage and $500 for family coverage. There is currently no premium for Medicare eligible retirees or dependents. KUB is responsible for determining the level of retired plan member contributions on an annual basis, as part of its review of healthcare cost sharing.

Investments

The Trust holds investments in a balanced fund, which invests in passively managed common trust index funds, managed and sponsored by State Street Global Advisors (SSgA), with an asset allocation mirroring the asset allocation of the Trust and rebalanced monthly. The Trust's Investment Policy was established and may only be amended by the KUB Board of Commissioners. The Trust's Investment Policy is to invest in a manner that will provide sufficient investment return to meet current and future retiree health benefits, while conforming to all governing State and Federal statutes. It allows investment of Trust assets in any type of security instrument allowed for in T.C.A 8-50-1203. The following was the Trust's adopted investment target allocations as set forth in the Trust's Investment Policy as of June 30, 2018:

Asset Class	Target Allocation
Domestic Equity:	
Large Cap	30%
Small Cap	8%
International Equity:	
Developed	16%
Emerging	8%
Real Estate Equity	8%
Debt Securities	30%
Total	100%

Contributions of zero and $620,015 were made to the OPEB Trust for the fiscal years ending June 30, 2018 and 2017, respectively, based on the OPEB Plan's actuarial valuations as of January 1, 2016, and 2015.

Implementation of GASB 75

In fiscal year 2018, KUB adopted GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* ("GASB 75"), which requires measurement of the net OPEB liability as total OPEB liability, less the amount of the Trust's fiduciary net position. The amounts reported as of June 30, 2018 are based on the reporting date for the KUB Other Post-Employment Benefits Plan which is June 30, 2018. Measurements as of the reporting date are based on the fair value of assets as of June 30, 2018 and the Total OPEB Liability as of the valuation date, January 1, 2017, updated to June 30, 2018.

The components of the net OPEB liability of the Trust are as follows as of June 30:

		2018		2017
Total OPEB liability	$	45,604,431	$	44,477,738
Plan fiduciary net position		49,355,499		49,000,433
Net OPEB (asset) liability	$	(3,751,068)	$	(4,522,695)
Plan fiduciary net position as a percentage of the total OPEB liability		108.23%		110.17%

Changes in Net OPEB Liability are as follows:

		Total OPEB Liability (a)		Increase (Decrease) Plan Fiduciary Net Position (b)		Net OPEB Liability (Asset) (a) - (b)
Balances at June 30, 2017	$	44,477,738	$	49,000,433	$	(4,522,695)
Changes for the year:						
Service cost		202,603		-		202,603
Interest		3,295,240		-		3,295,240
Differences between Expected and Actual Experience		1,324,769		-		1,324,769
Changes of Assumptions		(397,180)		-		(397,180)
Contributions - employer		-		-		-
Contributions - member		-		-		-
Net investment income		-		3,705,473		(3,705,473)
Benefit payments		(3,298,739)		(3,298,739)		-
Administrative expense		-		(51,668)		51,668
Net changes		1,126,693		355,066		771,627
Balances at June 30, 2018	$	45,604,431	$	49,355,499	$	(3,751,068)

Actuarial assumptions
The total OPEB liability was determined by an actuarial valuation as of January 1, 2017, updated to June 30, 2018, using the following actuarial assumptions, applied to all periods included in the measurement:

Discount rate:	7.5%
Healthcare cost trend rates:	Pre-Medicare: 7.83% grading down to 4.5% over 20 years; Medicare: 6.88% grading down to 4.5% over 20 years; Administrative expenses: 3.0% per year
Salary increases:	From 2.80% to 5.15%, based on years of service
Mortality:	Sex distinct RP-2000 Combined Mortality projected to 2024 using Scale AA
Inflation	2.8%

The actuarial assumptions used in the January 1, 2017 valuation were based on the results of an actuarial experience study for the period January 1, 2009 through December 31, 2013, with subsequent revisions to retirement and termination assumptions based upon a special experience study, which reflected experience through December 31, 2016.

The long-term expected rate of return on Trust investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Trust investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The long-term expected rate of return may be lower in periods of current strong performance due to future valuations that mean revert to the long-term average. Best estimates of arithmetic real rates of return for each major asset class included in the Trust's target asset allocation (see the discussion of the Trust's Investment Policy) are summarized in the chart below.

	Long Term Expected Real Rate of Return	
Asset Class	**2018**	**2017**
Domestic equity	5.1%	5.5%
International equity	6.6%	6.8%
Real estate equity	5.8%	6.0%
Debt securities	1.6%	1.4%
Cash and deposits	0.8%	0.6%

Discount rate
The discount rate used to measure the total OPEB liability was 7.5 percent. The projection of cash flows used to determine the discount rate assumed that participant contributions will be made at the current contribution rate and that KUB contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the Trust's fiduciary net position was projected to be available to make all projected future benefit payments. Therefore, the long-term expected rate of return on Trust investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Sensitivity of the net OPEB liability to changes in the discount rate.
The following presents the net OPEB liability of the Trust as of June 30, 2018, calculated using the discount rate of 7.5 percent, as well as what the Trust's net OPEB liability would be if it were calculated using a discount rate that is 1 percent lower (6.5 percent) or 1 percent higher (8.5 percent) than the current rate:

	1% Decrease (6.5%)	Current Discount Rate (7.5%)	1% Increase (8.5%)
Net OPEB liability (asset)	$1,172,935	$(3,751,068)	$(7,892,399)

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates.
The following presents the net OPEB liability of the Trust as of June 30, 2018, as well as what the Trust's net OPEB liability would be if it were calculated using a healthcare cost trend rate that is 1 percent lower or 1 percent higher than the current rate:

	1% Decrease	Baseline Trend	1% Increase
Net OPEB liability (asset)	$(8,393,131)	$(3,751,068)	$1,703,576

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended June 30, 2018, KUB recognized OPEB expense of $430,880.

The impact of liability experience gains or losses and assumption changes on the Total OPEB Liability are recognized in the OPEB expense over the average expected remaining service life of all active and inactive members of the OPEB Plan. As of the beginning of the measurement period, this average was 2.0 years. During the measurement year, there was an experience loss of $1,324,769 with $662,385 of that recognized in the current year and the remaining amount will be recognized in the next year, resulting in a deferred outflow of resources of $662,384.

During the measurement year, there were no benefit changes. There was a decrease in the Total OPEB Liability due to assumption changes of $397,180 with $198,590 of that recognized in the current year and in the next year, resulting in a deferred inflow of $198,590.

The impact of investment gains or losses is recognized over a period of five year. During the measurement year, there was an investment gain of $153,809. $30,762 of that was recognized in the current year and $123,047 will become a deferred inflow of resources recognized over the next four years. The table below summarizes the current balances of deferred outflows and deferred inflows of resources along with the net recognition over future years.

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 662,384	$ -
Changes in assumptions	-	198,590
Net difference between projected and actual earnings on OPEB plan investments	-	123,047
Total	$ 662,384	$ 321,637

Amounts reported as deferred outflows and deferred inflows of resources will be recognized in OPEB expense as follows:

Year ended June 30:	
2019	$ 433,032
2020	(30,762)
2021	(30,762)
2022	(30,761)
Thereafter	-

14. Related Party Transactions

KUB, in the normal course of operations, is involved in transactions with the City of Knoxville. Such transactions for the years ended June 30, 2018 and 2017 are summarized as follows:

	2018	**2017**
City of Knoxville		
Amounts billed by KUB for utilities and related services	$ 15,524,288	$ 15,360,561
Payments by KUB in lieu of property tax	19,144,877	18,524,684
Payments by KUB for services provided	1,114,977	2,561,261

With respect to these transactions, accounts receivable from the City of Knoxville included in the balance sheet at year end were:

	2018	**2017**
Accounts receivable	$ 991,023	$ 1,136,541

15. Natural Gas Supply Contract Commitments

For fiscal year 2018, the Gas Division hedged 50 percent of its total gas purchases via gas supply contracts. As of June 30, 2018, the Gas Division had hedged the price on approximately 7 percent of its anticipated gas purchases for fiscal year 2019.

KUB contracts separately for the purchase, transportation and storage of natural gas. Purchase commitments for the next five years are as follows:

Firm obligations related to purchased gas – demand

	2019	2020	2021	2022	2023
Transportation					
Tennessee Gas Pipeline	$ 3,271,320	$ 1,090,440	$ -	$ -	$ -
East Tennessee Natural Gas	10,066,388	2,748,496	-	-	-
Storage					
Tennessee Gas Pipeline	1,787,976	595,992	-	-	-
East Tennessee Natural Gas	757,460	-	-	-	-
Saltville Natural Gas	1,870,560	1,483,600	1,290,120	1,290,120	967,590
Demand Total	$ 17,753,704	$ 5,918,528	$ 1,290,120	$ 1,290,120	$ 967,590

Firm obligations related to purchased gas – commodity

	2019	2020	2021	2022	2023
Baseload					
ConocoPhillips	$ 513,820	$ -	$ -	$ -	$ -
Shell Energy	1,056,168	-	-	-	-
BP Energy Company	7,107,913	1,619,500	-	-	-
CNX Gas	1,243,042	-	-	-	-
Sequent Energy	651,721				
NJR Energy Services	898,762	-	-	-	-
Commodity Total	$ 11,471,426	$ 1,619,500	$ -	$ -	$ -

The total commodity values presented here are based upon firm supply obligations with each individual natural gas supplier. The firm obligations value for ConocoPhillips, Shell Energy, and BP Energy Company are based upon firm supply obligations and locked prices with those suppliers. The firm obligations value for BP Energy Company, Sequent, CNX Gas, and NJR Energy Services are based upon firm supply obligations and the applicable NYMEX strip prices on June 30, 2018.

16. Other Commitments and Contingencies

In the normal course of business, there are various lawsuits pending against KUB. Management has reviewed these lawsuits with counsel, who is vigorously defending KUB's position and is of the opinion that the ultimate disposition of these matters will not have a material adverse effect on KUB's financial position, results of operations or cash flows.

In February 2005, a Consent Decree was entered into federal court regarding the operation of KUB’s wastewater system. Under the terms of the Consent Decree, the remediation of identified sanitary sewer overflows (SSOs) on KUB’s wastewater system had to be completed by June 30, 2016. KUB completed all the requirements of the Consent Decree for the collection system two years in advance of the deadline.

The Consent Decree also required KUB to perform an evaluation of the wet weather performance and capacity of its wastewater treatment plants. In July 2007, KUB submitted a Composite Correction Plan (CCP) for its wastewater treatment plants to EPA for review. The development and filing of the CCP was a requirement of the federal order of February 2005. The CCP includes recommended improvements to KUB’s Kuwahee and Fourth Creek treatment plants to address wet weather capacity issues noted in prior assessments. The EPA approved the CCP in January 2009 including a recommended schedule of plant improvements that extends beyond the expiration date of the original Consent Decree. An amendment to the Consent Decree incorporating and establishing this schedule was agreed to by all parties and was entered on June 23, 2009. The purpose of the Amendment is to allow KUB to complete a portion of work outlined in the CCP after the Consent Decree deadline of

June 30, 2016. The CCP provides for a biologically enhanced high-rate clarification (the BEHRC) secondary treatment system to be installed at the Fourth Creek treatment plant by June 30, 2018 and at the Kuwahee treatment plant by June 30, 2021. KUB successfully completed the installation of the BEHRC system at the Fourth Creek treatment plant ahead of schedule in April 2018. Work is currently ongoing at the Kuwahee treatment plant and remains on schedule for completion before the deadline of June 30, 2021. The total cost of such improvements is estimated to be approximately $58 million.

KUB's funding plan for the Consent Decree includes long-term bonds and a series of rate increases phased in over the term of the order. Bond proceeds fund all types of wastewater capital projects, the majority of which are related to the Consent Decree. As of June 30, 2018, the Wastewater Division had issued $530 million in bonds to fund system capital improvements since the inception of the Consent Decree. The Board approved two 50 percent rate increases, which went into effect in April 2005 and January 2007. The Board also approved an 8 percent rate increase, which was effective in September 2008, two 12 percent rate increases, which were effective in April 2011 and October 2012, three 6 percent rate increases effective October 2014, October 2015 and October 2016 and three 5 percent rate increases effective July 2017, July 2018, and July 2019. KUB anticipates additional bond issues and rate increases over the next decade to help fund wastewater capital improvements.

KUB successfully completed the first cycle of Maintenance Operation Management (MOM) requirements one year before the deadline by inspecting manholes and gravity mains, smoke testing gravity mains, performing required inspections of pump stations and the related force mains, and completing all Corrective Action Plan/Engineering Report (CAP/ER) projects. KUB initiated the second MOM cycle that continues to focus on the prevention of SSOs. As part of the Century II initiative, formally known as the PACE10 program, KUB has installed storage tanks providing 34 million gallons of wastewater storage to control wet weather overflows and rehabilitated or replaced approximately 368.8 miles of collection system pipe. KUB also continues to maintain a proactive operations and maintenance plan for the wastewater collection system including inspection, grease control, and private lateral enforcement. The result of the Pace10/Century II initiative has been an 83 percent reduction in SSOs.

As of June 30, 2018, the Wastewater Division had completed its 14th full year under the Consent Decree, spending $536.9 million on capital investments to meet Consent Decree requirements.

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17. Segment Information

The following financial information represents identifiable activities for which the revenue bonds and other revenue backed debt are outstanding for the respective Divisions:

Condensed Statement of Net Position

	2018			
	Electric	**Gas**	**Water**	**Wastewater**
Assets and Deferred Outflows of Resources				
Current assets	$ 130,784,113	$ 53,677,817	$ 27,346,382	$ 65,131,156
Restricted assets	17,738,339	3,499,668	4,052,965	8,236,928
Net capital assets	581,742,407	278,095,447	318,177,240	719,979,490
Other assets	43,578,498	18,210,394	18,868,526	33,437,239
Total assets	$ 773,843,357	$ 353,483,326	$ 368,445,113	$ 826,784,813
Deferred outflows of resources	4,456,959	1,437,457	3,537,637	16,111,529
Total assets and deferred outflows of resources	$ 778,300,316	$ 354,920,783	$ 371,982,750	$ 842,896,342
Liabilities and Deferred Inflows of Resources				
Current liabilities	$ 95,619,157	$ 17,331,159	$ 11,626,083	$ 20,923,114
Other liabilities	16,615,433	4,800,729	1,568,701	1,481,343
Long-term debt	294,206,042	111,660,823	179,093,978	512,135,393
Total liabilities	$ 406,440,632	$ 133,792,711	$ 192,288,762	$ 534,539,850
Deferred inflows of resources	6,844,310	2,424,026	1,853,667	3,136,975
Total liabilities and deferred inflows of resources	$ 413,284,942	$ 136,216,737	$ 194,142,429	$ 537,676,825
Net position				
Net investment in capital assets	$ 278,370,404	$ 161,294,129	$ 138,681,584	$ 216,036,743
Restricted	12,285,419	2,050,413	1,941,221	3,158,568
Unrestricted	74,359,551	55,359,504	37,217,516	86,024,206
Total net position	$ 365,015,374	$ 218,704,046	$ 177,840,321	$ 305,219,517

Condensed Statement of Net Position

	2017			
	Electric	**Gas**	**Water**	**Wastewater**
Assets and Deferred Outflows of Resources				
Current assets	$ 126,944,697	$ 37,997,762	$ 28,286,134	$ 49,584,845
Restricted assets	16,094,418	3,221,379	3,663,847	7,991,374
Net capital assets	548,723,543	271,284,847	298,532,602	706,751,947
Other assets	26,644,185	14,128,546	11,279,052	24,483,884
Total assets	$ 718,406,843	$ 326,632,534	$ 341,761,635	$ 788,812,050
Deferred outflows of resources	7,909,536	2,645,831	4,607,518	18,331,718
Total assets and deferred outflows of resources	$ 726,316,379	$ 329,278,365	$ 346,369,153	$ 807,143,768
Liabilities and Deferred Inflows of Resources				
Current liabilities	$ 95,388,231	$ 19,167,104	$ 10,304,921	$ 19,799,766
Other liabilities	16,615,024	3,047,328	1,622,907	1,587,803
Long-term debt	266,530,941	106,161,708	164,722,304	500,207,331
Total liabilities	$ 378,534,196	$ 128,376,140	$ 176,650,132	$ 521,594,900
Deferred inflows of resources	2,528,408	895,478	684,777	1,158,854
Total liabilities and deferred inflows of resources	$ 381,062,604	$ 129,271,618	$ 177,334,909	$ 522,753,754
Net position				
Net investment in capital assets	$ 275,291,471	$ 160,724,983	$ 134,010,490	$ 216,334,381
Restricted	11,360,213	1,874,535	1,732,368	3,009,134
Unrestricted	58,602,091	37,407,229	33,291,386	65,046,499
Total net position	$ 345,253,775	$ 200,006,747	$ 169,034,244	$ 284,390,014

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Condensed Statement of Revenues, Expenses and Changes in Net Position

	2018			
	Electric	Gas	Water	Wastewater
Operating revenues	$560,110,507	$ 114,539,188	$ 54,365,215	$ 94,715,764
Operating expenses	497,857,357	80,099,775	29,830,805	35,977,830
Provision for depreciation	35,430,800	12,717,222	10,379,928	19,137,860
Total operating expenses	533,288,157	92,816,997	40,210,733	55,115,690
Operating income	26,822,350	21,722,191	14,154,482	39,600,074
Non-operating expense	(9,351,637)	(3,813,875)	(5,985,484)	(20,043,786)
Change in net position before capital contributions	17,470,713	17,908,316	8,168,998	19,556,288
Capital contributions	119,992	20,125	49,129	278,222
Change in net position	17,590,705	17,928,441	8,218,127	19,834,510
Net position				
Beginning of year, as previously reported	345,253,775	200,006,747	169,034,244	284,390,014
Change in method of accounting for OPEB	2,170,894	768,858	587,950	994,993
Net position, beginning of year, as restated	347,424,669	200,775,605	169,622,194	285,385,007
End of year	$365,015,374	$ 218,704,046	$ 177,840,321	$ 305,219,517

Condensed Statement of Revenues, Expenses and Changes in Net Position

	2017			
	Electric	Gas	Water	Wastewater
Operating revenues	$546,364,012	$ 91,868,316	$ 50,769,639	$ 88,517,210
Operating expenses	497,323,835	69,495,685	29,123,189	36,725,972
Provision for depreciation	31,450,260	12,261,903	9,792,630	18,517,403
Total operating expenses	528,774,095	81,757,588	38,915,819	55,243,375
Operating income	17,589,917	10,110,728	11,853,820	33,273,835
Non-operating expense	(8,324,347)	(4,020,718)	(5,937,091)	(20,463,169)
Change in net position before capital contributions	9,265,570	6,090,010	5,916,729	12,810,666
Capital contributions	1,420,361	-	123,840	463,784
Change in net position	10,685,931	6,090,010	6,040,569	13,274,450
Net position				
Beginning of year	334,567,844	193,916,737	162,993,675	271,115,564
End of year	$345,253,775	$ 200,006,747	$ 169,034,244	$ 284,390,014

Condensed Statement of Cash Flows

	2018			
	Electric	**Gas**	**Water**	**Wastewater**
Net cash provided by operating activities	$ 51,557,302	$ 35,529,580	$ 25,748,290	$ 57,717,293
Net cash used in capital and related financing activities	(50,954,932)	(18,097,897)	(21,982,580)	(39,967,945)
Net cash provided by (used in) investing activities	2,536,758	613,141	989,073	5,574,305
Net increase (decrease) in cash and cash equivalents	3,139,128	18,044,824	4,754,783	23,323,653
Cash and cash equivalents, beginning of year	37,195,215	13,391,230	9,395,231	18,973,860
Cash and cash equivalents, end of year	$ 40,334,343	$ 31,436,054	$ 14,150,014	$ 42,297,513

Condensed Statement of Cash Flows

	2017			
	Electric	**Gas**	**Water**	**Wastewater**
Net cash provided by operating activities	$ 58,301,306	$ 20,879,095	$ 16,704,257	$ 49,585,495
Net cash used in capital and related financing activities	(49,016,710)	(17,822,101)	(12,212,926)	(49,735,917)
Net cash provided by (used in) investing activities	(6,881,167)	(701,913)	(4,488,917)	(4,601,363)
Net increase (decrease) in cash and cash equivalents	2,403,429	2,355,081	2,414	(4,751,785)
Cash and cash equivalents, beginning of year	34,791,786	11,036,149	9,392,817	23,725,645
Cash and cash equivalents, end of year	$ 37,195,215	$ 13,391,230	$ 9,395,231	$ 18,973,860

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Knoxville Utilities Board
Required Supplementary Information - Schedule of Changes in Net Pension Liability and Related Ratios
June 30, 2018
(Unaudited)

	*Year ended December 31			
	2017	2016	2015	2014
Total pension liability				
Service cost	$ 4,607,486	$ 4,226,985	$ 4,157,062	$ 4,092,808
Interest	15,015,282	14,966,559	14,812,784	14,698,657
Differences between expected and actual experience	(1,087,161)	(2,233,762)	(1,890,334)	-
Changes of assumptions	(357,633)	(2,932,883)	-	-
Benefit payments, including refunds of member contributions	(14,969,979)	(14,138,511)	(15,350,926)	(15,533,167)
Net change in total pension liability	3,207,995	(111,612)	1,728,586	3,258,298
Total pension liability - beginning	204,390,738	204,502,350	202,773,764	199,515,466
Total pension liability - ending (a)	$ 207,598,733	$ 204,390,738	$ 204,502,350	$ 202,773,764
Plan fiduciary net position				
Contributions - employer	$ 4,286,597	$ 5,243,146	$ 5,991,887	$ 5,908,541
Contributions - participants	1,488,632	555,075	487,546	475,854
Net investment income	32,360,219	13,788,263	(95,430)	22,292,369
Other additions	82,239	45,848	30,879	29,733
Benefit payments, including refunds of member contributions	(14,895,979)	(14,044,511)	(15,274,926)	(15,405,167)
Administrative expense	(385,282)	(441,332)	(397,160)	(378,085)
Death benefits	(74,000)	(94,000)	(76,000)	(128,000)
Net change in plan fiduciary net position**	22,862,426	5,052,489	(9,333,204)	12,795,245
Plan fiduciary net position - beginning**	204,514,679	199,462,190	208,795,394	196,000,149
Plan fiduciary net position - ending (b)**	$ 227,377,105	$ 204,514,679	$ 199,462,190	$ 208,795,394
Plan's net pension liability - ending (a) - (b)	$ (19,778,372)	$ (123,941)	$ 5,040,160	$ (6,021,630)
Plan fiduciary net position as a percentage of the total pension liability	109.53%	100.06%	97.54%	102.97%
Covered payroll	$ 43,309,374	$ 44,437,747	$ 44,446,743	$ 44,076,351
Plan's net pension liability as a percentage of covered payroll	(45.67%)	(0.28%)	11.34%	(13.66%)

Notes to Schedule:

* Information not reflected prior to 2014 due to changes in actuary methodologies required under GASB 67, which was implemented in 2014.

** Excludes amounts related to 401(k) matching contributions.

Knoxville Utilities Board
Required Supplementary Information - Schedule of Employer Pension Contributions
June 30, 2018
(Unaudited)

	*Year ended December 31			
	2017	2016	2015	2014
Actuarially determined contribution	$ 4,286,597	$ 5,243,146	$ 5,991,887	$ 5,908,541
Contribution in relation to the actuarially determined contribution	4,286,597	5,243,146	5,991,887	5,908,541
Contribution deficiency	$ -	$ -	$ -	$ -
Covered payroll	$ 43,309,374	$ 44,437,747	$ 44,446,743	$ 44,076,351
Contributions as a percentage of covered payroll	9.90%	11.80%	13.48%	13.41%

Notes to Schedule:

Valuation Dates:	January 1, 2012 - 2016
Timing:	Actuarially determined contributions for a plan year are based upon 50% of the amounts determined at the actuarial valuations for each of the two prior plan years.

Key methods and assumptions used to determine contribution rates:

Actuarial cost method:	Entry age normal at January 1, 2012; Individual entry age of January 1, 2013 - 2016
Asset valuation method:	5-year smoothed market
Amortization method:	Level dollar closed period with 25 years remaining as of January 1, 2016
Discount rate:	8% at January 1, 2012 - 2013, 7.5% at January 1, 2014 - 2016
Salary increases:	From 2.58% to 7.92% for January 1, 2012 - 2013 and from 2.80% to 5.15% for January 1, 2014 - 2016, based on years of service
Mortality:	Sex distinct RP-2000 Combined Mortality projected to 2018 using Scale AA for the January 1, 2012 - 2013 valuations. Sex distinct RP-2000 Combined Mortality projected to 2024 using Scale AA for the January 1, 2014 - 2016 valuations.
Inflation:	2.8 percent

* Schedule of Employer Contribution information is not reflected prior to 2014 due to changes in actuary methodologies required under GASB 67, which was implemented 2014.

Knoxville Utilities Board
Required Supplementary Information – Schedule of Changes in Net OPEB Liability and Related Ratios
June 30, 2018
(Unaudited)

	*Year ended June 30 2018
Total OPEB liability	
Service cost	$ 202,603
Interest	3,295,240
Differences between expected and actual experience	1,324,769
Changes of assumptions	(397,180)
Benefit payments	(3,298,739)
Net change in total OPEB liability	1,126,693
Total OPEB liability - beginning	44,477,738
Total OPEB liability - ending (a)	$ 45,604,431
Plan fiduciary net position	
Contributions - employer	$ -
Net investment income	3,705,473
Benefit payments	(3,298,739)
Administrative expense	(51,668)
Net change in plan fiduciary net position	355,066
Plan fiduciary net position - beginning	49,000,433
Plan fiduciary net position - ending (b)	$ 49,355,499
Net OPEB liability - ending (a) - (b)	$ (3,751,068)
Plan fiduciary net position as a percentage of the total OPEB liability	108.23%
Covered employee payroll	$ 23,677,080
Net OPEB liability as a percentage of covered employee payroll	(15.84%)

Notes to Schedule:

* Information not reflected prior to 2018 due to changes in actuary methodologies required under GASB 75, which was implemented in 2018.

Knoxville Utilities Board
Required Supplementary Information – Schedule of Employer OPEB Contributions
June 30, 2018
(Unaudited)

	*Year ended June 30 2018
Actuarially determined contribution	$ -
Contribution in relation to the annual required contribution	-
Contribution deficiency/(excess)	$ -
Covered employee payroll	$ 23,677,080
Contributions as a percentage of covered employee payroll	0.00%

Notes to Schedule:

Valuation Date:	January 1, 2016
Timing:	Actuarially determined contribution rates are calculated based on the actuarial valuation completed 18 months before the beginning of the fiscal year.

Key methods and assumptions used to determine contribution rates:

Actuarial cost method:	Entry age normal
Asset valuation method:	5-year smoothed market
Amortization method:	Level dollar, closed period with 20 years remaining as of January 1, 2016
Discount rate:	7.5%
Healthcare cost trend rate:	Pre-Medicare: 8.00% to 4.50 % grading down over 20 years Medicare: 7.00% to 4.50% grading down over 20 years Administrative expenses: 3.0% per year

* Schedule of Employer Contribution information is not reflected prior to 2018 due to changes in actuary methodologies required under GASB 75, which was implemented in 2018.

Knoxville Utilities Board
Required Supplementary Information – Qualified Governmental Excess Benefit Arrangement
Schedule of Changes in Total Pension Liability and Related Ratios
June 30, 2018
(Unaudited)

	*Year ended December 31	
	2017	**2016**
Total pension liability		
Service cost	$ 584	$ -
Interest (includes interest on service cost)	7,535	-
Changes of benefit terms	-	185,077
Differences between expected and actual experience	13,684	-
Changes of assumptions	73,461	-
Benefit payments, including refunds of member contributions	-	-
Net change in total pension liability	95,264	185,077
Total pension liability - beginning	185,077	-
Total pension liability - ending	$ 280,341	$ 185,077
Covered payroll	$ 43,309,374	$ 44,437,747
Total pension liability as a percentage of covered payroll	0.65%	0.42%

Notes to Schedule:

* There are no assets accumulated in a trust that meet the criteria in paragraph 4 of GASB 73 to pay related benefits.

Federal Grantor/ Pass-Through Grantor	Program Name	CFDA Number	Contract Number	Expenditures
U.S. Department of Homeland Security through Tennessee Department of Military	Disaster Grants - Public Assistance	97.036	34101-19618	$ 878,634
		Total Program 97.036		$ 878,634
		Total Federal Awards		$ 878,634

NOTE 1 - BASIS OF PRESENTATION
The Schedule of Expenditures of Federal Awards and State Financial Assistance includes the federal award related grant activity of Knoxville Utilities Board and is presented on the accrual basis of accounting. The expenditures reported in the Schedule of Expenditures and State Financial Assistance were incurred in fiscal year 2017. In accordance with the requirements of CFDA 97.036, the expenditures have been reported in fiscal year 2018 when the grant was approved by the Federal Emergency Management Association. KUB did not elect to use 10% de minimis indirect cost rate.

Section I -- Summary of Auditors' Results

Financial Statements

Type of auditors' report issued:	Unmodified
Internal control over financial reporting: Material weakness(es) identified?	None reported
Significant deficiency(s) identified not considered to be material weaknesses?	None reported
Noncompliance material to financial statements:	None reported

Federal Awards

Internal control over major programs: Material weakness(es) identified?	None reported
Significant deficiency(s) identified not considered to be material weaknesses?	None reported
Type of auditors' report issued on compliance for major programs:	Unmodified
Any audit findings disclosed that are required to be reported in accordance with Title 2 U.S. Code of Federal Regulations Part 200?	None reported

Identification of major programs:

CFDA	Name of Program
97.036	Disaster Grants – Public Assistance

Dollar threshold used to distinguish between Type A and Type B programs:	$750,000
Auditee qualified as low-risk auditee?	No

Section II -- Financial Statement Findings
None reported.

Section III -- Federal Award Findings and Questioned Costs
None reported.

Section IV – Summary Schedule of Prior Year Audit Findings
Not applicable as there were no prior year findings reported.

Section V – Corrective Action Plan
Not applicable as there were no current year findings reported.

Crime
Covers losses resulting from employee dishonesty, robbery, burglary, and computer fraud. Limits of coverage - $5,000,000; $250,000 retention.

Directors' and Officers' Liability Insurance
Covers KUB personnel appropriately authorized to make decisions on behalf of KUB (including but not limited to Commissioners, President and CEO, Senior Vice Presidents, Vice Presidents, and Directors) for wrongful acts. Limits of coverage - $20,000,000; $1,000,000 corporate deductible, $0 individual deductible.

Employment Practices Liability
Coverage for costs related to actual or alleged employment practices violations for amounts exceeding specified amount ($500,000). Limits of coverage - $10,000,000.

Fiduciary
Covers losses resulting from wrongful acts related to KUB's Pension, 401(k), OPEB Trust funds, and Medical Plan. Limits of coverage - $10,000,000; $150,000 deductible.

Pollution Legal Liability
New conditions coverage for losses exceeding specified amount per occurrence ($1,000,000). Limits of coverage - $20,000,000.

Property Insurance
This coverage provides protection of KUB's property for fire, extended coverage, vandalism and malicious mischief, and coverage on boilers and machinery. Also included are flood and earthquake damage and mechanical failure. Limits of coverage - $250,000,000 per occurrence (subject to certain sublimits); $2,500,000 deductible per occurrence.

Travel Accident
Covers losses related to employees' business travel. Limits of coverage - $1,500,000 aggregate.

Excess Insurance for General Liability
As a government entity, KUB's liability is limited under the Tennessee Governmental Tort Liability Act (TCA §29-20-403). KUB is self-insured for up to the first $700,000 of any accident and has insurance of $1,000,000 above this retention.

Excess Insurance for Workers' Compensation
Covers all losses exceeding specified amount per occurrence ($1,000,000). Limits of coverage - Statutory; stop loss coverage applies for aggregate losses over $5,000,000.

Employee Health Plan Stop Loss Coverage
KUB's employee health plan is self-funded. KUB has purchased stop loss insurance, which covers KUB's exposure to annual expenses in excess of $500,000 per individual participant.

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Report of Independent Auditors on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

Board of Commissioners
Knoxville Utilities Board
Knoxville, Tennessee

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Knoxville Utilities Board (KUB), a component unit of the City of Knoxville, Tennessee, as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise KUB's basic financial statements, and have issued our report thereon dated October 25, 2018.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered KUB's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of KUB's internal control. Accordingly, we do not express an opinion on the effectiveness of KUB's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of KUB's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Board of Commissioners
Knoxville Utilities Board
Knoxville, Tennessee

Compliance and Other Matters

As part of obtaining reasonable assurance about whether KUB's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of KUB's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering KUB's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Coulter & Justus, P.C.

Knoxville, Tennessee
October 25, 2018

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Report of Independent Auditors on Compliance for Each Major Program and on Internal Control over Compliance Required by the Uniform Guidance

Board of Commissioners
Knoxville Utilities Board
Knoxville, Tennessee

Report on Compliance for the Major Federal Program

We have audited the compliance of the Knoxville Utilities Board (KUB), a component unit of the City of Knoxville, Tennessee, with the types of compliance requirements described in the *U.S. Office of Management and Budget (OMB) Compliance Supplement* that could have a direct and material effect on its major federal program for the year ended June 30, 2018. KUB's major federal program is identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations, and terms and conditions of federal awards applicable to its federal program.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for KUB's major federal program based on our audit of the types of compliance requirements referred to above.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on the major federal program occurred. An audit includes examining, on a test basis, evidence about KUB's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the major federal program. However, our audit does not provide a legal determination of KUB's compliance.

Board of Commissioners
Knoxville Utilities Board
Knoxville, Tennessee

Opinion

In our opinion, KUB complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on its major federal program for the year ended June 30, 2018.

Report on Internal Control over Compliance

Management of KUB is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered KUB's internal control over compliance with the types of requirements that could have a direct and material effect on its major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of KUB's internal control over compliance.

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Coulter & Justus, P.C.

Knoxville, Tennessee
October 25, 2018