



Consolidated

Financial Statements and Supplemental Information

June 30, 2018 and 2017

KUB Board of Commissioners

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Knoxville Utilities Board

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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.

Knoxville, Tennessee
October 25, 2018

Coulter & Justus, P.C.

Knoxville Utilities Board

Management's Discussion and Analysis

June 30, 2018 and 2017

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.

Knoxville Utilities Board

Management's Discussion and Analysis

June 30, 2018 and 2017

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

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Management's Discussion and Analysis

June 30, 2018 and 2017

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

Knoxville Utilities Board

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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.

Knoxville Utilities Board

Management's Discussion and Analysis

June 30, 2018 and 2017

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 Management's Discussion and Analysis June 30, 2018 and 2017

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.

Knoxville Utilities Board
Management's Discussion and Analysis
June 30, 2018 and 2017

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

| <i>(in thousands of dollars)</i> | 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 | <u>2,348,101</u> | <u>2,209,108</u> | <u>2,095,990</u> |
| 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 | <u>1,281,321</u> | <u>1,210,423</u> | <u>1,133,396</u> |
| 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 | <u>\$ 1,066,780</u> | <u>\$ 998,685</u> | <u>\$ 962,594</u> |

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.

Knoxville Utilities Board

Management's Discussion and Analysis

June 30, 2018 and 2017

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.

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Deferred Outflows of Resources

Fiscal Year 2018 Compared to Fiscal Year 2017

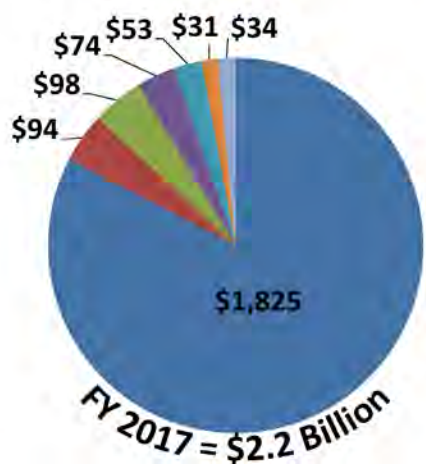
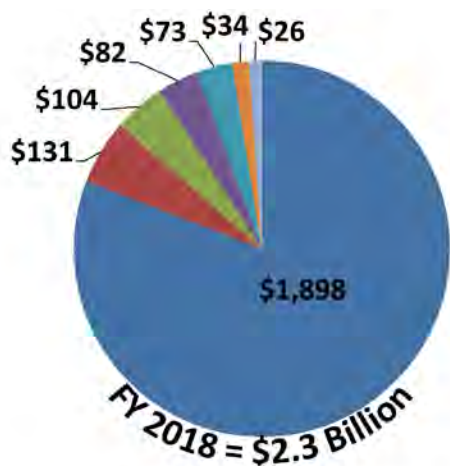
Deferred outflows of resources decreased \$8 million compared to the prior year, reflecting a decrease in pension outflow of \$7.1 million and a \$1.5 million decrease in unamortized bonds refunding costs offset by a \$0.7 increase in OPEB outflow when compared to the prior fiscal year.

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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**Knoxville Utilities Board
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**Consolidated Total Assets and
Deferred Outflows of Resources
(in Millions)**

| | <u>FY18</u> | <u>FY17</u> |
|--------------------------------|-------------|-------------|
| 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.

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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

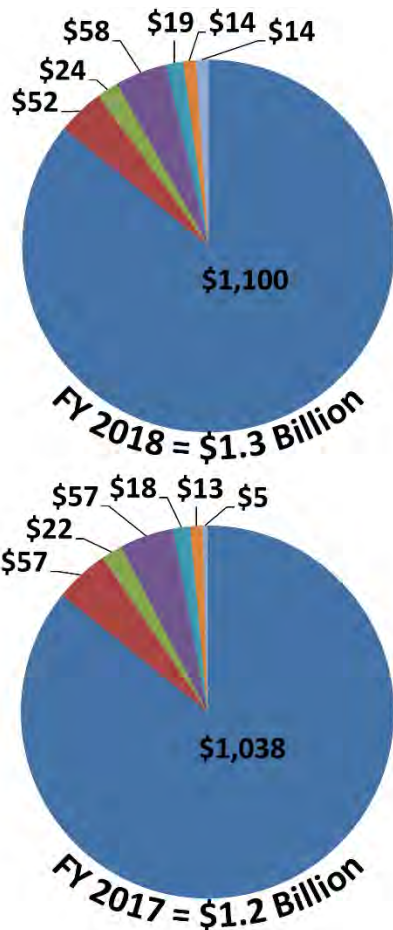
Deferred inflows increased \$9 million compared to the prior fiscal year primarily due to differences in pension inflows.

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)

| | <u>FY18</u> | <u>FY17</u> |
|---------------------------------|-------------|-------------|
| ■ 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.

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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 | <u>477,038</u> | <u>460,594</u> | <u>439,301</u> |
| Margin from sales | <u>338,506</u> | <u>308,902</u> | <u>294,061</u> |
| 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 | <u>34,504</u> | <u>33,483</u> | <u>31,440</u> |
| Total operating expenses | <u>236,207</u> | <u>236,073</u> | <u>223,096</u> |
| 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) | <u>(1,296)</u> | <u>(416)</u> | <u>(408)</u> |
| Change in net position before capital contributions | <u>63,104</u> | <u>34,083</u> | <u>32,802</u> |
| Capital contributions | 467 | 2,008 | 1,170 |
| Change in net position | <u>\$ 63,571</u> | <u>\$ 36,091</u> | <u>\$ 33,972</u> |

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.

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- 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.

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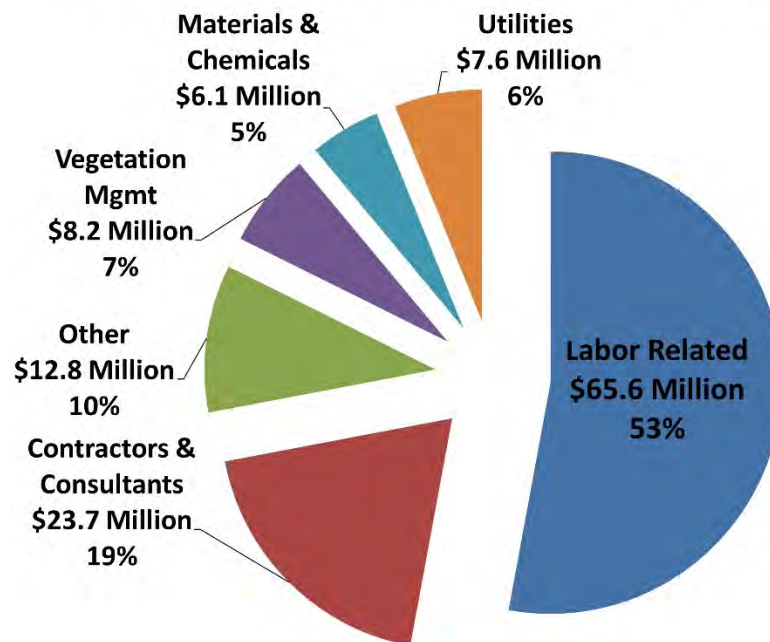
Operating Expenses

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.

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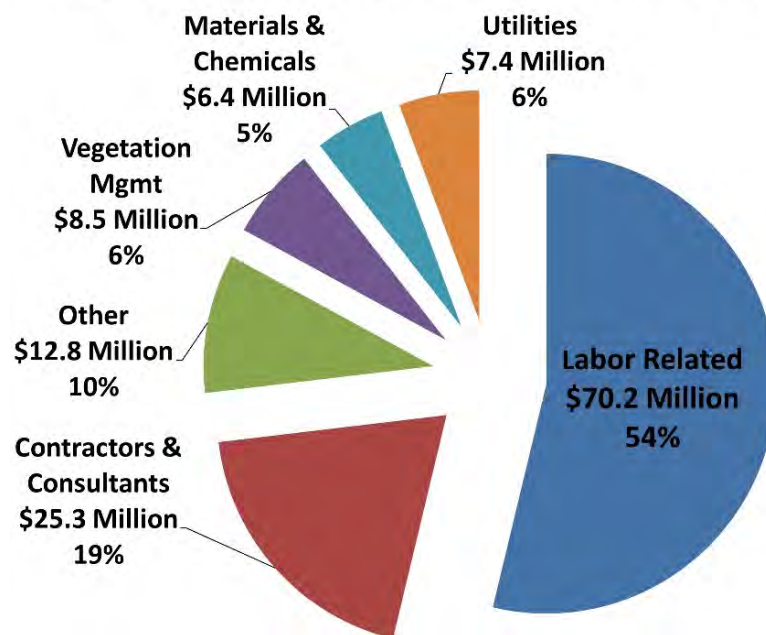
- Taxes and tax equivalents increased \$1 million or 3 percent due to increased plant in service levels. Tax equivalent payments to taxing jurisdictions in which KUB's utility systems are located are based on a combination of net plant values and margin from energy sales.

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

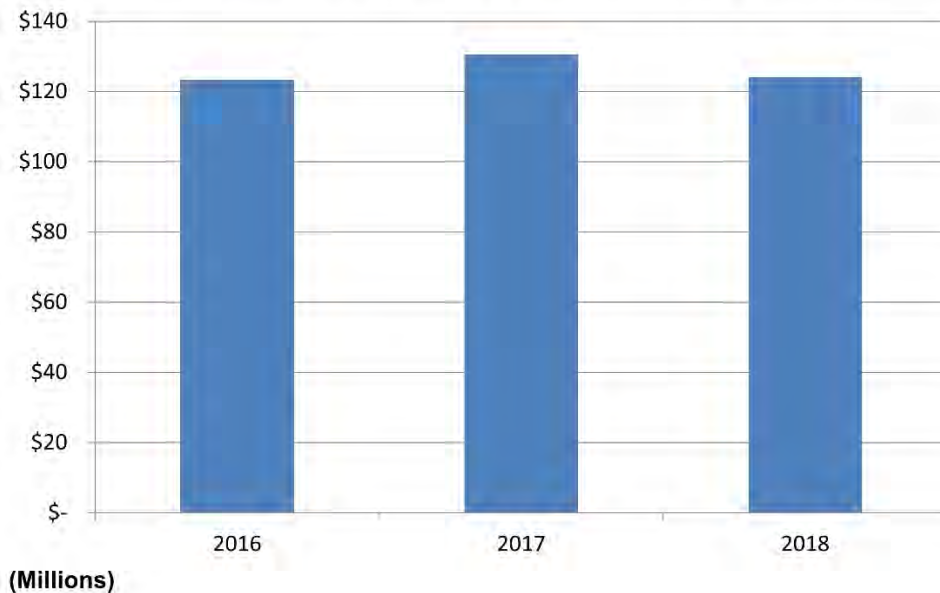


- Depreciation expense increased \$3.7 million or 5.3 percent. KUB added \$213.7 million in assets during fiscal year 2016. A full year of depreciation expense was recorded on these capital investments and a partial year of depreciation expense was incurred on \$156.7 million in assets placed in service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

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- 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.

Consolidated Operation & Maintenance Expense



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.

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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)**

| <i>(in thousands of dollars)</i> | 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 |

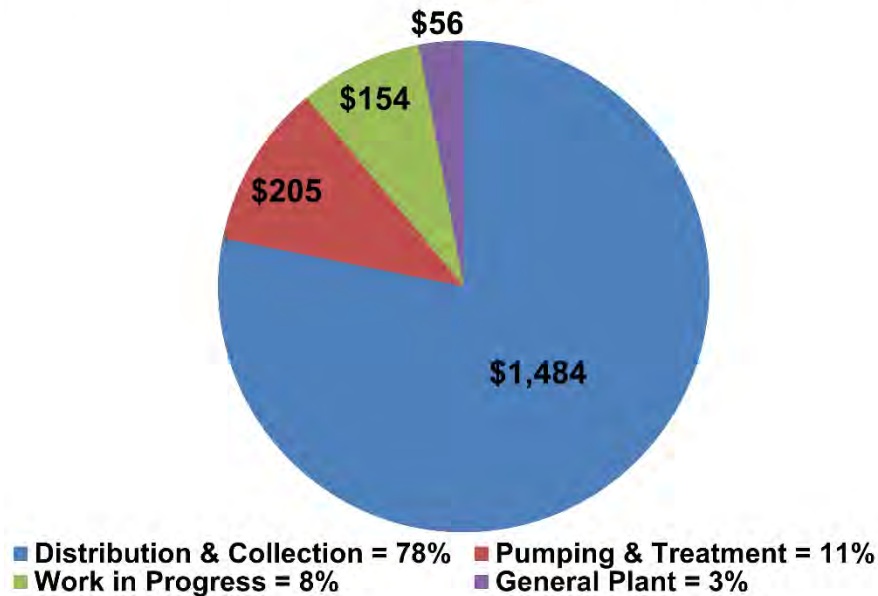
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Knoxville Utilities Board Management's Discussion and Analysis June 30, 2018 and 2017

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.

FY 2018 Consolidated Capital Assets = \$1.9 Billion (in Millions)



Major capital asset additions during the year were as follows:

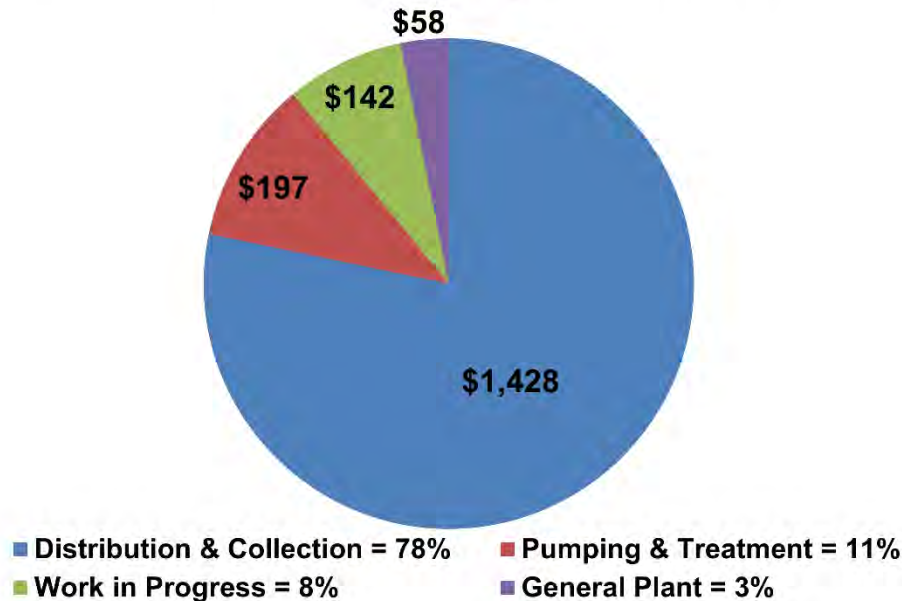
- \$31.3 million for various electric distribution system improvements
- \$26.7 million related to wastewater Century II projects
 - \$12.9 million for wastewater treatment plant upgrades
 - \$7.2 million for sewer mini-basin rehabilitation and replacement
 - \$4.9 million for sewer trunk line rehabilitation 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

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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.

FY 2017 Consolidated Capital Assets = \$1.8 Billion
(in Millions)



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

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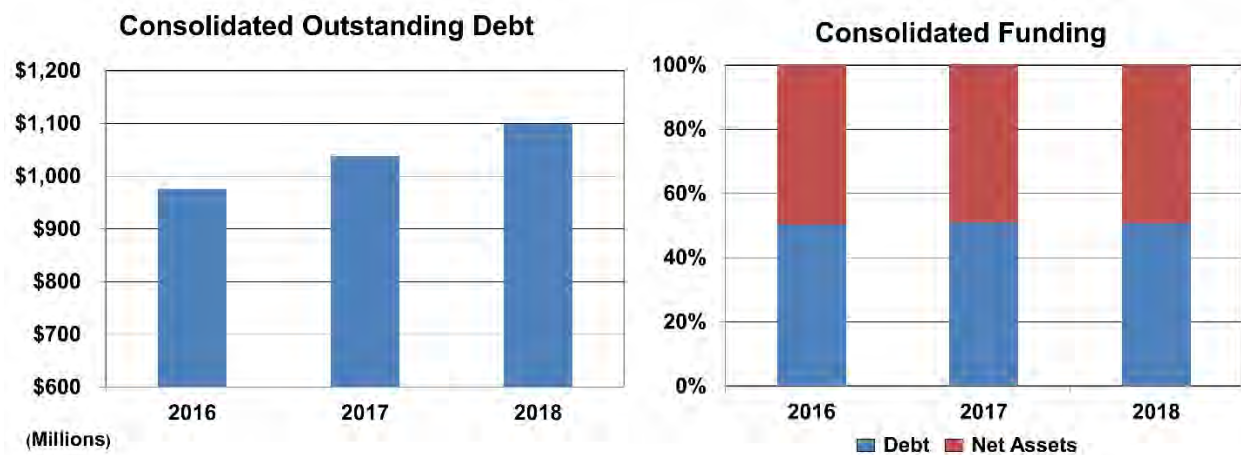
Debt Administration

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 | <u>\$ 1,099,795</u> | <u>\$ 1,037,500</u> | <u>\$ 976,430</u> |



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.

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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.

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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.

Knoxville Utilities Board

Management's Discussion and Analysis

June 30, 2018 and 2017

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 | <u>276,939,467</u> | <u>242,813,438</u> |
| Restricted assets: | | |
| Bond funds | 33,506,454 | 30,864,965 |
| Other funds | 21,446 | 31,434 |
| TVA contract proceeds | - | 74,619 |
| Total restricted assets | <u>33,527,900</u> | <u>30,971,018</u> |
| Plant in service | | |
| Plant in service | 2,616,728,074 | 2,522,407,685 |
| Less accumulated depreciation | <u>(872,419,331)</u> | <u>(838,877,792)</u> |
| | 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 | <u>1,897,994,584</u> | <u>1,825,292,939</u> |
| 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 | <u>114,094,657</u> | <u>76,535,667</u> |
| Total assets | <u>2,322,556,608</u> | <u>2,175,613,062</u> |
| Deferred outflows of resources: | | |
| Pension outflow | 1,947,863 | 9,090,810 |
| OPEB outflow | 662,384 | - |
| Unamortized bond refunding costs | <u>22,933,336</u> | <u>24,403,793</u> |
| Total deferred outflows of resources | <u>25,543,583</u> | <u>33,494,603</u> |
| Total assets and deferred outflows of resources | <u>\$ 2,348,100,191</u> | <u>\$ 2,209,107,665</u> |

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 | <u>14,092,280</u> | <u>12,994,768</u> |
| Total current liabilities | <u>145,499,513</u> | <u>144,660,022</u> |
| 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 | <u>155,411</u> | <u>124,777</u> |
| Total other liabilities | <u>24,466,206</u> | <u>22,873,062</u> |
| Long-term debt: | | |
| Revenue bonds | 1,062,950,000 | 1,003,445,000 |
| Unamortized premiums/discounts | <u>34,146,236</u> | <u>34,177,284</u> |
| Total long-term debt | <u>1,097,096,236</u> | <u>1,037,622,284</u> |
| Total liabilities | <u>1,267,061,955</u> | <u>1,205,155,368</u> |
| Deferred inflows of resources: | | |
| Pension inflow | 13,937,341 | 5,267,517 |
| OPEB inflow | <u>321,637</u> | <u>-</u> |
| Total deferred inflows of resources | <u>14,258,978</u> | <u>5,267,517</u> |
| Total liabilities and deferred inflows of resources | <u>1,281,320,933</u> | <u>1,210,422,885</u> |
| 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 | <u>252,960,778</u> | <u>194,347,205</u> |
| Total net position | <u>1,066,779,258</u> | <u>998,684,780</u> |
| Total liabilities, deferred inflows, and net position | <u>\$ 2,348,100,191</u> | <u>\$ 2,209,107,665</u> |

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 | <u>815,543,992</u> | <u>769,495,780</u> |
| 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 | <u>713,244,894</u> | <u>696,667,480</u> |
| Operating income | <u>102,299,098</u> | <u>72,828,300</u> |
| 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) | <u>(39,194,783)</u> | <u>(38,745,325)</u> |
| 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 | <u>1,003,207,475</u> | <u>962,593,820</u> |
| Net position, end of year | <u>\$ 1,066,779,258</u> | <u>\$ 998,684,780</u> |

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 | <u>(2,097,002)</u> | <u>(2,571,436)</u> |
| Net cash provided by operating activities | <u>170,552,469</u> | <u>145,470,152</u> |
| 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 | <u>9,219,259</u> | <u>4,328,656</u> |
| Net cash used in capital and related financing activities | <u>(131,003,358)</u> | <u>(128,787,654)</u> |
| 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 | <u>(597,269)</u> | <u>420,356</u> |
| Net cash provided by (used in) investing activities | <u>9,713,277</u> | <u>(16,673,359)</u> |
| Net increase (decrease) in cash and cash equivalents | 49,262,388 | 9,139 |
| Cash and cash equivalents, beginning of year | <u>78,955,536</u> | <u>78,946,397</u> |
| Cash and cash equivalents, end of year | <u>\$ 128,217,924</u> | <u>\$ 78,955,536</u> |
| 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 | <u>30,635</u> | <u>(178,896)</u> |
| Net cash provided by operating activities | <u>\$ 170,552,469</u> | <u>\$ 145,470,152</u> |
| 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.

Knoxville Utilities Board

Notes to Consolidated Financial Statements

June 30, 2018 and 2017

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

Knoxville Utilities Board

Notes to Consolidated Financial Statements

June 30, 2018 and 2017

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

Knoxville Utilities Board

Notes to Consolidated Financial Statements

June 30, 2018 and 2017

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.

Knoxville Utilities Board

Notes to Consolidated Financial Statements

June 30, 2018 and 2017

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.

Knoxville Utilities Board

Notes to Consolidated Financial Statements

June 30, 2018 and 2017

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.

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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

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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.

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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 |
| | <u>\$ 267,575,847</u> | <u>\$ 222,952,095</u> |

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 | - |
| | <u>\$ 272,606,882</u> | <u>\$ 179,575,978</u> | <u>\$ 93,030,904</u> |

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.

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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) |
| | <u>\$ 82,097,279</u> | <u>\$ 74,433,839</u> |

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 |
| | <u>\$ 73,949,269</u> | <u>\$ 77,853,232</u> |

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6. Long-Term Obligations

| | Balance June 30, 2017 | | Additions | Payments | Defeased | Balance June 30, 2018 | | Amounts Due Within One Year |
|---------------------------|-----------------------------|----------------------|----------------------|----------------------|----------|-----------------------------|------|--------------------------------------|
| Electric | | | | | | | | |
| 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 | \$ | <u>265,795,000</u> | \$ <u>40,000,000</u> | \$ <u>11,345,000</u> | \$ - | \$ <u>294,450,000</u> | \$ - | \$ <u>12,275,000</u> |
| Unamortized Premium | | <u>12,080,941</u> | <u>841,629</u> | <u>891,528</u> | - | <u>12,031,042</u> | - | - |
| Total long term debt | \$ | <u>277,875,941</u> | \$ <u>40,841,629</u> | \$ <u>12,236,528</u> | \$ - | \$ <u>306,481,042</u> | \$ - | \$ <u>12,275,000</u> |
| 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 | \$ | <u>107,220,000</u> | \$ <u>12,000,000</u> | \$ <u>5,930,000</u> | \$ - | \$ <u>113,290,000</u> | \$ - | \$ <u>6,140,000</u> |
| Unamortized Premium | | <u>4,671,708</u> | <u>222,730</u> | <u>383,615</u> | - | <u>4,510,823</u> | - | - |
| Total long term debt | \$ | <u>111,891,708</u> | \$ <u>12,222,730</u> | \$ <u>6,313,615</u> | \$ - | \$ <u>117,800,823</u> | \$ - | \$ <u>6,140,000</u> |
| 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 | \$ | <u>164,635,000</u> | \$ <u>20,000,000</u> | \$ <u>5,470,000</u> | \$ - | \$ <u>179,165,000</u> | \$ - | \$ <u>5,815,000</u> |
| Unamortized Premium | | <u>5,357,304</u> | <u>735,453</u> | <u>348,779</u> | - | <u>5,743,978</u> | - | - |
| Total long term debt | \$ | <u>169,992,304</u> | \$ <u>20,735,453</u> | \$ <u>5,818,779</u> | \$ - | \$ <u>184,908,978</u> | \$ - | \$ <u>5,815,000</u> |
| 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 | \$ | <u>499,850,000</u> | \$ <u>25,000,000</u> | \$ <u>11,960,000</u> | \$ - | \$ <u>512,890,000</u> | \$ - | \$ <u>12,615,000</u> |
| Unamortized Premium | | <u>12,067,331</u> | <u>473,638</u> | <u>680,576</u> | - | <u>11,860,393</u> | - | - |
| Total long term debt | \$ | <u>511,917,331</u> | \$ <u>25,473,638</u> | \$ <u>12,640,576</u> | \$ - | \$ <u>524,750,393</u> | \$ - | \$ <u>12,615,000</u> |
| 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 | \$ | <u>1,071,677,284</u> | \$ <u>99,273,450</u> | \$ <u>37,009,498</u> | \$ - | \$ <u>1,133,941,236</u> | \$ - | \$ <u>36,845,000</u> |

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| | Balance June 30, | | | | Balance June 30, | | Amounts Due Within One Year |
|---------------------------|---------------------|----------------|---------------|---------------|---------------------|----|--------------------------------------|
| | 2016 | Additions | Payments | Defeased | 2017 | | |
| Electric | | | | | | | |
| 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 |

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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 | <u>\$ 1,099,795,000</u> | <u>\$ 574,486,698</u> | <u>\$ 1,674,281,698</u> |

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

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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 Series 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.

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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 | <u>124,777</u> | <u>247,352</u> | <u>(216,718)</u> | <u>155,411</u> |
| | <u>\$ 18,730,312</u> | <u>\$ 19,956,025</u> | <u>\$ (20,673,910)</u> | <u>\$ 18,012,427</u> |

| | 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 | <u>303,673</u> | <u>193,396</u> | <u>(372,292)</u> | <u>124,777</u> |
| | <u>\$ 20,025,351</u> | <u>\$ 18,165,002</u> | <u>\$ (19,460,041)</u> | <u>\$ 18,730,312</u> |

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 | <u>229,300</u> |
| Total operating minimum lease payments | <u>\$ 555,580</u> |

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Notes to Consolidated Financial Statements
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8. Capital Assets

Capital asset activity was as follows:

| | Balance | | | Balance | | |
|--|----------------------|----------------|------------------|----------------------|----|------------------|
| | June 30, 2017 | | | 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 | | | Balance | | |
|--|----------------------|----------------|------------------|----------------------|----|------------------|
| | June 30, 2016 | | | 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 |

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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 | <u>(15,782,224)</u> | <u>(15,908,379)</u> |
| Balance, end of year | <u>\$ 1,822,689</u> | <u>\$ 1,891,789</u> |

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 | <u>629</u> | <u>662</u> |
| Total | <u>1,265</u> | <u>1,310</u> |

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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:

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| <u>Asset Class</u> | <u>Target Allocation</u> |
|--|--------------------------|
| 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 | <u>\$ (19,778,372)</u> | <u>\$ (123,941)</u> |

| | | |
|--|---------|---------|
| Plan fiduciary net position as a percentage of the total pension liability | 109.50% | 100.06% |
|--|---------|---------|

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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

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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.

| Asset Class | Long Term Expected Real Rate of Return | |
|--------------------|---|-------------|
| | 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 | <u>1,878,146</u> | <u>-</u> |
| Total | <u>\$ 1,878,146</u> | <u>\$ 13,937,342</u> |

\$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.

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| | 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.

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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 | <u>\$210,625</u> | <u>\$185,077</u> |
| | | |
| 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:

| | <u>Increase (Decrease)</u> |
|--|--------------------------------|
| | <u>Total Pension Liability</u> |
| 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 | <u>95,264</u> |
| Balances at December 31, 2017 | <u>\$ 280,341</u> |

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 |

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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.

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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:

| | <u>2018</u> | <u>2017</u> |
|---------------------------|--------------|--------------|
| Retirees | 562 | 567 |
| Dependents of retirees | 561 | 580 |
| Eligible active employees | 309 | 334 |
| Total | <u>1,432</u> | <u>1,481</u> |

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,

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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% |

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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 | <u>\$ (3,751,068)</u> | <u>\$ (4,522,695)</u> |

| | | |
|---|---------|---------|
| 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 | <u>1,126,693</u> | <u>355,066</u> | <u>771,627</u> |
| Balances at June 30, 2018 | <u>\$ 45,604,431</u> | <u>\$ 49,355,499</u> | <u>\$ (3,751,068)</u> |

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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.

| Asset Class | Long Term Expected Real Rate of Return | |
|----------------------|---|-------------|
| | 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.

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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.

Knoxville Utilities Board
Notes to Consolidated Financial Statements
June 30, 2018 and 2017

| | 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 | <u>\$ 662,384</u> | <u>\$ 321,637</u> |

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:

Knoxville Utilities Board
Notes to Consolidated Financial Statements
June 30, 2018 and 2017

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 | <u>\$ 17,753,704</u> | <u>\$ 5,918,528</u> | <u>\$ 1,290,120</u> | <u>\$ 1,290,120</u> | <u>\$ 967,590</u> |

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 | <u>\$ 11,471,426</u> | <u>\$ 1,619,500</u> | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> |

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

Knoxville Utilities Board

Notes to Consolidated Financial Statements

June 30, 2018 and 2017

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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Knoxville Utilities Board
Notes to Consolidated Financial Statements
June 30, 2018 and 2017

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 |

Knoxville Utilities Board
Notes to Consolidated Financial Statements
June 30, 2018 and 2017

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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Knoxville Utilities Board
Notes to Consolidated Financial Statements
June 30, 2018 and 2017

**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 | <u>533,288,157</u> | <u>92,816,997</u> | <u>40,210,733</u> | <u>55,115,690</u> |
| Operating income | 26,822,350 | 21,722,191 | 14,154,482 | 39,600,074 |
| Non-operating expense | <u>(9,351,637)</u> | <u>(3,813,875)</u> | <u>(5,985,484)</u> | <u>(20,043,786)</u> |
| 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 | <u>17,590,705</u> | <u>17,928,441</u> | <u>8,218,127</u> | <u>19,834,510</u> |
| 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 | <u>2,170,894</u> | <u>768,858</u> | <u>587,950</u> | <u>994,993</u> |
| Net position, beginning of year, as restated | 347,424,669 | 200,775,605 | 169,622,194 | 285,385,007 |
| End of year | <u>\$365,015,374</u> | <u>\$ 218,704,046</u> | <u>\$ 177,840,321</u> | <u>\$ 305,219,517</u> |

**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 | <u>528,774,095</u> | <u>81,757,588</u> | <u>38,915,819</u> | <u>55,243,375</u> |
| Operating income | 17,589,917 | 10,110,728 | 11,853,820 | 33,273,835 |
| Non-operating expense | <u>(8,324,347)</u> | <u>(4,020,718)</u> | <u>(5,937,091)</u> | <u>(20,463,169)</u> |
| 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 | <u>10,685,931</u> | <u>6,090,010</u> | <u>6,040,569</u> | <u>13,274,450</u> |
| Net position | | | | |
| Beginning of year | 334,567,844 | 193,916,737 | 162,993,675 | 271,115,564 |
| End of year | <u>\$345,253,775</u> | <u>\$ 200,006,747</u> | <u>\$ 169,034,244</u> | <u>\$ 284,390,014</u> |

Knoxville Utilities Board
Notes to Consolidated Financial Statements
June 30, 2018 and 2017

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 | <u>2,536,758</u> | <u>613,141</u> | <u>989,073</u> | <u>5,574,305</u> |
| 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 | <u>37,195,215</u> | <u>13,391,230</u> | <u>9,395,231</u> | <u>18,973,860</u> |
| Cash and cash equivalents, end of year | <u><u>\$ 40,334,343</u></u> | <u><u>\$ 31,436,054</u></u> | <u><u>\$ 14,150,014</u></u> | <u><u>\$ 42,297,513</u></u> |

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 | <u>(6,881,167)</u> | <u>(701,913)</u> | <u>(4,488,917)</u> | <u>(4,601,363)</u> |
| 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 | <u>34,791,786</u> | <u>11,036,149</u> | <u>9,392,817</u> | <u>23,725,645</u> |
| Cash and cash equivalents, end of year | <u><u>\$ 37,195,215</u></u> | <u><u>\$ 13,391,230</u></u> | <u><u>\$ 9,395,231</u></u> | <u><u>\$ 18,973,860</u></u> |

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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 | <u>(3,298,739)</u> |
| Net change in total OPEB liability | <u>1,126,693</u> |
| Total OPEB liability - beginning | <u>44,477,738</u> |
| Total OPEB liability - ending (a) | <u><u>\$ 45,604,431</u></u> |
| Plan fiduciary net position | |
| Contributions - employer | \$ - |
| Net investment income | 3,705,473 |
| Benefit payments | (3,298,739) |
| Administrative expense | <u>(51,668)</u> |
| Net change in plan fiduciary net position | <u>355,066</u> |
| Plan fiduciary net position - beginning | <u>49,000,433</u> |
| Plan fiduciary net position - ending (b) | <u><u>\$ 49,355,499</u></u> |
| Net OPEB liability - ending (a) - (b) | <u><u>\$ (3,751,068)</u></u> |
| 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) | <u>\$ -</u> |
| 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 | <u>95,264</u> | <u>185,077</u> |
| Total pension liability - beginning | <u>185,077</u> | <u>-</u> |
| Total pension liability - ending | <u>\$ 280,341</u> | <u>\$ 185,077</u> |
| | | |
| 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.

Knoxville Utilities Board
Supplemental Information –
Schedule of Expenditures of Federal Awards and State Financial Assistance
June 30, 2018 **Schedule 1**

| 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 | \$ <u>878,634</u> |
| | | Total Program 97.036 | | \$ <u>878,634</u> |
| | | Total Federal Awards | | \$ <u>878,634</u> |

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.

Knoxville Utilities Board
Supplemental Information – Schedule of Findings and Questioned Costs
June 30, 2018 **Schedule 2**

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: | <u>CFDA</u> | <u>Name of Program</u> |
| | 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.

Knoxville Utilities Board
Supplemental Information - Schedule of Insurance in Force
June 30, 2018
(Unaudited)

Schedule 3

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.

See accompanying Report of Independent Auditors on Supplemental Information.



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



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



Electric Division

Financial Statements and Supplemental Information
June 30, 2018 and 2017

KUB Board of Commissioners

Celeste Herbert - Chair
Dr. Jerry W. Askew - Vice Chair
John Worden
Kathy Hamilton
Sara Hedstrom Pinnell
Tyvi Small
Adrienne Simpson-Brown

Management

| | |
|---|---|
| Mintha Roach President and Chief Executive Officer | Mike Bolin Vice President |
| Mark Walker Senior Vice President and Chief Financial Officer | Julie Childers Vice President |
| Susan Edwards Senior Vice President and Chief Administrative Officer | John Gresham Vice President |
| Gabe Bolas Senior Vice President and Chief Engineer | Dawn Mosteit Vice President |
| Eddie Black Senior Vice President | Paul Randolph Vice President |
| Derwin Hagood Senior Vice President of Operations | |

Knoxville Utilities Board Electric Division

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June 30, 2018 and 2017

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Independent Auditors' Report

Board of Commissioners
Electric Division of the Knoxville Utilities Board
Knoxville, Tennessee

We have audited the accompanying financial statements of the Electric Division (the Division) of the Knoxville Utilities Board, 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 the Division's basic financial statements as listed in the index.

Management's Responsibility for the Financial Statements

The Division'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 the Division'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 the Division'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 the Electric Division of the Knoxville Utilities Board 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, the Division 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
Electric Division of the 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 25 and the required supplementary information on pages 61 through 65 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 the Division’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 Schedules 3 through 5 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.

Emphasis of Matter

As discussed in Note 1, the financial statements present only the Electric Division and do not purport to, and do not, present fairly the financial position of the Knoxville Utilities Board, as of June 30, 2018 and 2017, and the changes in its financial position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

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 the Division’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 the Division’s internal control over financial reporting and compliance.

Knoxville, Tennessee
October 25, 2018

Coulter & Justus, P.C.

Knoxville Utilities Board Electric Division Management's Discussion and Analysis June 30, 2018 and 2017

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. The Electric Division (Division) provides services to certain customers in Knox County and in seven surrounding counties in East Tennessee. The Division's accounts are maintained in conformity with the Uniform System of Accounts of the Federal Energy Regulatory Commission and the Governmental Accounting Standards Board, as applicable. The financial statements present only the Electric Division and do not purport to, and do not, present fairly the consolidated financial position of Knoxville Utilities Board at June 30, 2018 and 2017, and the changes in its financial position for the years then ended in conformity with accounting principles generally accepted in the United States of America.

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

The Division's 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 the Division's financial statements.

Electric Division Highlights

System Highlights

KUB serves 206,433 electric customers over a 688 square mile service area and maintains 5,362 miles of service lines and 63 electric substations to provide 5.7 million megawatt hours to its customers annually.

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.

KUB has added 5,581 electric system customers over the past three years representing annual growth of one percent. In fiscal year 2018, 1,345 customers were added.

The typical residential customer's average monthly electric bill was \$106.93 as of June 30, 2018, representing a very modest \$0.03 increase compared to June 30, 2017. The slight increase in the monthly bill during fiscal year 2018 was the net result of the flow through of TVA wholesale rate adjustments, previously over recovered wholesale power costs and the October 2017 electric rate increase.

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 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.

Knoxville Utilities Board Electric Division Management's Discussion and Analysis June 30, 2018 and 2017

Century II Infrastructure Program

Century II is KUB's proactive long-range program to improve and maintain its electric, natural gas, water and wastewater systems for its customers. It includes the maintenance and asset replacement strategies for each utility 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 a ten-year funding plan for the Electric Division, which includes a combination of rate increases and debt issues to fully fund the electric system's Century II program.

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 three annual rate increases for the Electric Division to support the Century II program. The July 2014, July 2015 and July 2016 rate increases each provided an additional \$5 million in annual revenue to help fund the Electric Division.

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 approximately \$124.4 million on Grid Modernization, of which the Electric Division's share is approximately \$80.1 million. The deployment is funded in large part by debt issues and system revenues. As of June 30, 2018, KUB completed its second year of the advanced meter deployment. KUB replaced approximately 40 percent of its electric meters, spending \$24.8 million on the deployment.

In May 2017, a new Century II funding resolution was adopted by the KUB Board to express the continued commitment to funding Century II programs for the next ten years. The funding will be achieved through a combination of rate increases and debt issues supplemented by cost savings and new revenue from net customer additions.

In June 2017, the Board approved the next phase of electric rate increases to support the Century II program. 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 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.

During the fiscal year, KUB replaced 2,418 poles, exceeding the target level of 2,400, and replaced 15 miles of underground electric cable while staying on track with Century II goals and within the Electric Division's total capital budget.

Knoxville Utilities Board Electric Division

Management's Discussion and Analysis

June 30, 2018 and 2017

Financial Highlights

Fiscal Year 2018 Compared to Fiscal Year 2017

The Division's Change in Net Position increased \$17.6 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 \$2.2 million. The change resulted in a total increase of \$19.8 million in the Division's net position. Comparatively, net position increased by \$10.7 million in fiscal year 2017.

Operating revenue increased \$13.7 million or 2.5 percent over the prior fiscal year. The increase in operating revenue was the result of additional revenue from KUB's October 2017 electric rate increase, the flow through of TVA rate adjustments, a 1.5 percent increase in billed sales and the flow through of prior year over recovered purchased power costs to KUB's electric customers. KUB flows changes to wholesale power rates directly through to its retail electric rates via its Purchased Power Adjustment.

Seventy eight percent of Electric Division sales revenue was used to purchase electric power from TVA for the fiscal year ended June 30, 2018. Purchased power expense increased \$4.1 million compared to last fiscal year. Mild summer and spring months offset a colder winter in the electric system's service territory to result in a 1.5 percent increase in billed power sales compared to fiscal year 2017.

Margin on electric sales (operating revenue less purchased power expense) increased \$9.6 million or 7.7 percent, reflecting additional revenue from the KUB electric rate increase.

Operating expenses (excluding purchased power expense) increased \$0.4 million. Operating and maintenance (O&M) expenditures decreased \$4.4 million or 7.5 percent. Depreciation expense increased \$4 million or 12.7 percent. Taxes and tax equivalents were \$0.8 million, or 4.7 percent, higher than the prior fiscal year.

Interest income was \$0.7 million more than the prior fiscal year, due to higher investment returns. Interest expense increased \$0.7 million or 7.4 percent, due to the net effect of interest expense on long-term bonds issued in August 2017 and savings on refunding of outstanding bonds.

Capital contributions decreased \$1.3 million, reflecting a lower level of electric system assets provided to KUB during the fiscal year.

Total capital assets (net) increased \$33 million or 6 percent over the end of the last fiscal year reflecting pole replacements and other distribution system improvements as part of KUB's Century II electric program.

During fiscal year 2018, KUB sold \$40 million in electric system revenue bonds for the purpose of funding electric system capital improvements.

Long-term debt represented 44.7 percent of the Division's capital structure as of June 30, 2018, compared to 43.5 percent last year. Capital structure equals long-term debt (including the current and long-term portion of any revenue bonds and notes) plus net position.

The Division's bond covenants require a debt service coverage ratio of at least 1.2 times the maximum principal and interest payments over the life of the Division's outstanding bonds. Current year debt coverage for the fiscal year was 3.74. Maximum debt service coverage was 3.47.

Knoxville Utilities Board Electric Division

Management's Discussion and Analysis

June 30, 2018 and 2017

Fiscal Year 2017 Compared to Fiscal Year 2016

The Division's net position during the year increased \$10.7 million compared to an \$10.9 million increase last fiscal year.

Operating revenue increased \$25 million or 4.8 percent over the prior fiscal year. The increase in operating revenue was 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 KUB's electric customers. KUB flows changes to wholesale power rates directly through to its retail electric rates via its Purchased Power Adjustment.

Seventy nine percent of Electric Division sales revenue was used to purchase electric power from TVA for the fiscal year ended June 30, 2017. Purchased power expense increased \$19.1 million compared to last fiscal year. Warmer summer and spring months offset a very mild winter in the electric system's service territory to result in a 0.3 percent increase in billed power sales compared to fiscal year 2016.

Margin on electric sales (operating revenue less purchased power expense) increased \$5.9 million or 4.9 percent, reflecting additional revenue from the KUB electric rate increase.

Operating expenses (excluding purchased power expense) increased \$7.3 million or 7.3 percent. Operating and maintenance (O&M) expenditures increased \$4.2 million or 7.7 percent. Depreciation expense increased \$2 million or 6.6 percent. Taxes and tax equivalents were \$1.1 million, or 7 percent, higher than the prior fiscal year.

Interest income was \$0.4 million more than the prior fiscal year. Interest expense increased \$0.7 million or 7.5 percent, primarily due to interest expense on long-term bonds issued in July 2016.

Capital contributions increased \$1.2 million, reflecting a higher level of electric system assets provided to KUB during the fiscal year.

Total capital assets (net) increased \$37.4 million or 7.3 percent over the end of the last fiscal year reflecting pole replacements and other distribution system improvements as part of KUB's Century II electric program.

During fiscal year 2017, KUB sold \$40 million in electric system revenue bonds for the purpose of funding electric system capital improvements and also sold \$23.4 million in electric system revenue refunding bonds to refinance existing electric system bonds at lower interest rates. The refunding produced total debt service savings of \$3.2 million over the life of the bonds (\$2.8 million on a net present value basis).

Long-term debt represented 43.5 percent of the Division's capital structure as of June 30, 2017, compared to 41.6 percent last year. Capital structure equals long-term debt (including the current and long-term portion of any revenue bonds and notes) plus net position.

The Division's bond covenants require a debt service coverage ratio of at least 1.2 times the maximum principal and interest payments over the life of the Division's outstanding bonds. Current year debt coverage for the fiscal year was 3.29. Maximum debt service coverage was 3.10.

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Knoxville Utilities Board Electric Division Management's Discussion and Analysis June 30, 2018 and 2017

Knoxville Utilities Board Electric Division - Financial Statements

The Division's financial performance is reported under three basic 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

The Division 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, electric 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 the Division has done with its accumulated earnings, not just the balance.

Net investment in capital assets is the net 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 the Division'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

The Division 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

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

The statement indicates the Division's 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 back to operating income as it appears on the Statement of Revenues, Expenses and Changes in Net Position.

**Knoxville Utilities Board Electric Division
Management's Discussion and Analysis
June 30, 2018 and 2017**

Condensed Financial Statements

Statement of Net Position

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

**Statements of Net Position
As of June 30**

| <i>(in thousands of dollars)</i> | 2018 | 2017 | 2016 |
|---|-------------------|-------------------|-------------------|
| Current, restricted and other assets | \$ 192,101 | \$ 169,683 | \$ 157,010 |
| Capital assets, net | 581,742 | 548,724 | 511,260 |
| Deferred outflows of resources | <u>4,457</u> | <u>7,909</u> | <u>8,544</u> |
| Total assets and deferred outflows of resources | <u>778,300</u> | <u>726,316</u> | <u>676,814</u> |
| Current and other liabilities | 112,235 | 112,004 | 103,918 |
| Long-term debt outstanding | 294,206 | 266,531 | 237,603 |
| Deferred inflows of resources | <u>6,844</u> | <u>2,528</u> | <u>726</u> |
| Total liabilities and deferred inflows of resources | <u>413,285</u> | <u>381,063</u> | <u>342,247</u> |
| Net position | | | |
| Net investment in capital assets | 278,370 | 275,291 | 268,462 |
| Restricted | 12,285 | 11,360 | 10,120 |
| Unrestricted | <u>74,360</u> | <u>58,602</u> | <u>55,985</u> |
| Total net position | <u>\$ 365,015</u> | <u>\$ 345,253</u> | <u>\$ 334,567</u> |

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.

Knoxville Utilities Board Electric Division Management's Discussion and Analysis June 30, 2018 and 2017

Impacts and Analysis

Current, Restricted and Other Assets

Fiscal Year 2018 Compared to Fiscal Year 2017

Current, restricted and other assets increased \$22.4 million or 13.2 percent. The change reflects an increase in the actuarially determined net pension asset of \$9.4 million, an increase in accounts receivable of \$5.3 million, an increase in inventories of \$4.2 million and a net increase in operating contingency reserves of \$3.4 million. These increases were offset by a decrease in general fund cash (consisting of cash and cash equivalents, short-term investments, and long-term investments) of \$1.9 million.

Fiscal Year 2017 Compared to Fiscal Year 2016

Current, restricted and other assets increased \$12.7 million or 8.1 percent. The change reflects an increase in general fund cash (consisting of cash and cash equivalents, short-term investments, and long-term investments) of \$9.9 million, an increase in inventories of \$4.2 million primarily due to Grid Modernization materials and a net increase in operating contingency reserves of \$0.8 million.

KUB under recovered \$1.4 million in purchased power costs from its 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 of depreciation, increased \$33 million or 6 percent. Major capital expenditures included \$31.3 million for distribution system improvements, \$8.6 million for pole replacements, \$7.5 million for building improvements, \$7 million for Grid Modernization including Supervisory Control and Data Acquisition (SCADA) system upgrades and \$3.5 million for installation or replacement of electric services.

Fiscal Year 2017 Compared to Fiscal Year 2016

Capital assets, net of depreciation, increased \$37.4 million or 7.3 percent. Major capital expenditures included \$34.4 million for distribution system improvements, \$8.3 million for pole replacements, \$4.7 million for installation or replacement of electric services, \$2.2 million for trucks and equipment, \$1.8 million for upgrades to various information systems, \$1.7 million for tools and equipment, \$1.7 million for the purchase of property, and \$1.3 million for Grid Modernization Supervisory Control and Data Acquisition (SCADA) system upgrades.

Deferred Outflows of Resources

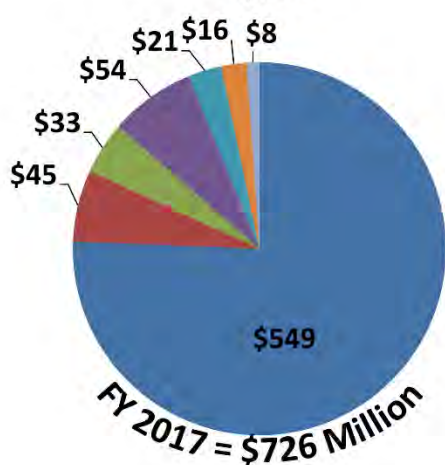
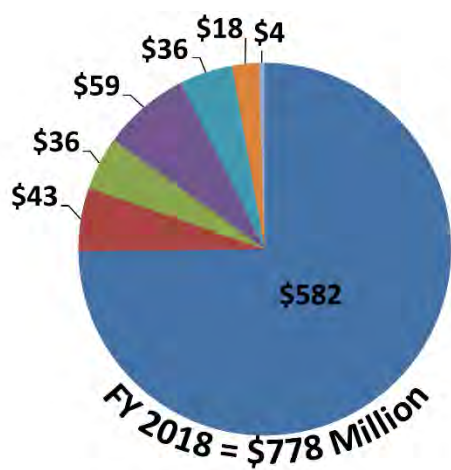
Fiscal Year 2018 Compared to Fiscal Year 2017

Deferred outflows of resources decreased \$3.5 million compared to the prior fiscal year primarily due to a decrease in pension outflow of \$3.4 million.

Fiscal Year 2017 Compared to Fiscal Year 2016

Deferred outflows of resources decreased \$0.6 million compared to the prior fiscal year primarily due to a decrease in pension outflow of \$0.6 million.

**Knoxville Utilities Board Electric Division
Management’s Discussion and Analysis
June 30, 2018 and 2017**



**Electric Division Total Assets and
Deferred Outflows of Resources
(in Millions)**

| | <u>FY18</u> | <u>FY17</u> |
|--------------------------------|-------------|-------------|
| Plant | 75% | 76% |
| General Fund | 5% | 6% |
| Contingency Fund | 5% | 5% |
| Accounts Receivable | 7% | 7% |
| Other Assets | 5% | 3% |
| Restricted Assets | 2% | 2% |
| Deferred Outflows of Resources | 1% | 1% |

Current and Other Liabilities

Fiscal Year 2018 Compared to Fiscal Year 2017

Current and other liabilities increased \$0.2 million. Accrued expenses increased \$1.6 million, the current portion of revenue bonds and associated accrued interest increased \$1.6 million and customer advances for construction increased \$1.3 million. These increases were offset by a decline in accounts payable of \$3.6 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.

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.

Knoxville Utilities Board Electric Division

Management's Discussion and Analysis

June 30, 2018 and 2017

Fiscal Year 2017 Compared to Fiscal Year 2016

Current and other liabilities increased \$8.1 million or 7.8 percent. Accounts payable increased \$6.8 million, which was offset by a decline in the actuarially determined net pension obligation of \$2.4 million and a \$1.3 million decrease in accrued expenses. The outstanding balance on TVA conservation loans declined by \$2.2 million, as KUB ceased issuance of any new loans in fiscal year 2016.

KUB over recovered \$4 million in wholesale power costs from its customers in fiscal year 2017, as compared to a \$1.4 million under recovery in fiscal year 2016. 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.

Long-Term Debt

Fiscal Year 2018 Compared to Fiscal Year 2017

Long-term debt increased \$27.7 million or 10.4 percent. Electric system revenue bonds of \$40 million, sold in August 2017, were offset by the scheduled repayment of debt.

Fiscal Year 2017 Compared to Fiscal Year 2016

Long-term debt increased \$28.9 million or 12.2 percent. \$40 million in new revenue bonds issue in July 2016 added to KUB's outstanding debt. In March 2017, revenue refunding bonds of \$23.4 million were issued to refinance bonds sold in 2005. The additional issuances offset by the defeased bonds and scheduled debt repayments accounted for the change in long-term debt.

Deferred Inflows of Resources

Fiscal Year 2018 Compared to Fiscal Year 2017

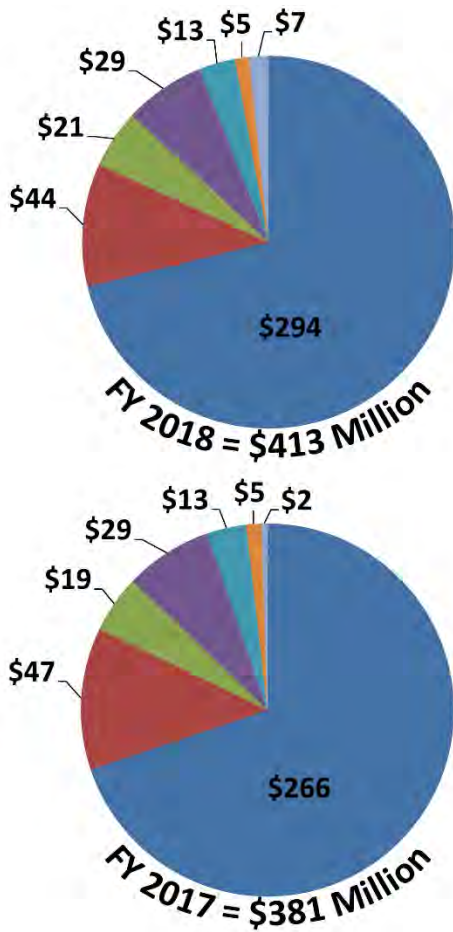
Deferred inflows increased \$4.3 million compared to the prior fiscal year due to differences in pension inflows.

Fiscal Year 2017 Compared to Fiscal Year 2016

Deferred inflows increased \$1.8 million compared to the prior fiscal year due to differences in pension inflows.

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**Knoxville Utilities Board Electric Division
Management's Discussion and Analysis
June 30, 2018 and 2017**



Electric Division Total Liabilities and Deferred Inflows of Resources (in Millions)

| | <u>FY18</u> | <u>FY17</u> |
|---------------------------------|-------------|-------------|
| ■ Bond Debt | 71% | 70% |
| ■ Payables | 11% | 13% |
| ■ Misc Current | 5% | 5% |
| ■ Other Liabilities | 7% | 8% |
| ■ Customer Deposits | 3% | 2% |
| ■ Interest Accrued | 1% | 1% |
| ■ Deferred Inflows of Resources | 2% | 1% |

Net Position

Fiscal Year 2018 Compared to Fiscal Year 2017

Unrestricted net position increased \$15.8 million, primarily due to the \$20.8 million increase in current and other assets. Net investment in capital assets increased by \$3.1 million or 1.1 percent. The increase was primarily the result of an increase of \$33 million in net electric plant additions offset by an increase in the current portion of revenue bonds and total long-term debt of \$28.6 million. Restricted net position increased \$0.9 million due to the net increase of the electric bond fund and the associated interest payable.

Fiscal Year 2017 Compared to Fiscal Year 2016

Net investment in capital assets increased by \$6.8 million or 2.5 percent. The increase was primarily the result of an increase of \$37.4 million in net electric plant additions offset by an increase in the current portion of revenue bonds and total long-term debt of \$30.2 million. Unrestricted net position increased \$2.6 million, primarily due to the \$11.3 million increase in current and other assets. Restricted net position increased \$1.2 million due to the net increase of the electric bond fund and the associated interest payable.

**Knoxville Utilities Board Electric Division
Management's Discussion and Analysis
June 30, 2018 and 2017**

Statement of Revenues, Expenses and Changes in Net Position

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

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

| <i>(in thousands of dollars)</i> | 2018 | 2017 | 2016 |
|---|------------------|------------------|------------------|
| Operating revenues | \$ 560,111 | \$ 546,364 | \$ 521,369 |
| Less: Purchased power expense | <u>425,841</u> | <u>421,727</u> | <u>402,604</u> |
| Margin from sales | <u>134,270</u> | <u>124,637</u> | <u>118,765</u> |
| Operating expenses | | | |
| Distribution | 35,020 | 36,526 | 33,062 |
| Customer service | 6,124 | 6,641 | 6,589 |
| Administrative and general | 13,173 | 15,522 | 14,856 |
| Depreciation | 35,431 | 31,450 | 29,490 |
| Taxes and tax equivalents | <u>17,700</u> | <u>16,908</u> | <u>15,795</u> |
| Total operating expenses | <u>107,448</u> | <u>107,047</u> | <u>99,792</u> |
| Operating income | <u>26,822</u> | <u>17,590</u> | <u>18,973</u> |
| Interest income | 1,635 | 899 | 549 |
| Interest expense | (10,692) | (9,954) | (9,258) |
| Other income/(expense) | <u>(294)</u> | <u>731</u> | <u>438</u> |
| Change in net position before capital contributions | <u>17,471</u> | <u>9,266</u> | <u>10,702</u> |
| Capital contributions | <u>120</u> | <u>1,420</u> | <u>178</u> |
| Change in net position | <u>\$ 17,591</u> | <u>\$ 10,686</u> | <u>\$ 10,880</u> |

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 the volume of electric power sales for the fiscal year. Any change (increase/decrease) in retail electric rates would also be a cause of change in operating revenue.
- Purchased power expense is determined by volume of power purchases from TVA for the fiscal year. Also, any change (increase/decrease) in TVA wholesale power rates would result in a change in purchased power expense.
- Operating expenses (distribution, customer service, administrative and general) are normally impacted by changes in areas including, but not limited to, labor costs (staffing, wage rates), active employee and retiree medical costs, and overhead line maintenance (tree trimming, pole inspection, etc.).
- Depreciation expense is impacted by plant additions and retirements during the fiscal year.
- Taxes and tax equivalents are impacted by plant additions/retirements, changes in property tax rates, and margin (operating revenue less purchased power expense) levels.
- Interest income is impacted by the level of interest rates and investments.

Knoxville Utilities Board Electric Division

Management's Discussion and Analysis

June 30, 2018 and 2017

- Interest expense on debt is impacted by the level of outstanding debt and the interest rates 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

The Division's Change in Net Position increased \$17.6 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 \$2.2 million. The change resulted in a total increase of \$19.8 million in the Division's net position. Comparatively, net position increased by \$10.7 million in fiscal year 2017.

The higher earnings were attributable to the net effect of a \$9.6 million increase in margin on sales, a \$0.7 million increase in interest income offset by a \$0.7 million increase in interest expense and a \$0.4 million increase in operating expenses.

Fiscal Year 2017 Compared to Fiscal Year 2016

The Division's net position increased \$10.7 million, which was \$0.2 million less than last year's \$10.9 million increase. The lower earnings were attributable to the net effect of a \$5.9 million increase in margin on sales, a \$1.2 million increase in capital contributions, a \$0.4 million increase in interest income offset by a \$7.3 million rise in operating expenses, and a \$0.7 million increase in interest expense.

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**Knoxville Utilities Board Electric Division
Management's Discussion and Analysis
June 30, 2018 and 2017**

Margin from Sales

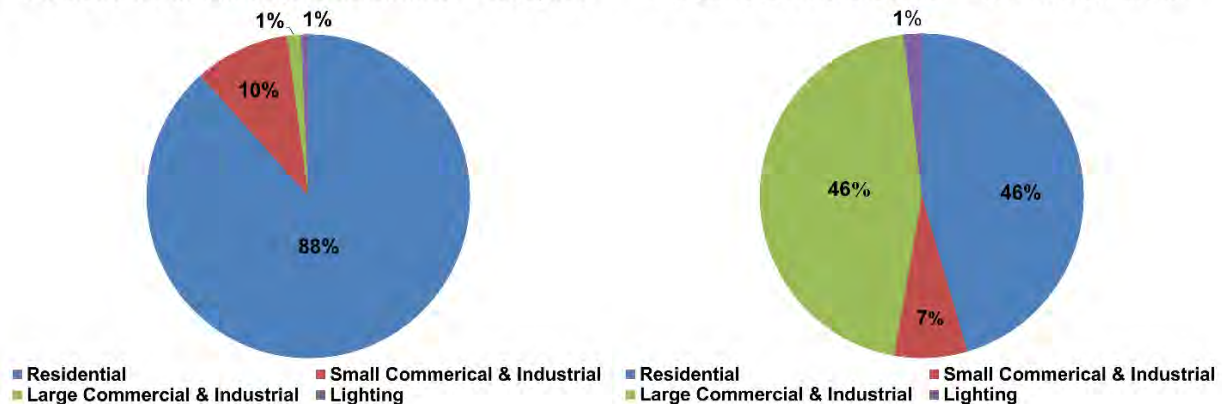
Fiscal Year 2018 Compared to Fiscal Year 2017

Margin on electric sales grew \$9.6 million, reflecting increased revenue due to the October 2017 rate increase.

Operating revenue increased \$13.7 million or 2.5 percent, reflecting the net result of additional revenue from KUB's October 2017 electric rate increase, the flow through of previously over recovered wholesale power costs, and the flow through of TVA rate adjustments. A colder winter experienced by the service area than the prior fiscal year resulted in a 1.5 percent increase in billed power sales volumes, which finished the fiscal year at 5.4 million MWh. Purchased power expense increased \$4.1 million over last year.

FY 2018 Total Electric Customers = 206,433

FY 2018 Electric Sales = 5.4 million MWh



Residential customers represented 88 percent of total electric system customers and accounted for 46 percent of electric sales volumes for the year. Large commercial and industrial customers accounted for the largest portion of total sales volumes for the year, which was consistent with the prior year due to a steady customer base. KUB's ten largest electric customers accounted for 19 percent of KUB's billed volumes. Those ten customers represent two industrial and eight commercial customers, including five governmental customers. Sales to Gerdau Ameristeel, KUB's largest industrial customer, accounted for 5.9 percent of total electric system sales.

KUB has added 5,581 electric system customers over the past three years, representing annual growth of one percent. Electric billed sales volumes have remained consistent over the past three years. Fiscal year 2018 customer growth was 1,345.

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Knoxville Utilities Board Electric Division Management's Discussion and Analysis June 30, 2018 and 2017

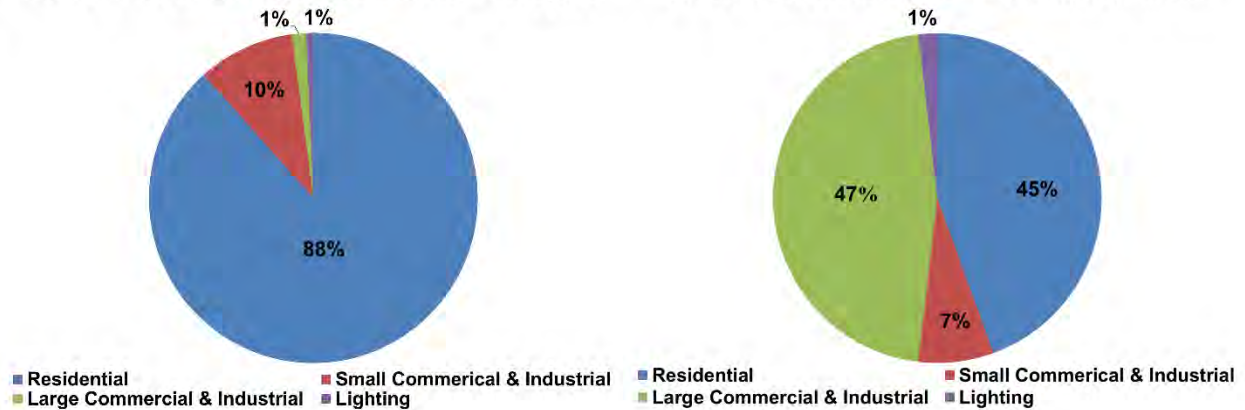
Fiscal Year 2017 Compared to Fiscal Year 2016

Margin on electric sales grew \$5.9 million, reflecting increased revenue due to the July 2016 rate increase.

Operating revenue increased \$25 million or 4.8 percent, reflecting the net result of additional revenue from KUB's one percent electric rate increase effective July 2016, the flow through of previously under recovered wholesale power costs, and the flow through of TVA rate adjustments. A mild winter offset by a hotter than normal summer and spring during the fiscal year resulted in a 0.3 percent increase in billed power sales volumes. Purchased power expense increased \$19.1 million over last year. Power sales of 5.4 million MWh were consistent with the prior fiscal year.

FY 2017 Total Electric Customers = 205,088

FY 2017 Electric Sales = 5.4 million MWh



Residential customers represented 88 percent of total electric system customers and accounted for 45 percent of electric sales volumes for the year. Large commercial and industrial customers accounted for the largest portion of total sales volumes for the year, which was consistent with the prior year due to a steady customer base. KUB's ten largest electric customers accounted for 20.6 percent of KUB's billed volumes. Those ten customers represent two industrial and eight commercial customers, including four governmental customers. Sales to Gerdau Ameristeel, KUB's largest industrial customer, accounted for 5.4 percent of total electric system sales.

KUB has added 5,706 electric system customers over the past three years, representing annual growth of less than one percent. Fiscal year 2017 customer growth of 2,245 was the highest in nine years.

Electric billed sales volumes have remained consistent over the past three years. Fiscal year 2017 sales were impacted by a mild winter, but were offset by warmer weather during the summer and spring months.

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Knoxville Utilities Board Electric Division Management's Discussion and Analysis June 30, 2018 and 2017

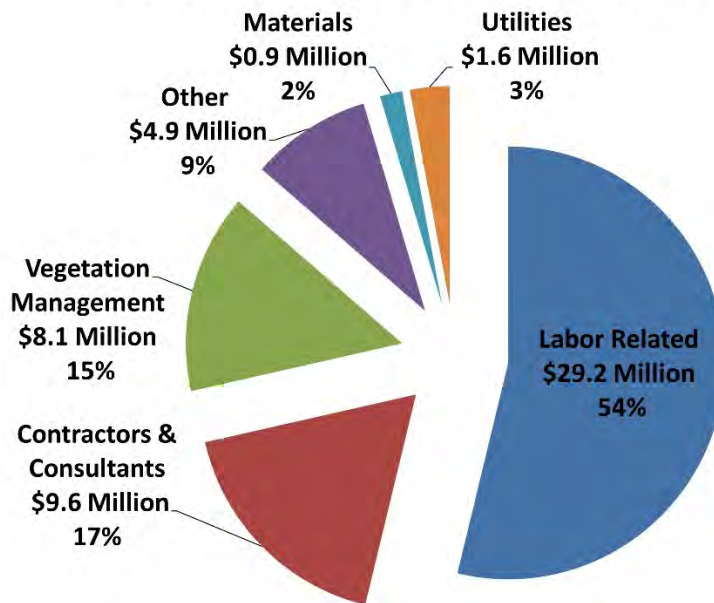
Operating Expenses

Fiscal Year 2018 Compared to Fiscal Year 2017

Operating expenses (excluding purchased power expense) increased 0.4 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 distribution, customer service and administrative and general.

- Distribution expenses decreased \$1.5 million or 4.1 percent, primarily due to lower outside contractor use.
- Customer service expenses decreased \$0.5 million from the prior year, primarily due to less outside contractor use.
- Administrative and general expenses decreased \$2.3 million or 15.1 percent, primarily due to lower labor related expenses.

FY 2018 Electric O&M Expense = \$54.3 Million



- Depreciation expense for fiscal year 2018 increased \$4 million or 12.7 percent. This increase was primarily attributable to Century II initiatives and the impairment of meters due to the Grid Modernization project that calls for accelerated depreciation of meters being replaced as part of the project.
- Taxes and tax equivalents were \$0.8 million higher than the prior fiscal year primarily due to increased plant in service levels.

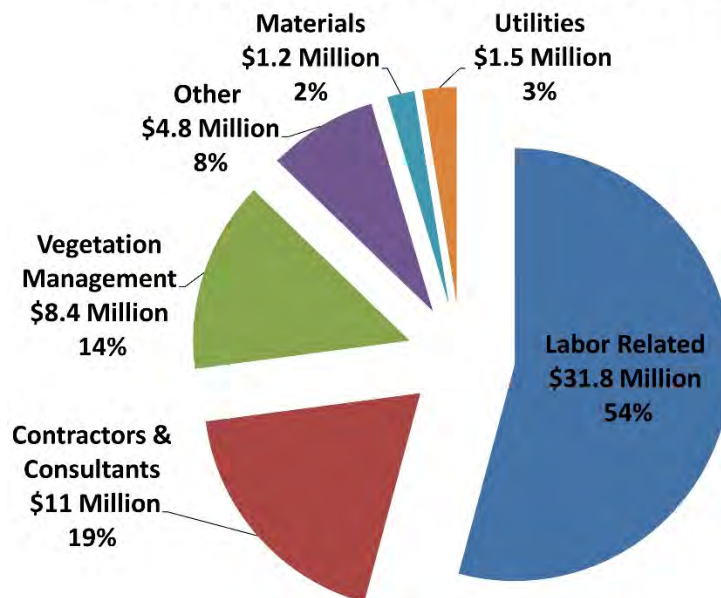
Knoxville Utilities Board Electric Division Management's Discussion and Analysis June 30, 2018 and 2017

Fiscal Year 2017 Compared to Fiscal Year 2016

Operating expenses (excluding purchased power expense) increased 7.3 million, or 7.3 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 distribution, customer service and administrative and general.

- Distribution expenses increased \$3.5 million or 10.5 percent, primarily from increased labor related expenses from storm restoration and outside contractor use.
- Customer service expenses increased \$0.1 million from the prior year.
- Administrative and general expenses increased \$0.7 million or 4.5 percent, primarily due to labor related expenses.

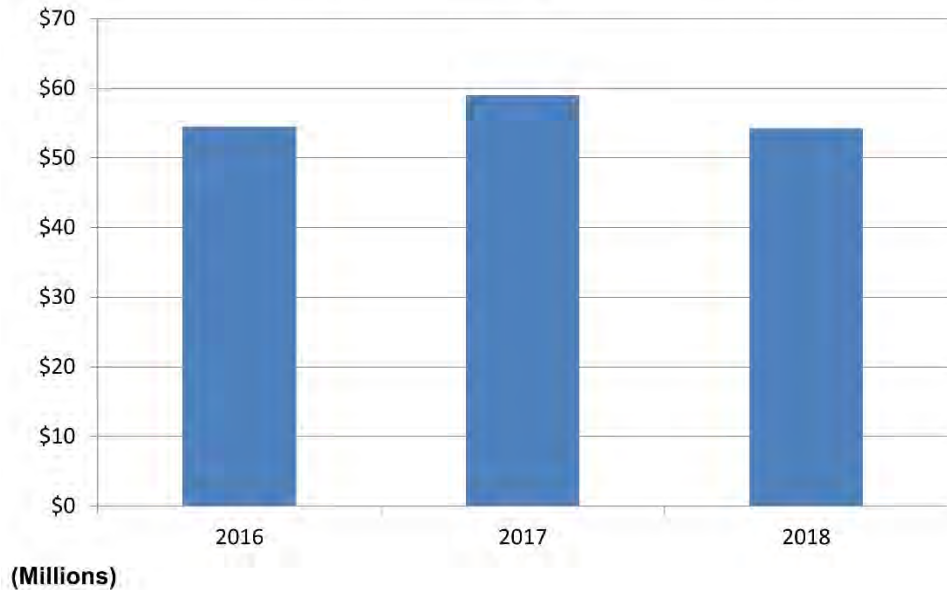
FY 2017 Electric O&M Expense = \$58.7 Million



- Depreciation expense for fiscal year 2017 increased \$2 million or 6.6 percent. This increase was primarily attributable to Century II initiatives, upgrades to information systems, substation upgrades and the impairment of meters due to the Grid Modernization project that calls for accelerated depreciation of meters being replaced as part of the project.
- Taxes and tax equivalents were \$1.1 million higher than the prior fiscal year primarily due to increased plant in service levels.

**Knoxville Utilities Board Electric Division
Management's Discussion and Analysis
June 30, 2018 and 2017**

Electric Division Operation & Maintenance Expense



Other Income and Expense

Fiscal Year 2018 Compared to Fiscal Year 2017

Interest income increased \$0.7 million compared to the prior fiscal year, primarily due to increases in short-term interest rates over the prior fiscal year.

Interest expense increased \$0.7 million or 7.4 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 \$1 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.

The Division's capital contributions decreased \$1.3 million due to less donated assets compared to the prior fiscal year.

Fiscal Year 2017 Compared to Fiscal Year 2016

Interest income increased \$0.4 million compared to the prior fiscal year, primarily due to modest increases in interest rates over the prior fiscal year.

Interest expense increased \$0.7 million or 7.5 percent, primarily due to interest on bonds issued during the fiscal year.

Other income (net) increased \$0.3 million, primarily due to the recognition of \$0.9 million in non-operating income for future reimbursement by FEMA to offset the cost of restoration expenses related to the May 2017 storm.

**Knoxville Utilities Board Electric Division
Management's Discussion and Analysis
June 30, 2018 and 2017**

The Division's capital contributions increased \$1.2 million due to more donated assets compared to the prior fiscal year.

Capital Assets

**Capital Assets
As of June 30
(Net of Depreciation)**

| <i>(in thousands of dollars)</i> | 2018 | 2017 | 2016 |
|----------------------------------|--------------------------|--------------------------|--------------------------|
| Distribution Plant | | | |
| Services and Meters | \$ 31,210 | \$ 22,959 | \$ 15,719 |
| 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 | 104,435 | 113,948 | 113,141 |
| Total Distribution Plant | <u>\$ 478,890</u> | <u>\$ 455,035</u> | <u>\$ 434,738</u> |
| General Plant | 27,821 | 30,532 | 29,590 |
| Total Plant Assets | <u>\$ 506,711</u> | <u>\$ 485,567</u> | <u>\$ 464,328</u> |
| Work In Progress | 75,031 | 63,157 | 46,932 |
| Total Net Plant | <u><u>\$ 581,742</u></u> | <u><u>\$ 548,724</u></u> | <u><u>\$ 511,260</u></u> |

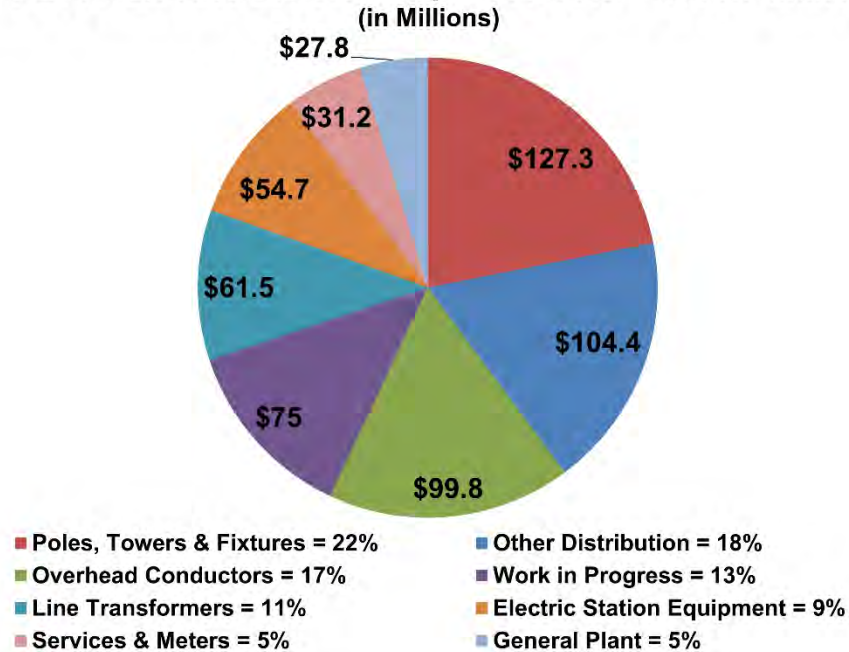
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Knoxville Utilities Board Electric Division Management's Discussion and Analysis June 30, 2018 and 2017

Fiscal Year 2018 Compared to Fiscal Year 2017

As of June 30, 2018, the Division had \$581.7 million invested in a variety of capital assets, as reflected in the schedule of capital assets, which represents a net increase (including additions, retirements, and depreciation) of \$33 million or 6 percent over the end of the last fiscal year.

FY 2018 Electric Division Capital Assets = \$581.7 Million



Major capital asset expenditures during the year were as follows:

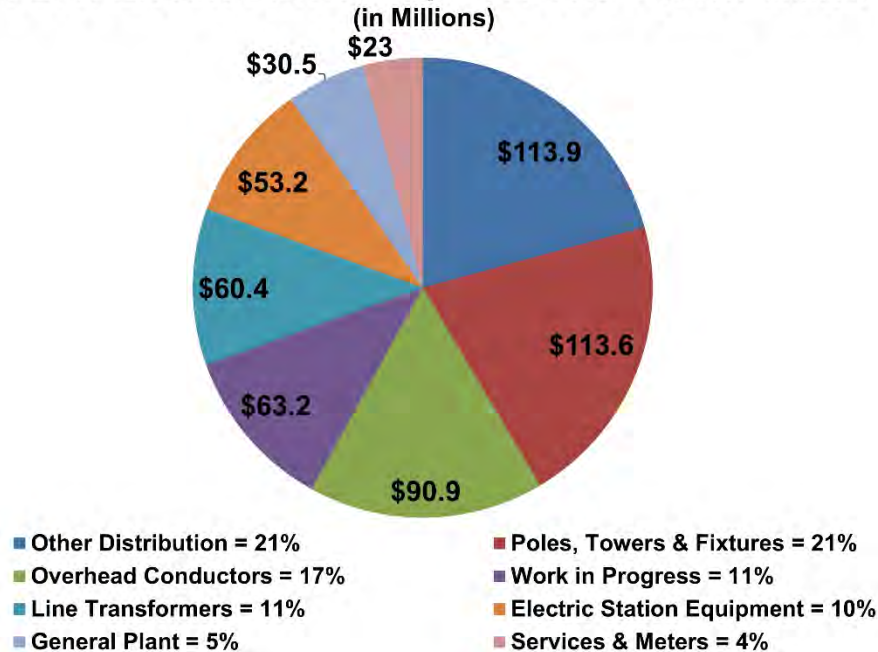
- \$31.3 million for electric distribution system improvements
- \$8.6 million for pole replacements
- \$7.5 million for building improvements
- \$7 million for Grid Modernization including SCADA system upgrades
- \$3.5 million for installation of new electric services and the upgrade or replacement of existing services

Knoxville Utilities Board Electric Division Management's Discussion and Analysis June 30, 2018 and 2017

Fiscal Year 2017 Compared to Fiscal Year 2016

As of June 30, 2017, the Division had \$548.7 million invested in a variety of capital assets, as reflected in the schedule of capital assets, which represents a net increase (including additions, retirements, and depreciation) of \$37.4 million or 7.3 percent over the end of the last fiscal year.

FY 2017 Electric Division Capital Assets = \$548.7 Million



Major capital asset expenditures during the year were as follows:

- \$34.4 million for electric distribution system improvements
- \$8.3 million for pole replacements
- \$4.7 million for installation of new electric services and the upgrade or replacement of existing services
- \$2.2 million for trucks and equipment
- \$1.8 million for upgrades to various information systems
- \$1.7 million for tools and equipment
- \$1.7 million for the purchase of property
- \$1.3 million for Grid Modernization SCADA system upgrades

Knoxville Utilities Board Electric Division Management's Discussion and Analysis June 30, 2018 and 2017

Debt Administration

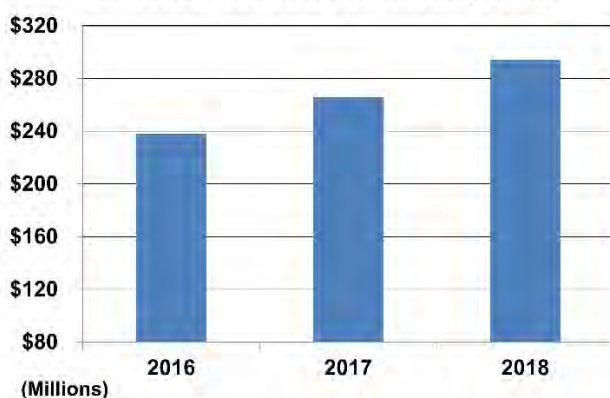
The Division's outstanding debt was \$294.5 million at June 30, 2018. The bonds are secured solely by revenues of the Electric Division. Debt as a percentage of the Division's capital structure was 44.7 percent in 2018, 43.5 percent in 2017, and 41.6 percent at the end of fiscal year 2016. KUB's Debt Management Policy limits the Division's debt ratio to 60 percent or less.

Outstanding Debt As of June 30

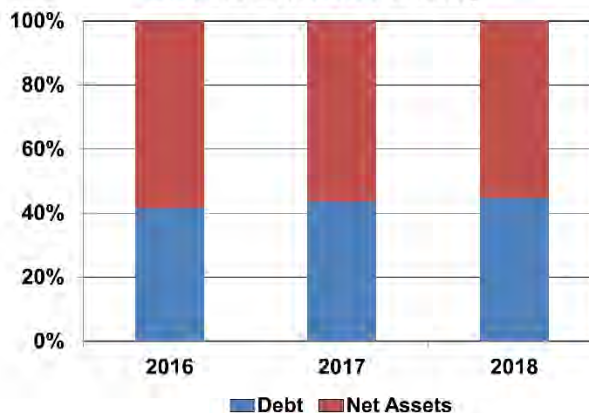
(in thousands of dollars)

| | 2018 | 2017 | 2016 |
|------------------------|------------|------------|------------|
| Revenue bonds | \$ 294,450 | \$ 265,795 | \$ 237,985 |
| Total outstanding debt | \$ 294,450 | \$ 265,795 | \$ 237,985 |

Electric Division Outstanding Debt



Electric Division Funding



The Division will pay \$140.7 million in principal payments over the next ten years, representing 47.8 percent of the outstanding bonds. KUB's Debt Management Policy requires that a minimum of 30 percent of electric debt principal be repaid over the next ten years.

Fiscal Year 2018 Compared to Fiscal Year 2017

As of June 30, 2018, the Division had \$294.5 million in outstanding debt (including the current portion of revenue bonds), compared to \$265.8 million last year, an increase of \$28.7 million or 10.8 percent. The increase is attributable to new revenue bonds issued during the fiscal year offset by the scheduled repayment of debt. The Division's weighted average cost of debt at June 30, 2018 was 3.70 percent (3.58 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.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2018, the Division's revenue bonds were rated AA+ by Standard & Poor's and Aa2 by Moody's Investors Service.

Knoxville Utilities Board Electric Division Management's Discussion and Analysis June 30, 2018 and 2017

Fiscal Year 2017 Compared to Fiscal Year 2016

As of June 30, 2017, the Division had \$265.8 million in outstanding debt (including the current portion of revenue bonds), compared to \$238 million last year, an increase of \$27.8 million or 11.7 percent. The increase is attributable to the net effect of new revenue and refunding bond issuances. The Division's weighted average cost of debt at June 30, 2017 was 3.76 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.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2017, the Division's revenue bonds were rated AA+ by Standard & Poor's and Aa2 by Moody's Investors Service.

Impacts on Future Financial Position

KUB anticipates adding 1,600 additional electric customers in fiscal year 2019.

In June 2017, the KUB Board adopted three years of rate increases for all four utility Divisions to help fund the ongoing Century II infrastructure programs for each system. The two remaining approved electric rate increases are effective October 2018 and October 2019 and are expected to provide an additional \$11.2 million and \$5.7 million, respectively, in annual revenue to assist with the funding of the Electric Division.

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 long-term debt includes \$21.3 million of Electric Division 2010 Build America Bonds (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. The Electric Division's portion of this contribution is \$1,515,197. 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. The Electric Division's portion of this contribution is \$1,241,196. 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,

Knoxville Utilities Board Electric Division

Management's Discussion and Analysis

June 30, 2018 and 2017

based on the Plan's current funding policy. The Electric Division's portion of this contribution is \$149,436. 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 the Division's financial position or results of operations during fiscal year 2018.

Financial Contact

The Division's financial statements are designed to present users (citizens, customers, investors, and creditors) with a general overview of the Division'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 Electric Division
Statements of Net Position
June 30, 2018 and 2017

| | 2018 | 2017 |
|---|-----------------------|-----------------------|
| Assets and Deferred Outflows of Resources | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 40,334,343 | \$ 37,195,215 |
| Short-term investments | 2,485,400 | 7,489,575 |
| Short-term contingency fund investments | 11,238,511 | 15,045,262 |
| Other current assets | 402,936 | 397,746 |
| Accrued interest receivable | 63,510 | 36,910 |
| Accounts receivable, less allowance of uncollectible accounts of \$506,030 in 2018 and \$489,884 in 2017 | 58,853,516 | 53,567,020 |
| Inventories | 16,710,893 | 12,530,569 |
| Prepaid expenses | 695,004 | 682,400 |
| Total current assets | <u>130,784,113</u> | <u>126,944,697</u> |
| Restricted assets: | | |
| Electric bond fund | 17,728,045 | 16,079,330 |
| Other funds | 10,294 | 15,088 |
| Total restricted assets | <u>17,738,339</u> | <u>16,094,418</u> |
| Electric plant in service | 929,981,483 | 903,531,703 |
| Less accumulated depreciation | <u>(423,269,910)</u> | <u>(417,964,937)</u> |
| | 506,711,573 | 485,566,766 |
| Retirement in progress | 2,189,617 | 1,580,649 |
| Construction in progress | 72,841,217 | 61,576,128 |
| Net plant in service | <u>581,742,407</u> | <u>548,723,543</u> |
| Other assets: | | |
| Net pension asset | 9,493,619 | 59,492 |
| Net OPEB asset | 1,800,513 | - |
| Long-term contingency fund investments | 24,849,159 | 17,636,387 |
| TVA conservation program receivable | 4,301,001 | 6,022,815 |
| Other | 3,134,206 | 2,925,491 |
| Total other assets | <u>43,578,498</u> | <u>26,644,185</u> |
| Total assets | <u>773,843,357</u> | <u>718,406,843</u> |
| Deferred outflows of resources: | | |
| Pension outflow | 934,974 | 4,363,589 |
| OPEB outflow | 317,944 | - |
| Unamortized bond refunding costs | 3,204,041 | 3,545,947 |
| Total deferred outflows of resources | <u>4,456,959</u> | <u>7,909,536</u> |
| Total assets and deferred outflows of resources | <u>\$ 778,300,316</u> | <u>\$ 726,316,379</u> |

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

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

| | 2018 | 2017 |
|--|-----------------------|-----------------------|
| Liabilities, Deferred Inflows, and Net Position | | |
| Current liabilities: | | |
| Current portion of revenue bonds | \$ 12,275,000 | \$ 11,345,000 |
| Sales tax collections payable | 969,239 | 929,375 |
| Accounts payable | 43,788,667 | 47,437,569 |
| Accrued expenses | 19,629,545 | 18,044,293 |
| Customer deposits plus accrued interest | 13,503,785 | 12,897,789 |
| Accrued interest on revenue bonds | 5,452,921 | 4,734,205 |
| Total current liabilities | <u>95,619,157</u> | <u>95,388,231</u> |
| Other liabilities: | | |
| TVA conservation program | 4,431,219 | 6,236,061 |
| Accrued compensated absences | 4,056,705 | 4,371,334 |
| Customer advances for construction | 3,236,413 | 1,916,046 |
| Net pension liability - QEBA | 134,564 | 88,837 |
| Over recovered purchased power cost | 4,706,715 | 3,957,673 |
| Other | 49,817 | 45,073 |
| Total other liabilities | <u>16,615,433</u> | <u>16,615,024</u> |
| Long-term debt: | | |
| Electric revenue bonds | 282,175,000 | 254,450,000 |
| Unamortized premiums/discounts | 12,031,042 | 12,080,941 |
| Total long-term debt | <u>294,206,042</u> | <u>266,530,941</u> |
| Total liabilities | <u>406,440,632</u> | <u>378,534,196</u> |
| Deferred inflows of resources: | | |
| Pension inflow | 6,689,924 | 2,528,408 |
| OPEB inflow | 154,386 | - |
| Total deferred inflows of resources | <u>6,844,310</u> | <u>2,528,408</u> |
| Total liabilities and deferred inflows of resources | <u>413,284,942</u> | <u>381,062,604</u> |
| Net position | | |
| Net investment in capital assets | 278,370,404 | 275,291,471 |
| Restricted for: | | |
| Debt service | 12,275,125 | 11,345,125 |
| Other | 10,294 | 15,088 |
| Unrestricted | 74,359,551 | 58,602,091 |
| Total net position | <u>365,015,374</u> | <u>345,253,775</u> |
| Total liabilities, deferred inflows, and net position | <u>\$ 778,300,316</u> | <u>\$ 726,316,379</u> |

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

Knoxville Utilities Board Electric Division
Statements of Revenues, Expenses and Changes in Net Position
Years Ended June 30, 2018 and 2017

| | 2018 | 2017 |
|---|-----------------------|-----------------------|
| Operating revenues | \$ <u>560,110,507</u> | \$ <u>546,364,012</u> |
| Operating expenses | | |
| Purchased power | 425,841,567 | 421,726,756 |
| Distribution | 35,019,674 | 36,525,681 |
| Customer service | 6,123,651 | 6,641,176 |
| Administrative and general | 13,172,673 | 15,522,227 |
| Provision for depreciation | 35,430,800 | 31,450,260 |
| Taxes and tax equivalents | <u>17,699,792</u> | <u>16,907,995</u> |
| Total operating expenses | <u>533,288,157</u> | <u>528,774,095</u> |
| Operating income | <u>26,822,350</u> | <u>17,589,917</u> |
| Non-operating revenues (expenses) | | |
| Contributions in aid of construction | 2,100,439 | 1,773,994 |
| Interest and dividend income | 1,635,170 | 899,405 |
| Interest expense | (10,692,299) | (9,954,448) |
| Amortization of debt costs | 375,458 | 212,123 |
| Write-down of plant for costs recovered through contributions | (2,100,439) | (1,773,994) |
| Other | <u>(669,966)</u> | <u>518,573</u> |
| Total non-operating revenues (expenses) | <u>(9,351,637)</u> | <u>(8,324,347)</u> |
| Change in net position before capital contributions | 17,470,713 | 9,265,570 |
| Capital contributions | <u>119,992</u> | <u>1,420,361</u> |
| Change in net position | 17,590,705 | 10,685,931 |
| Net position, beginning of year, as previously reported | 345,253,775 | 334,567,844 |
| Change in method of accounting for OPEB | <u>2,170,894</u> | <u>-</u> |
| Net position, beginning of year, as restated | <u>347,424,669</u> | <u>334,567,844</u> |
| Net position, end of year | <u>\$ 365,015,374</u> | <u>\$ 345,253,775</u> |

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

Knoxville Utilities Board Electric Division

Statements of Cash Flows

Years Ended June 30, 2018 and 2017

| | 2018 | 2017 |
|---|----------------------|----------------------|
| Cash flows from operating activities: | | |
| Cash receipts from customers | \$ 544,429,204 | \$ 539,470,564 |
| Cash receipts from other operations | 9,012,655 | 10,986,528 |
| Cash payments to suppliers of goods or services | (459,606,233) | (450,464,944) |
| Cash payments to employees for services | (26,652,345) | (26,815,870) |
| Payment in lieu of taxes | (15,542,951) | (14,828,556) |
| Cash receipts from collections of TVA conservation loan program participants | 2,013,974 | 2,525,020 |
| Cash payments for TVA conservation loan program | <u>(2,097,002)</u> | <u>(2,571,436)</u> |
| Net cash provided by operating activities | <u>51,557,302</u> | <u>58,301,306</u> |
| Cash flows from capital and related financing activities: | | |
| Net proceeds from bond issuance | 40,340,022 | 65,828,379 |
| Principal paid on revenue bonds and notes payable | (11,345,000) | (35,635,000) |
| Interest paid on revenue bonds and notes payable | (9,973,583) | (9,849,199) |
| Acquisition and construction of electric plant | (77,699,175) | (70,660,081) |
| Changes in electric bond fund, restricted | (1,648,715) | (1,340,249) |
| Customer advances for construction | 1,362,957 | 662,158 |
| Proceeds received on disposal of plant | 5,908,123 | 203,288 |
| Cash received from developers and individuals for capital purposes | <u>2,100,439</u> | <u>1,773,994</u> |
| Net cash used in capital and related financing activities | <u>(50,954,932)</u> | <u>(49,016,710)</u> |
| Cash flows from investing activities: | | |
| Changes in deposit and investment accounts: | | |
| Purchase of investment securities | (21,193,298) | (15,416,957) |
| Maturities of investment securities | 22,554,390 | 6,931,476 |
| Interest received | 1,561,336 | 865,446 |
| Other property and investments | <u>(385,670)</u> | <u>738,868</u> |
| Net cash provided by (used in) investing activities | <u>2,536,758</u> | <u>(6,881,167)</u> |
| Net increase (decrease) in cash and cash equivalents | 3,139,128 | 2,403,429 |
| Cash and cash equivalents, beginning of year | <u>37,195,215</u> | <u>34,791,786</u> |
| Cash and cash equivalents, end of year | <u>40,334,343</u> | <u>\$ 37,195,215</u> |
| Reconciliation of operating income to net cash provided by operating activities | | |
| Operating income | \$ 26,822,350 | \$ 17,589,917 |
| Adjustments to reconcile operating income to net cash provided by operating activities: | | |
| Depreciation expense | 36,749,149 | 32,630,752 |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | (5,286,496) | 401,621 |
| Inventories | (4,180,324) | (4,171,434) |
| Prepaid expenses | (12,604) | 2,435 |
| TVA conservation program receivable | 1,721,814 | 2,130,377 |
| Other assets | 118,333 | (105,366) |
| Sales tax collections payable | 39,864 | 47,542 |
| Accounts payable and accrued expenses | (3,969,725) | 5,566,720 |
| Unrecovered purchased power cost | 749,042 | 5,337,316 |
| TVA conservation program payable | (1,804,842) | (2,176,792) |
| Customer deposits plus accrued interest | 605,996 | 1,162,150 |
| Other liabilities | <u>4,745</u> | <u>(113,932)</u> |
| Net cash provided by operating activities | <u>\$ 51,557,302</u> | <u>\$ 58,301,306</u> |
| Noncash capital activities: | | |
| Acquisition of plant assets through developer contributions | \$ 119,992 | \$ 1,420,361 |

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

Knoxville Utilities Board Electric Division

Notes to Financial Statements

June 30, 2018 and 2017

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. The Electric Division (Division) provides services to certain customers in Knox County and in seven surrounding counties in East Tennessee. The Division's accounts are maintained in conformity with the Uniform Division of Accounts of the Federal Energy Regulatory Commission (FERC) and the Governmental Accounting Standards Board (GASB), as applicable. The financial statements present only the Electric Division and do not purport to, and do not, present fairly the consolidated financial position of Knoxville Utilities Board at June 30, 2018 and 2017, and the changes in its financial position for the years then ended in conformity with accounting principles generally accepted in the United States of America.

2. Summary of 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 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 to the Division is determined by measurement focus. The transactions of the Division 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

Knoxville Utilities Board Electric Division

Notes to Financial Statements

June 30, 2018 and 2017

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.

Electric Plant

Electric plant and other property are stated on the basis of original cost. The cost of current repairs and minor replacements is charged to operating expense. The cost of renewals and improvements is 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 electric plant in service is based on the estimated useful lives of the assets, which range from three to forty years, and is computed using the straight-line method. Pursuant to FERC, the caption "Provision for depreciation" in the Statements of Revenues, Expenses and Changes in Net Position does not include depreciation for transportation equipment of \$1,318,349 in fiscal year 2018 and \$1,180,492 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 the KUB Electric Division. 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 \$1,563,176 in fiscal year 2018 and \$1,174,673 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 net assets available, it is KUB's policy to apply those expenses to restricted net assets to the extent such are available and then to unrestricted net 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,

Knoxville Utilities Board Electric Division

Notes to Financial Statements

June 30, 2018 and 2017

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 (Division's share \$2,170,894) to increase the net OPEB asset by \$4,522,695 (Division's share \$2,170,894) 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

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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 (Division's share \$9,493,619) as of June 30, 2018 and \$123,941 (Division's share \$59,492) 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 (Division's share \$134,564) as of June 30, 2018 and \$185,077 (Division's share \$88,837) 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

Knoxville Utilities Board Electric Division

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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 and is recorded 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 and is recorded 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 and is recorded 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.

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

Knoxville Utilities Board Electric Division

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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 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.

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.

Knoxville Utilities Board Electric Division

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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.

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Knoxville Utilities Board Electric Division
Notes to Financial Statements
June 30, 2018 and 2017

Classification of deposits and investments per Statement of Net Position:

| | 2018 | 2017 |
|---|----------------------|----------------------|
| Current assets | | |
| Cash and cash equivalents | \$ 40,334,343 | \$ 37,195,215 |
| Short-term investments | 2,485,400 | 7,489,575 |
| Short-term contingency fund investments | 11,238,511 | 15,045,262 |
| Other assets | | |
| Long-term contingency fund investments | 24,691,037 | 17,525,499 |
| Restricted assets | | |
| Electric bond fund | 17,728,045 | 16,079,330 |
| Other funds | 10,294 | 15,088 |
| | <u>\$ 96,487,630</u> | <u>\$ 93,349,969</u> |

The above amounts do not include accrued interest of \$158,122 in fiscal year 2018 and \$110,888 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 | \$ 49,644,939 | \$ 49,644,939 | \$ - |
| State Treasurer's Investment Pool | - | - | - |
| Agency Bonds | 48,284,874 | 13,723,911 | 34,560,963 |
| Certificates of Deposits | - | - | - |
| | <u>\$ 97,929,813</u> | <u>\$ 63,368,850</u> | <u>\$ 34,560,963</u> |

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 \$34,560,963, 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.

Knoxville Utilities Board Electric Division
Notes to Financial Statements
June 30, 2018 and 2017

4. Accounts Receivable

Accounts receivable consists of the following:

| | 2018 | 2017 |
|--------------------------------------|----------------------|----------------------|
| Wholesale and retail customers | | |
| Billed services | \$ 35,480,648 | \$ 32,538,981 |
| Unbilled services | 21,803,140 | 18,560,793 |
| Other | 2,075,758 | 2,957,130 |
| Allowance for uncollectible accounts | (506,030) | (489,884) |
| | <u>\$ 58,853,516</u> | <u>\$ 53,567,020</u> |

5. Accounts Payable and Accruals

Accounts payable and accruals were composed of the following:

| | 2018 | 2017 |
|----------------------------|----------------------|----------------------|
| Trade accounts | \$ 43,788,667 | \$ 47,437,569 |
| Salaries and wages | 1,523,756 | 1,273,877 |
| Advances on pole rental | 1,225,693 | 2,101,729 |
| Self-insurance liabilities | 874,891 | 908,059 |
| Other current liabilities | 16,005,205 | 13,760,628 |
| | <u>\$ 63,418,212</u> | <u>\$ 65,481,862</u> |

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Knoxville Utilities Board Electric Division
Notes to Financial Statements
June 30, 2018 and 2017

6. Long-Term Obligations

Long-term debt consists of the following:

| | 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 |

| | 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 |

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

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

| Fiscal Year | Total | | Grand Total |
|----------------|-----------------------|-----------------------|-----------------------|
| | Principal | Interest | |
| 2019 | \$ 12,275,000 | \$ 10,632,278 | \$ 22,907,278 |
| 2020 | 12,825,000 | 10,091,635 | 22,916,635 |
| 2021 | 13,370,000 | 9,512,105 | 22,882,105 |
| 2022 | 14,005,000 | 8,895,725 | 22,900,725 |
| 2023 | 14,585,000 | 8,263,095 | 22,848,095 |
| 2024-2028 | 73,645,000 | 32,570,561 | 106,215,561 |
| 2029-2033 | 47,405,000 | 21,069,106 | 68,474,106 |
| 2034-2038 | 36,195,000 | 14,770,641 | 50,965,641 |
| 2039-2043 | 43,240,000 | 8,316,662 | 51,556,662 |
| 2044-2048 | 26,905,000 | 1,749,394 | 28,654,394 |
| Total | <u>\$ 294,450,000</u> | <u>\$ 125,871,202</u> | <u>\$ 420,321,202</u> |

During fiscal year 2006, KUB's Electric Division issued Series W 2005 bonds in part to retire certain existing debt and to 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.

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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.

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 | 4,371,334 | 8,062,347 | (8,376,976) | 4,056,705 |
| Customer advances for construction | 1,916,046 | 2,033,752 | (713,385) | 3,236,413 |
| Other | 45,073 | 34,887 | (30,143) | 49,817 |
| | <u>\$ 12,568,514</u> | <u>\$ 10,460,908</u> | <u>\$ (11,255,268)</u> | <u>\$ 11,774,154</u> |

| | 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 | 4,344,437 | 7,657,682 | (7,630,785) | 4,371,334 |
| Customer advances for construction | 1,262,889 | 1,328,520 | (675,363) | 1,916,046 |
| Other | 159,005 | 72,044 | (185,976) | 45,073 |
| | <u>\$ 14,179,184</u> | <u>\$ 9,527,821</u> | <u>\$ (11,138,491)</u> | <u>\$ 12,568,514</u> |

7. Lease Commitments

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

| | |
|--|-------------------|
| 2019 | \$ 162,452 |
| 2020 | <u>114,443</u> |
| Total operating minimum lease payments | <u>\$ 276,895</u> |

Knoxville Utilities Board Electric Division
Notes to Financial Statements
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8. Capital Assets

Capital asset activity was as follows:

| | Balance | | Balance |
|---------------------------------|-----------------------|----------------------|---------------------------------------|
| | June 30, 2017 | Increase | June 30, 2018 |
| Distribution Plant | | | |
| Services and Meters | \$ 53,715,836 | \$ 12,185,665 | \$ (206,396) \$ 65,695,105 |
| 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 | 143,937,396 | 13,259,176 | (2,031,041) 155,165,531 |
| Line Transformers | 99,293,217 | 3,464,337 | (762,671) 101,994,883 |
| Other Accounts | 200,455,297 | 6,677,050 | (26,196,194) 180,936,153 |
| Total Distribution Plant | <u>\$ 812,431,059</u> | <u>\$ 59,531,815</u> | <u>\$ (32,899,761) \$ 839,063,113</u> |
| | | | |
| General Plant | <u>91,100,644</u> | <u>2,857,527</u> | <u>(3,039,801) 90,918,370</u> |
| Total Plant Assets | <u>\$ 903,531,703</u> | <u>\$ 62,389,342</u> | <u>\$ (35,939,562) \$ 929,981,483</u> |
| | | | |
| Less Accumulated Depreciation | <u>(417,964,937)</u> | <u>(36,855,591)</u> | <u>31,550,618 (423,269,910)</u> |
| Net Plant Assets | <u>\$ 485,566,766</u> | <u>\$ 25,533,751</u> | <u>\$ (4,388,944) \$ 506,711,573</u> |
| | | | |
| Work In Progress | <u>63,156,777</u> | <u>70,636,196</u> | <u>(58,762,139) 75,030,834</u> |
| Total Net Plant | <u>\$ 548,723,543</u> | <u>\$ 96,169,947</u> | <u>\$ (63,151,083) \$ 581,742,407</u> |
| | | | |
| | Balance | | Balance |
| | June 30, 2016 | Increase | June 30, 2017 |
| Distribution Plant | | | |
| Services and Meters | \$ 43,551,858 | \$ 10,517,986 | \$ (354,008) \$ 53,715,836 |
| 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 | 136,774,701 | 9,610,604 | (2,447,909) 143,937,396 |
| Line Transformers | 96,843,152 | 3,281,186 | (831,121) 99,293,217 |
| Other Accounts | 195,424,354 | 6,479,815 | (1,448,872) 200,455,297 |
| Total Distribution Plant | <u>\$ 772,887,849</u> | <u>\$ 46,491,841</u> | <u>\$ (6,948,631) \$ 812,431,059</u> |
| | | | |
| General Plant | <u>86,133,148</u> | <u>6,712,878</u> | <u>(1,745,382) 91,100,644</u> |
| Total Plant Assets | <u>\$ 859,020,997</u> | <u>\$ 53,204,719</u> | <u>\$ (8,694,013) \$ 903,531,703</u> |
| | | | |
| Less Accumulated Depreciation | <u>(394,693,191)</u> | <u>(32,737,194)</u> | <u>9,465,448 (417,964,937)</u> |
| Net Plant Assets | <u>\$ 464,327,806</u> | <u>\$ 20,467,525</u> | <u>\$ 771,435 \$ 485,566,766</u> |
| | | | |
| Work In Progress | <u>46,932,330</u> | <u>68,722,382</u> | <u>(52,497,935) 63,156,777</u> |
| Total Net Plant | <u>\$ 511,260,136</u> | <u>\$ 89,189,907</u> | <u>\$ (51,726,500) \$ 548,723,543</u> |

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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 \$874,891 and \$908,059, respectively, resulting from the following changes:

| | 2018 | 2017 |
|--|--------------------|--------------------|
| Balance, beginning of year | \$ 908,059 | \$ 843,930 |
| Current year claims and changes in estimates | 7,609,420 | 7,717,808 |
| Claims payments | <u>(7,642,588)</u> | <u>(7,653,679)</u> |
| Balance, end of year | <u>\$ 874,891</u> | <u>\$ 908,059</u> |

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. For purposes of this disclosure, presentation is on a consolidated basis unless division's share is specified.

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.

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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 | <u>629</u> | <u>662</u> |
| Total | <u>1,265</u> | <u>1,310</u> |

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 percent of the first \$4,800 of annual earnings and 5 percent 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.

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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. Of these amounts, \$1,803,016 and \$2,312,118 are attributable to the Electric Division. 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. The Division's share of the net pension asset at June 30, 2018 is \$9,493,619 and at June 30, 2017 is \$59,492.

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 | <u>(227,377,105)</u> | <u>(204,514,679)</u> |
| Plan's net pension (asset) liability | <u>\$ (19,778,372)</u> | <u>\$ (123,941)</u> |
| Plan fiduciary net position as a percentage of the total pension liability | 109.50% | 100.06% |

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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.

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| Asset Class | Long Term Expected Real Rate of Return | |
|--------------------|---|-------------|
| | 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) |

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) (Division's share (\$7,516)).

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 (Division's share \$417,470). 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 (Division's share \$1,006,268).

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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 (Division's share \$137,332). 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 (division's share \$844,670).

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) (Division's share (\$4,284,184)). 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 (Division's share \$901,510) at June 30, 2018 for employer contributions made between December 31, 2017 and June 30, 2018.

| | 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 | <u>\$ 1,878,146</u> | <u>\$ 13,937,342</u> |
| Division's share | <u>\$ 901,510</u> | <u>\$ 6,689,924</u> |

\$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 (Division's share \$2,243,781).

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

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the next four years, resulting in a deferred inflow of \$1,787,010 (Division's share \$857,765). 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 (Division's share \$544,416).

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 (Division's share \$1,126,227).

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 (Division's share \$3,207,529). 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 (Division's share \$1,156,060) 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 |
| Division's share | \$ 4,363,589 | \$ 2,528,408 |

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

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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. The Division's share of the total pension liability at June 30, 2018 is \$134,564 and at June 30, 2017 is \$88,837.

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 | <u>\$210,625</u> | <u>\$185,077</u> |
| Covered payroll | \$43,309,374 | \$44,437,747 |
| Total pension liability as a % of covered payroll | 0.65% | 0.42% |

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

| | <u>Increase (Decrease)</u> |
|--|----------------------------|
| | 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 | <u>95,264</u> |
| Balances at December 31, 2017 | <u>\$ 280,341</u> |

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.

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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 (Division's share \$14,173). 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 (Division's share \$5,255).

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 (Division's share \$28,209).

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 | \$ - |
| Division's share | \$ 33,464 | \$ - |

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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 (Division's share \$88,837). 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 (Division's share \$1,043,861) and \$1,963,541 (Division's share \$942,500), respectively, for the years ended June 30, 2018 and 2017.

Knoxville Utilities Board Electric Division
Notes to Financial Statements
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. For purposes of this disclosure, presentation is on a consolidated basis unless division's share is specified.

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 OPEB Plan.

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

| | <u>2018</u> | <u>2017</u> |
|---------------------------|--------------|--------------|
| Retirees | 562 | 567 |
| Dependents of retirees | 561 | 580 |
| Eligible active employees | 309 | 334 |
| Total | <u>1,432</u> | <u>1,481</u> |

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.

Knoxville Utilities Board Electric Division
Notes to Financial Statements
June 30, 2018 and 2017

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:

| <u>Asset Class</u> | <u>Target Allocation</u> |
|-----------------------|--------------------------|
| Domestic Equity: | |
| Large Cap | 30% |
| Small Cap | 8% |
| International Equity: | |
| Developed | 16% |
| Emerging | 8% |
| Real Estate Equity | 8% |
| Debt Securities | 30% |
| Total | <u>100%</u> |

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. Of these amounts, zero and \$297,607 were attributable to the Electric Division.

Knoxville Utilities Board Electric Division
Notes to Financial Statements
June 30, 2018 and 2017

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 Division's share of the total net OPEB asset at June 30, 2018 is \$1,800,513 and at June 30, 2017 is \$2,170,894.

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 | <u>\$ (3,751,068)</u> | <u>\$ (4,522,695)</u> |

| | | |
|---|---------|---------|
| 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 | <u>1,126,693</u> | <u>355,066</u> | <u>771,627</u> |
| Balances at June 30, 2018 | <u>\$ 45,604,431</u> | <u>\$ 49,355,499</u> | <u>\$ (3,751,068)</u> |

Knoxville Utilities Board Electric Division

Notes to Financial Statements

June 30, 2018 and 2017

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.

| Asset Class | Long Term Expected Real Rate of Return | |
|----------------------|---|-------------|
| | 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.

Knoxville Utilities Board Electric Division
Notes to Financial Statements
June 30, 2018 and 2017

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 (Division's share \$206,822).

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 (Division's share \$317,944).

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 (Division's share \$95,323).

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 \$153,809. \$30,762 of that was recognized in the current year and \$123,047 (Division's share \$59,063) 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.

Knoxville Utilities Board Electric Division
Notes to Financial Statements
June 30, 2018 and 2017

| | 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 | <u>\$ 662,384</u> | <u>\$ 321,637</u> |
| Division's share | <u>\$ 317,944</u> | <u>\$ 154,386</u> |

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

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

| | 2018 | 2017 |
|---|--------------|--------------|
| City of Knoxville | | |
| Amounts billed by the Division for utilities and related services | \$ 9,190,195 | \$ 9,537,099 |
| Payments by the Division in lieu of property tax | 7,947,289 | 7,472,820 |
| Payments by the Division for services provided | 69,966 | 66,843 |
| Other divisions of KUB | | |
| Amounts billed to other divisions for utilities and related services provided | 6,093,018 | 5,989,819 |
| Interdivisional rental expense | - | - |
| Interdivisional rental income | 804,921 | 805,115 |
| Amounts billed to the Division by other divisions for utilities services provided | 227,990 | 207,960 |

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 | \$ 522,238 | \$ 727,226 |

Knoxville Utilities Board Electric Division
Notes to Financial Statements
June 30, 2018 and 2017

15. 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.

Knoxville Utilities Board Electric Division
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 Electric Division
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 Electric Division
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 | <u>1,126,693</u> |
| Total OPEB liability - beginning | <u>44,477,738</u> |
| Total OPEB liability - ending (a) | <u><u>\$ 45,604,431</u></u> |
| 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 | <u>355,066</u> |
| Plan fiduciary net position - beginning | <u>49,000,433</u> |
| Plan fiduciary net position - ending (b) | <u><u>\$ 49,355,499</u></u> |
| Net OPEB liability - ending (a) - (b) | <u><u>\$ (3,751,068)</u></u> |
| 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 Electric Division
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) | <u>\$ -</u> |
| 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 Electric Division
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 | <u>95,264</u> | <u>185,077</u> |
| Total pension liability - beginning | <u>185,077</u> | <u>-</u> |
| Total pension liability - ending | <u>\$ 280,341</u> | <u>\$ 185,077</u> |
| | | |
| 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.

Knoxville Utilities Board Electric Division
Supplemental Information –
Schedule of Expenditures of Federal Awards and State Financial Assistance
June 30, 2018 **Schedule 1**

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

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.

Knoxville Utilities Board Electric Division
Supplemental Information – Schedule of Findings and Questioned Costs
June 30, 2018 **Schedule 2**

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: | <u>CFDA</u> 97.036 | <u>Name of Program</u> 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.

Knoxville Utilities Board Electric Division
Supplemental Information - Schedule of Insurance in Force
June 30, 2018
(Unaudited)

Schedule 3

Insurance coverage is for KUB as a consolidated entity.

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.

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Electric Division
Supplemental Information - Schedule of Debt Maturities by Fiscal Year
June 30, 2018
(Unaudited)

Schedule 4
Continued on Next Page

| FY | Y-2009 | | Z-2010 | | | AA-2012 | | BB-2012 | | CC-2013 | | DD-2014 | |
|-------|---------------------|------------------|----------------------|---------------------|---------------------|----------------------|---------------------|----------------------|----------------------|---------------------|---------------------|----------------------|----------------------|
| | Principal | Interest | Principal | Interest | Rebate* | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest |
| 18-19 | 1,850,000 | 37,000 | 1,355,000 | 1,128,729 | 395,055 | 2,805,000 | 1,086,838 | 725,000 | 972,000 | 475,000 | 267,600 | 775,000 | 1,314,369 |
| 19-20 | | | 1,390,000 | 1,070,710 | 374,749 | 2,955,000 | 942,838 | 750,000 | 942,500 | 500,000 | 248,100 | 800,000 | 1,298,619 |
| 20-21 | | | 1,425,000 | 1,007,355 | 352,575 | 3,100,000 | 791,463 | 800,000 | 911,500 | 515,000 | 227,800 | 825,000 | 1,282,369 |
| 21-22 | | | 1,470,000 | 939,300 | 328,756 | 3,270,000 | 632,213 | 825,000 | 879,000 | 540,000 | 206,700 | 875,000 | 1,256,619 |
| 22-23 | | | 1,515,000 | 866,145 | 303,151 | 3,415,000 | 482,163 | 875,000 | 849,375 | 560,000 | 187,500 | 900,000 | 1,221,119 |
| 23-24 | | | 1,560,000 | 787,710 | 275,698 | 3,540,000 | 360,763 | 900,000 | 822,750 | 575,000 | 170,475 | 950,000 | 1,184,119 |
| 24-25 | | | 1,615,000 | 703,545 | 246,241 | 3,640,000 | 253,063 | 950,000 | 795,000 | 590,000 | 153,000 | 975,000 | 1,145,619 |
| 25-26 | | | 1,670,000 | 613,180 | 214,614 | 1,105,000 | 180,506 | 975,000 | 766,125 | 640,000 | 134,550 | 1,025,000 | 1,110,744 |
| 26-27 | | | 1,725,000 | 516,395 | 180,739 | 1,140,000 | 144,025 | 1,025,000 | 736,125 | 650,000 | 115,200 | 1,075,000 | 1,079,244 |
| 27-28 | | | 1,785,000 | 413,266 | 144,643 | 1,180,000 | 106,325 | 1,075,000 | 704,625 | 670,000 | 95,400 | 1,125,000 | 1,046,244 |
| 28-29 | | | 1,850,000 | 303,738 | 106,308 | 1,225,000 | 65,713 | 1,125,000 | 671,625 | 675,000 | 75,225 | 1,175,000 | 1,011,744 |
| 29-30 | | | 1,925,000 | 187,156 | 65,505 | 1,265,000 | 22,138 | 1,175,000 | 637,125 | 710,000 | 54,450 | 1,225,000 | 975,744 |
| 30-31 | | | 2,000,000 | 63,500 | 22,225 | | | 1,225,000 | 601,125 | 725,000 | 32,925 | 1,275,000 | 938,244 |
| 31-32 | | | | | | | | 1,275,000 | 563,625 | 735,000 | 11,025 | 1,325,000 | 897,919 |
| 32-33 | | | | | | | | 1,325,000 | 524,625 | | | 1,375,000 | 854,375 |
| 33-34 | | | | | | | | 1,375,000 | 484,125 | | | 1,450,000 | 808,469 |
| 34-35 | | | | | | | | 1,450,000 | 441,750 | | | 1,500,000 | 759,594 |
| 35-36 | | | | | | | | 1,500,000 | 397,500 | | | 1,575,000 | 707,703 |
| 36-37 | | | | | | | | 1,575,000 | 351,375 | | | 1,650,000 | 652,250 |
| 37-38 | | | | | | | | 1,625,000 | 303,375 | | | 1,725,000 | 593,188 |
| 38-39 | | | | | | | | 1,700,000 | 253,500 | | | 1,800,000 | 531,500 |
| 39-40 | | | | | | | | 1,775,000 | 201,375 | | | 1,875,000 | 462,500 |
| 40-41 | | | | | | | | 1,850,000 | 147,000 | | | 1,950,000 | 386,000 |
| 41-42 | | | | | | | | 1,950,000 | 90,000 | | | 2,025,000 | 306,500 |
| 42-43 | | | | | | | | 2,025,000 | 30,375 | | | 2,125,000 | 223,500 |
| 43-44 | | | | | | | | | | | | 2,225,000 | 136,500 |
| 44-45 | | | | | | | | | | | | 2,300,000 | 46,000 |
| 45-46 | | | | | | | | | | | | | |
| 46-47 | | | | | | | | | | | | | |
| 47-48 | | | | | | | | | | | | | |
| Total | <u>\$ 1,850,000</u> | <u>\$ 37,000</u> | <u>\$ 21,285,000</u> | <u>\$ 8,600,729</u> | <u>\$ 3,010,259</u> | <u>\$ 28,640,000</u> | <u>\$ 5,068,048</u> | <u>\$ 31,850,000</u> | <u>\$ 14,077,500</u> | <u>\$ 8,560,000</u> | <u>\$ 1,979,950</u> | <u>\$ 37,900,000</u> | <u>\$ 22,230,795</u> |

*Series Z-2010 bonds were issued as federally taxable Build America Bonds. KUB is scheduled to receive a 35 percent interest rebate payment from the United States Government for each interest payment. Effective October 1, 2017 these bonds became subject to a 6.6% 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.

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Electric Division
Supplemental Information - Schedule of Debt Maturities by Fiscal Year
June 30, 2018
(Unaudited)

Schedule 4
Continued from Previous Page

| FY | EE-2015 | | FF-2015 | | GG-2016 | | HH-2017 | | II-2017 | | Total | | Grand Total | Grand Total |
|-------|---------------|--------------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|----------------|----------------|----------------|----------------|
| | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | (P + I) | (Less Rebate) |
| 18-19 | 150,000 | 962,450 | 725,000 | 1,411,625 | 825,000 | 1,159,562 | 1,890,000 | 953,455 | 700,000 | 1,338,650 | 12,275,000 | 10,632,278 | 22,907,278 | 22,512,223 |
| 19-20 | 2,075,000 | 937,950 | 750,000 | 1,374,750 | 850,000 | 1,117,688 | 1,990,000 | 856,455 | 765,000 | 1,302,025 | 12,825,000 | 10,091,635 | 22,916,635 | 22,541,886 |
| 20-21 | 2,135,000 | 863,825 | 775,000 | 1,336,625 | 900,000 | 1,073,938 | 2,090,000 | 754,455 | 805,000 | 1,262,775 | 13,370,000 | 9,512,105 | 22,882,105 | 22,529,530 |
| 21-22 | 2,235,000 | 788,100 | 800,000 | 1,297,250 | 950,000 | 1,027,688 | 2,195,000 | 647,330 | 845,000 | 1,221,525 | 14,005,000 | 8,895,725 | 22,900,725 | 22,571,969 |
| 22-23 | 2,300,000 | 708,250 | 825,000 | 1,256,625 | 1,000,000 | 978,938 | 2,305,000 | 534,830 | 890,000 | 1,178,150 | 14,585,000 | 8,263,095 | 22,848,095 | 22,544,944 |
| 23-24 | 2,415,000 | 590,375 | 850,000 | 1,214,750 | 1,050,000 | 927,688 | 2,400,000 | 444,205 | 935,000 | 1,132,525 | 15,175,000 | 7,635,360 | 22,810,360 | 22,534,662 |
| 24-25 | 2,555,000 | 478,900 | 900,000 | 1,171,000 | 1,100,000 | 884,938 | 2,460,000 | 380,455 | 985,000 | 1,084,525 | 15,770,000 | 7,050,045 | 22,820,045 | 22,573,804 |
| 25-26 | 2,670,000 | 387,750 | 925,000 | 1,125,375 | 1,125,000 | 857,188 | 2,560,000 | 285,705 | 1,035,000 | 1,034,025 | 13,730,000 | 6,495,148 | 20,225,148 | 20,010,534 |
| 26-27 | 2,735,000 | 306,675 | 950,000 | 1,078,500 | 1,150,000 | 834,438 | 2,695,000 | 154,330 | 1,075,000 | 992,025 | 14,220,000 | 5,956,957 | 20,176,957 | 19,996,218 |
| 27-28 | 2,850,000 | 222,900 | 975,000 | 1,030,375 | 1,175,000 | 811,188 | 2,805,000 | 43,478 | 1,110,000 | 959,250 | 14,750,000 | 5,433,051 | 20,183,051 | 20,038,408 |
| 28-29 | 2,955,000 | 135,825 | 1,025,000 | 985,500 | 1,200,000 | 787,437 | | | 1,140,000 | 925,500 | 12,370,000 | 4,962,307 | 17,332,307 | 17,225,999 |
| 29-30 | 3,050,000 | 45,750 | 1,050,000 | 944,000 | 1,200,000 | 762,687 | | | 1,175,000 | 890,775 | 12,775,000 | 4,519,825 | 17,294,825 | 17,229,320 |
| 30-31 | | | 1,100,000 | 901,000 | 1,250,000 | 731,187 | | | 1,215,000 | 854,925 | 8,790,000 | 4,122,906 | 12,912,906 | 12,890,681 |
| 31-32 | | | 1,125,000 | 856,500 | 1,275,000 | 693,312 | | | 1,250,000 | 817,950 | 6,985,000 | 3,840,331 | 10,825,331 | 10,825,331 |
| 32-33 | | | 1,175,000 | 810,500 | 1,325,000 | 654,312 | | | 1,285,000 | 779,925 | 6,485,000 | 3,623,737 | 10,108,737 | 10,108,737 |
| 33-34 | | | 1,225,000 | 762,500 | 1,350,000 | 614,187 | | | 1,325,000 | 740,775 | 6,725,000 | 3,410,056 | 10,135,056 | 10,135,056 |
| 34-35 | | | 1,250,000 | 713,000 | 1,400,000 | 572,937 | | | 1,365,000 | 700,425 | 6,965,000 | 3,187,706 | 10,152,706 | 10,152,706 |
| 35-36 | | | 1,300,000 | 662,000 | 1,450,000 | 535,625 | | | 1,410,000 | 658,800 | 7,235,000 | 2,961,628 | 10,196,628 | 10,196,628 |
| 36-37 | | | 1,350,000 | 609,000 | 1,475,000 | 500,875 | | | 1,450,000 | 615,900 | 7,500,000 | 2,729,400 | 10,229,400 | 10,229,400 |
| 37-38 | | | 1,400,000 | 554,000 | 1,525,000 | 459,563 | | | 1,495,000 | 571,725 | 7,770,000 | 2,481,851 | 10,251,851 | 10,251,851 |
| 38-39 | | | 1,450,000 | 497,000 | 1,550,000 | 417,313 | | | 1,540,000 | 526,200 | 8,040,000 | 2,225,513 | 10,265,513 | 10,265,513 |
| 39-40 | | | 1,500,000 | 438,000 | 1,600,000 | 377,937 | | | 1,590,000 | 479,250 | 8,340,000 | 1,959,062 | 10,299,062 | 10,299,062 |
| 40-41 | | | 1,550,000 | 377,000 | 1,650,000 | 335,250 | | | 1,635,000 | 430,875 | 8,635,000 | 1,676,125 | 10,311,125 | 10,311,125 |
| 41-42 | | | 1,600,000 | 314,000 | 1,675,000 | 289,531 | | | 1,685,000 | 381,075 | 8,935,000 | 1,381,106 | 10,316,106 | 10,316,106 |
| 42-43 | | | 1,675,000 | 248,500 | 1,725,000 | 242,781 | | | 1,740,000 | 329,700 | 9,290,000 | 1,074,856 | 10,364,856 | 10,364,856 |
| 43-44 | | | 1,725,000 | 180,500 | 1,775,000 | 194,656 | | | 1,790,000 | 275,631 | 7,515,000 | 787,287 | 8,302,287 | 8,302,287 |
| 44-45 | | | 1,800,000 | 110,000 | 1,825,000 | 142,875 | | | 1,850,000 | 218,756 | 7,775,000 | 517,631 | 8,292,631 | 8,292,631 |
| 45-46 | | | 1,850,000 | 37,000 | 1,900,000 | 87,000 | | | 1,910,000 | 160,006 | 5,660,000 | 284,006 | 5,944,006 | 5,944,006 |
| 46-47 | | | | | 1,950,000 | 29,250 | | | 1,970,000 | 98,151 | 3,920,000 | 127,401 | 4,047,401 | 4,047,401 |
| 47-48 | | | | | | | | | 2,035,000 | 33,069 | 2,035,000 | 33,069 | 2,068,069 | 2,068,069 |
| Total | \$ 28,125,000 | \$ 6,428,750 | \$ 33,625,000 | \$ 22,296,875 | \$ 39,225,000 | \$ 18,101,969 | \$ 23,390,000 | \$ 5,054,698 | \$ 40,000,000 | \$ 21,994,888 | \$ 294,450,000 | \$ 125,871,202 | \$ 420,321,202 | \$ 417,310,943 |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Electric Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 5

| Rate Class | Base Charge | Number of Customers |
|------------------------------|--|----------------------------|
| Residential | Customer Charge: \$19.10 per month, less Hydro Allocation Credit: \$1.60 per month. Energy Charge: Summer Period 9.002 cents per kWh per month. Winter Period 8.961 cents per kWh per month. Transition Period 8.961 cents per kWh per month. | 182,415 |
| Commercial/Industrial | A. 1. If (a) the higher of (i) the customer's currently effective contract demand, if any, or (ii) its highest billing demand during the latest 12-month period is not more than 50 kWh, and (b) customer's monthly energy takings for any month during such period do not exceed 15,000 kWh: Customer Charge: \$26.00 per delivery point per month. Energy Charge: Summer Period 10.680 cents per kWh. Winter Period 10.639 cents per kWh. Transition Period 10.639 cents per kWh. | 19,662 |
| | 2. If (a) the higher of (i) the customer's currently effective contract demand or (ii) its highest billing demand during the latest 12-month period is greater than 50 kW but not more than 1,000 kW, or (b) if the customer's billing demand is less than 50 kW and its energy takings for any month during such period exceed 15,000 kWh: Customer Charge: \$75.00 per delivery point per month. Demand Charge: First 50 kW of billing demand per month, no demand charge. Excess over 50 kW of billing demand per month, at Summer Period \$14.42 per kW. Winter Period \$13.63 per kW. Transition Period \$13.63 per kW. Energy Charge: Summer Period First 15,000 kWh per month at 12.795 cents per kWh Additional kWh per month at 5.994 cents per kWh. Winter Period First 15,000 kWh per month at 12.754 cents per kWh Additional kWh per month at 5.994 cents per kWh. Transition Period First 15,000 kWh per month at 12.754 cents per kWh Additional kWh per month at 5.994 cents per kWh. | 2,766 |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Electric Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 5

| Rate Class | Number of Customers |
|---|---------------------|
| <p>3. If (a) the higher of the customer's currently effective contract demand or (b) its highest billing demand during the latest 12-month period is greater than 1,000 kW:</p> <p>Customer Charge: \$200.00 per delivery point per month.</p> <p>Demand Charge:</p> <p style="padding-left: 40px;">Summer Period First 1,000 kW of billing demand per month, at \$15.06 per kW. Excess over 1,000 kW of billing demand per month, at \$15.70 per kW, plus an additional \$15.70 per kW per month for each kW, if any, of the amount by which the customer's billing demand exceeds the higher of 2,500 kW or its contract demand.</p> <p style="padding-left: 40px;">Winter Period First 1,000 kW of billing demand per month, at \$14.30 per kW. Excess over 1,000 kW of billing demand per month, at \$14.94 per kW, plus an additional \$14.94 per kW per month for each kW, if any, of the amount by which the customer's billing demand exceeds the higher of 2,500 kW or its contract demand.</p> <p style="padding-left: 40px;">Transition Period First 1,000 kW of billing demand per month, at \$14.30 per kW. Excess over 1,000 kW of billing demand per month, at \$14.94 per kW, plus an additional \$14.94 per kW per month for each kW, if any, of the amount by which the customer's billing demand exceeds the higher of 2,500 kW or its contract demand.</p> <p>Energy Charge:</p> <p style="padding-left: 40px;">Summer Period 6.728 cents per kWh.</p> <p style="padding-left: 40px;">Winter Period 6.728 cents per kWh.</p> <p style="padding-left: 40px;">Transition Period 6.728 cents per kWh.</p> | <p>47</p> |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Electric Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 5

| Rate Class | Base Charge | Number of Customers | | | | | | | | | | | | | | | | | | |
|-----------------------------------|--|----------------------------|--|----------------|--|---------------|---|---------------|---|----------------|---|---------------|---|---------------|---|----------------|---|---------------|---|---|
| Commercial/ Industrial | <p>B. This rate shall apply to the firm electric power requirements where a customer's currently effective contract demand is greater than 5,000 kW but not more than 15,000 kW:</p> <p>Customer Charge: \$1,500 per delivery point per month. Administrative Charge: \$700 per delivery point per month. Demand Charge:</p> <p>Summer Period</p> <table border="0"> <tr> <td>Onpeak Demand</td> <td>\$10.64 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$5.87 per kW per month of the customer's maximum billing demand, plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$16.51 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> <p>Winter Period</p> <table border="0"> <tr> <td>Onpeak Demand</td> <td>\$9.70 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$5.87 per kW per month of the customer's maximum billing demand plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$15.57 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> <p>Transition Period</p> <table border="0"> <tr> <td>Onpeak Demand</td> <td>\$9.70 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$5.87 per kW per month of the customer's maximum billing demand plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$15.57 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> | Onpeak Demand | \$10.64 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$5.87 per kW per month of the customer's maximum billing demand, plus | Excess Demand | \$16.51 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | Onpeak Demand | \$9.70 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$5.87 per kW per month of the customer's maximum billing demand plus | Excess Demand | \$15.57 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | Onpeak Demand | \$9.70 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$5.87 per kW per month of the customer's maximum billing demand plus | Excess Demand | \$15.57 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | 4 |
| Onpeak Demand | \$10.64 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$5.87 per kW per month of the customer's maximum billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$16.51 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |
| Onpeak Demand | \$9.70 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$5.87 per kW per month of the customer's maximum billing demand plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$15.57 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |
| Onpeak Demand | \$9.70 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$5.87 per kW per month of the customer's maximum billing demand plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$15.57 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Electric Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 5

| | | | |
|-------------------|------------------|--|--|
| Energy Charge: | | | |
| Summer Period | Onpeak | | 9.525 cents per kWh per month for all metered onpeak kWh, plus |
| | Offpeak: Block 1 | | 7.084 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 2 | | 2.546 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 3 | | 2.211 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. |
| Winter Period | Onpeak | | 8.411 cents per kWh per month for all metered onpeak kWh, plus |
| | Offpeak: Block 1 | | 7.300 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 2 | | 2.546 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 3 | | 2.211 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. |
| Transition Period | Onpeak | | 7.053 cents per kWh per month for all metered onpeak kWh, plus |
| | Offpeak: Block 1 | | 7.053 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 2 | | 2.546 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 3 | | 2.211 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. |
| | | | For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of 1.703 cents per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy. |

See accompanying Report of Independent Auditors on Supplemental Information.

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Schedule 5

| Rate Class | Base Charge | Number of Customers |
|-----------------------------------|--|----------------------------|
| Commercial/ Industrial | <p>C. This rate shall apply to the firm electric power requirements where a customer's currently effective contract demand is greater than 15,000 kW but not more than 25,000 kW:</p> <p>Customer Charge: \$1,500 per delivery point per month. Administrative Charge: \$700 per delivery point per month. Demand Charge:</p> <p>Summer Period Onpeak Demand \$10.64 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$5.75 per kW per month of the customer's maximum billing demand, plus Excess Demand \$16.39 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</p> <p>Winter Period Onpeak Demand \$9.70 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$5.75 per kW per month of the customer's maximum billing demand plus Excess Demand \$15.45 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</p> <p>Transition Period Onpeak Demand \$9.70 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$5.75 per kW per month of the customer's maximum billing demand plus Excess Demand \$15.45 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</p> | 1 |

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| | | | |
|-------------------|------------------|--|--|
| Energy Charge: | | | |
| Summer Period | Onpeak | | 9.516 cents per kWh per month for all metered onpeak kWh, plus |
| | Offpeak: Block 1 | | 7.075 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 2 | | 2.537 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 3 | | 2.202 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. |
| Winter Period | Onpeak | | 8.402 cents per kWh per month for all metered onpeak kWh, plus |
| | Offpeak: Block 1 | | 7.291 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 2 | | 2.537 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 3 | | 2.202 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. |
| Transition Period | Onpeak | | 7.044 cents per kWh per month for all metered onpeak kWh, plus |
| | Offpeak: Block 1 | | 7.044 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 2 | | 2.537 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 3 | | 2.202 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. |
| | | | For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of 1.703 cents per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy. |

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| Rate Class | Base Charge | Number of Customers |
|-----------------------------------|---|----------------------------|
| Commercial/ Industrial | <p>D. This rate shall apply to the firm electric power requirements where a customer's currently effective contract demand is greater than 25,000 kW:</p> <p>Customer Charge: \$1,500 per delivery point per month. Administrative Charge: \$700 per delivery point per month. Demand Charge:</p> <p>Summer Period Onpeak Demand \$10.64 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$5.62 per kW per month of the customer's maximum billing demand, plus Excess Demand \$16.26 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</p> <p>Winter Period Onpeak Demand \$9.70 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$5.62 per kW per month of the customer's maximum billing demand plus Excess Demand \$15.32 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</p> <p>Transition Period Onpeak Demand \$9.70 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$5.62 per kW per month of the customer's maximum billing demand plus Excess Demand \$15.32 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</p> | 1 |

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|-------------------|------------------|--|--|
| Energy Charge: | | | |
| Summer Period | Onpeak | | 9.507 cents per kWh per month for all metered onpeak kWh, plus |
| | Offpeak: Block 1 | | 7.066 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 2 | | 2.415 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 3 | | 2.193 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. |
| Winter Period | Onpeak | | 8.393 cents per kWh per month for all metered onpeak kWh, plus |
| | Offpeak: Block 1 | | 7.282 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 2 | | 2.415 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 3 | | 2.193 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. |
| Transition Period | Onpeak | | 7.035 cents per kWh per month for all metered onpeak kWh, plus |
| | Offpeak: Block 1 | | 7.035 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 2 | | 2.415 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 3 | | 2.193 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. |
| | | | For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of 1.703 cents per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy. |

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| Rate Class | Base Charge | Number of Customers | | | | | | | | | | | | | | | | | | |
|---|---|---------------------|--|----------------|--|---------------|---|---------------|---|----------------|---|---------------|---|---------------|---|----------------|---|---------------|---|---|
| Commercial/ Industrial Time of Use | <p>A. This rate shall apply to the firm electric power requirements where a customer's currently effective contract demand is greater than 1,000 kW but not more than 5,000 kW:</p> <p>Customer Charge: \$1,500 per delivery point per month.</p> <p>Administrative Charge: \$700 per delivery point per month.</p> <p>Demand Charge:</p> <p>Summer Period</p> <table border="0"> <tr> <td>Onpeak Demand</td> <td>\$10.69 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$6.17 per kW per month of the customer's maximum billing demand, plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$16.86 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> <p>Winter Period</p> <table border="0"> <tr> <td>Onpeak Demand</td> <td>\$9.75 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$6.17 per kW per month of the customer's maximum billing demand plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$15.92 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> <p>Transition Period</p> <table border="0"> <tr> <td>Onpeak Demand</td> <td>\$9.75 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$6.17 per kW per month of the customer's maximum billing demand plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$15.92 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> | Onpeak Demand | \$10.69 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$6.17 per kW per month of the customer's maximum billing demand, plus | Excess Demand | \$16.86 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | Onpeak Demand | \$9.75 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$6.17 per kW per month of the customer's maximum billing demand plus | Excess Demand | \$15.92 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | Onpeak Demand | \$9.75 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$6.17 per kW per month of the customer's maximum billing demand plus | Excess Demand | \$15.92 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | 6 |
| Onpeak Demand | \$10.69 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$6.17 per kW per month of the customer's maximum billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$16.86 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |
| Onpeak Demand | \$9.75 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$6.17 per kW per month of the customer's maximum billing demand plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$15.92 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |
| Onpeak Demand | \$9.75 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$6.17 per kW per month of the customer's maximum billing demand plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$15.92 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |

See accompanying Report of Independent Auditors on Supplemental Information.

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| | | | |
|-------------------|------------------|--|--|
| Energy Charge: | | | |
| Summer Period | Onpeak | | 10.084 cents per kWh per month for all metered onpeak kWh, plus |
| | Offpeak: Block 1 | | 6.813 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 2 | | 2.663 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 3 | | 2.368 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. |
| Winter Period | Onpeak | | 8.590 cents per kWh per month for all metered onpeak kWh, plus |
| | Offpeak: Block 1 | | 7.102 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 2 | | 2.663 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 3 | | 2.368 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. |
| Transition Period | Onpeak | | 7.219 cents per kWh per month for all metered onpeak kWh, plus |
| | Offpeak: Block 1 | | 7.219 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 2 | | 2.663 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus |
| | Block 3 | | 2.368 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. |
| | | | For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of 1.703 cents per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy. |

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| Rate Class | Base Charge | Number of Customers | | | | | | | | | | | | | | | | | | |
|----------------------|---|---------------------|--|----------------|--|---------------|---|---------------|---|----------------|---|---------------|---|---------------|---|----------------|---|---------------|---|---|
| Manufacturing | <p>B. This rate shall apply to the firm electric power requirements where (a) a customer's currently effective contract demand is greater than 5,000 kW but not more than 15,000 kW and (b) the major use of electricity is for activities conducted at the delivery point serving that customer which are classified with a 2-digit Standard Industrial Classification Code between 20 and 39, inclusive, or classified with 2002 North American Industry Classification System (NAICS) code 5181, or 2007 NAICS codes 5182, 522320, and 541214.</p> <p>Customer Charge: \$1,500 per delivery point per month.</p> <p>Administrative Charge: \$700 per delivery point per month.</p> <p>Demand Charge:</p> <p>Summer Period</p> <table style="margin-left: 20px;"> <tr> <td style="padding-left: 20px;">Onpeak Demand</td> <td>\$10.00 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td style="padding-left: 20px;">Maximum Demand</td> <td>\$2.97 per kW per month of the customer's maximum billing demand, plus</td> </tr> <tr> <td style="padding-left: 20px;">Excess Demand</td> <td>\$12.97 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> <p>Winter Period</p> <table style="margin-left: 20px;"> <tr> <td style="padding-left: 20px;">Onpeak Demand</td> <td>\$9.06 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td style="padding-left: 20px;">Maximum Demand</td> <td>\$2.97 per kW per month of the customer's maximum billing demand plus</td> </tr> <tr> <td style="padding-left: 20px;">Excess Demand</td> <td>\$12.03 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> <p>Transition Period</p> <table style="margin-left: 20px;"> <tr> <td style="padding-left: 20px;">Onpeak Demand</td> <td>\$9.06 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td style="padding-left: 20px;">Maximum Demand</td> <td>\$2.97 per kW per month of the customer's maximum billing demand plus</td> </tr> <tr> <td style="padding-left: 20px;">Excess Demand</td> <td>\$12.03 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> | Onpeak Demand | \$10.00 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$2.97 per kW per month of the customer's maximum billing demand, plus | Excess Demand | \$12.97 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$2.97 per kW per month of the customer's maximum billing demand plus | Excess Demand | \$12.03 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$2.97 per kW per month of the customer's maximum billing demand plus | Excess Demand | \$12.03 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | 1 |
| Onpeak Demand | \$10.00 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$2.97 per kW per month of the customer's maximum billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$12.97 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |
| Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$2.97 per kW per month of the customer's maximum billing demand plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$12.03 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |
| Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$2.97 per kW per month of the customer's maximum billing demand plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$12.03 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |

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|-------------------|------------------|--|--|
| Energy Charge: | | | |
| Summer Period | Onpeak | 7.610 cents per kWh per month for all metered onpeak kWh, plus | |
| | Offpeak: Block 1 | 5.169 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 2 | 2.268 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 3 | 2.020 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. | |
| Winter Period | Onpeak | 6.497 cents per kWh per month for all metered onpeak kWh, plus | |
| | Offpeak: Block 1 | 5.387 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 2 | 2.268 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 3 | 2.020 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. | |
| Transition Period | Onpeak | 5.472 cents per kWh per month for all metered onpeak kWh, plus | |
| | Offpeak: Block 1 | 5.472 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 2 | 2.268 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 3 | 2.020 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. | |

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of 1.703 cents per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

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| Rate Class | Base Charge | Number of Customers | | | | | | | | | | | | | | | | | | |
|----------------------|--|----------------------------|--|----------------|--|---------------|---|---------------|---|----------------|---|---------------|---|---------------|---|----------------|---|---------------|---|---|
| Manufacturing | <p>C. This rate shall apply to the firm electric power requirements where (a) a customer's currently effective contract demand is greater than 15,000 kW but not more than 25,000 kW and (b) the major use of electricity is for activities conducted at the delivery point serving that customer which are classified with a 2-digit Standard Industrial Classification Code between 20 and 39, inclusive, or classified with 2002 North American Industry Classification System (NAICS) code 5181, or 2007 NAICS codes 5182, 522320, and 541214.</p> <p>Customer Charge: \$1,500 per delivery point per month.</p> <p>Administrative Charge: \$700 per delivery point per month.</p> <p>Demand Charge:</p> <p>Summer Period</p> <table border="0"> <tr> <td>Onpeak Demand</td> <td>\$10.00 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$2.85 per kW per month of the customer's maximum billing demand, plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$12.85 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> <p>Winter Period</p> <table border="0"> <tr> <td>Onpeak Demand</td> <td>\$9.06 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$2.85 per kW per month of the customer's maximum billing demand plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$11.91 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> <p>Transition Period</p> <table border="0"> <tr> <td>Onpeak Demand</td> <td>\$9.06 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$2.85 per kW per month of the customer's maximum billing demand plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$11.91 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> | Onpeak Demand | \$10.00 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$2.85 per kW per month of the customer's maximum billing demand, plus | Excess Demand | \$12.85 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$2.85 per kW per month of the customer's maximum billing demand plus | Excess Demand | \$11.91 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$2.85 per kW per month of the customer's maximum billing demand plus | Excess Demand | \$11.91 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | 1 |
| Onpeak Demand | \$10.00 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$2.85 per kW per month of the customer's maximum billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$12.85 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |
| Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$2.85 per kW per month of the customer's maximum billing demand plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$11.91 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |
| Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$2.85 per kW per month of the customer's maximum billing demand plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$11.91 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Electric Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 5

| | | | |
|-------------------|------------------|--|--|
| Energy Charge: | | | |
| Summer Period | Onpeak | 7.499 cents per kWh per month for all metered onpeak kWh, plus | |
| | Offpeak: Block 1 | 5.057 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 2 | 2.404 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 3 | 2.404 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. | |
| Winter Period | Onpeak | 6.384 cents per kWh per month for all metered onpeak kWh, plus | |
| | Offpeak: Block 1 | 5.274 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 2 | 2.404 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 3 | 2.404 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. | |
| Transition Period | Onpeak | 5.359 cents per kWh per month for all metered onpeak kWh, plus | |
| | Offpeak: Block 1 | 5.359 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 2 | 2.404 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 3 | 2.404 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. | |

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of 1.703 cents per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Electric Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 5

| Rate Class | Base Charge | Number of Customers | | | | | | | | | | | | | | | | | | |
|----------------------|--|---------------------|--|----------------|--|---------------|---|---------------|---|----------------|---|---------------|---|---------------|---|----------------|---|---------------|---|---|
| Manufacturing | <p>D. This rate shall apply to the firm electric power requirements where (a) a customer's currently effective contract demand is greater than 25,000 kW and (b) the major use of electricity is for activities conducted at the delivery point serving that customer which are classified with a 2-digit Standard Industrial Classification Code between 20 and 39, inclusive, or classified with 2002 North American Industry Classification System (NAICS) code 5181, or 2007 NAICS codes 5182, 522320, and 541214.</p> <p>Customer Charge: \$1,500 per delivery point per month.</p> <p>Administrative Charge: \$700 per delivery point per month.</p> <p>Demand Charge:</p> <p>Summer Period</p> <table style="margin-left: 20px;"> <tr> <td>Onpeak Demand</td> <td>\$10.00 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$2.60 per kW per month of the customer's maximum billing demand, plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$12.60 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> <p>Winter Period</p> <table style="margin-left: 20px;"> <tr> <td>Onpeak Demand</td> <td>\$9.06 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$2.60 per kW per month of the customer's maximum billing demand plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$11.66 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> <p>Transition Period</p> <table style="margin-left: 20px;"> <tr> <td>Onpeak Demand</td> <td>\$9.06 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$2.60 per kW per month of the customer's maximum billing demand plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$11.66 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> | Onpeak Demand | \$10.00 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$2.60 per kW per month of the customer's maximum billing demand, plus | Excess Demand | \$12.60 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$2.60 per kW per month of the customer's maximum billing demand plus | Excess Demand | \$11.66 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$2.60 per kW per month of the customer's maximum billing demand plus | Excess Demand | \$11.66 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | 1 |
| Onpeak Demand | \$10.00 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$2.60 per kW per month of the customer's maximum billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$12.60 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |
| Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$2.60 per kW per month of the customer's maximum billing demand plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$11.66 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |
| Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$2.60 per kW per month of the customer's maximum billing demand plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$11.66 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Electric Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 5

| | | | |
|-------------------|------------------|--|--|
| Energy Charge: | | | |
| Summer Period | Onpeak | 7.244 cents per kWh per month for all metered onpeak kWh, plus | |
| | Offpeak: Block 1 | 4.802 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 2 | 2.207 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 3 | 2.149 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. | |
| Winter Period | Onpeak | 6.129 cents per kWh per month for all metered onpeak kWh, plus | |
| | Offpeak: Block 1 | 5.019 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 2 | 2.207 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 3 | 2.149 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. | |
| Transition Period | Onpeak | 5.104 cents per kWh per month for all metered onpeak kWh, plus | |
| | Offpeak: Block 1 | 5.104 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 2 | 2.207 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 3 | 2.149 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. | |
| | | For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of 1.703 cents per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy. | |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Electric Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 5

| Rate Class | Base Charge | Number of Customers | | | | | | | | | | | | | | | | | | |
|------------------------------------|--|----------------------------|--|----------------|--|---------------|---|---------------|---|----------------|---|---------------|---|---------------|---|----------------|---|---------------|---|---|
| Manufacturing Time of Use A | <p>This rate shall apply to the firm electric power requirements where (a) a customer's currently effective contract demand is greater than 1,000 kW but not more than 5,000 kW and (b) the major use of electricity is for activities conducted at the delivery point serving that customer which are classified with a 2-digit Standard Industrial Classification Code between 20 and 39, inclusive, or classified with 2002 North American Industry Classification System (NAICS) code 5181, or 2007 NAICS codes 5182, 522320, and 541214.</p> <p>Customer Charge: \$1,500 per delivery point per month.</p> <p>Administrative Charge: \$700 per delivery point per month.</p> <p>Demand Charge:</p> <p>Summer Period</p> <table border="0"> <tr> <td>Onpeak Demand</td> <td>\$10.00 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$4.54 per kW per month of the customer's maximum billing demand, plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$14.54 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> <p>Winter Period</p> <table border="0"> <tr> <td>Onpeak Demand</td> <td>\$9.06 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$4.54 per kW per month of the customer's maximum billing demand plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$13.60 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> <p>Transition Period</p> <table border="0"> <tr> <td>Onpeak Demand</td> <td>\$9.06 per kW per month of the customer's onpeak billing demand, plus</td> </tr> <tr> <td>Maximum Demand</td> <td>\$4.54 per kW per month of the customer's maximum billing demand plus</td> </tr> <tr> <td>Excess Demand</td> <td>\$13.60 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.</td> </tr> </table> | Onpeak Demand | \$10.00 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$4.54 per kW per month of the customer's maximum billing demand, plus | Excess Demand | \$14.54 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$4.54 per kW per month of the customer's maximum billing demand plus | Excess Demand | \$13.60 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | Maximum Demand | \$4.54 per kW per month of the customer's maximum billing demand plus | Excess Demand | \$13.60 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | 4 |
| Onpeak Demand | \$10.00 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$4.54 per kW per month of the customer's maximum billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$14.54 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |
| Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$4.54 per kW per month of the customer's maximum billing demand plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$13.60 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |
| Onpeak Demand | \$9.06 per kW per month of the customer's onpeak billing demand, plus | | | | | | | | | | | | | | | | | | | |
| Maximum Demand | \$4.54 per kW per month of the customer's maximum billing demand plus | | | | | | | | | | | | | | | | | | | |
| Excess Demand | \$13.60 per kW per month for each kW of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher. | | | | | | | | | | | | | | | | | | | |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Electric Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 5

| | | | |
|-------------------|------------------|--|--|
| Energy Charge: | | | |
| Summer Period | Onpeak | 7.624 cents per kWh per month for all metered onpeak kWh, plus | |
| | Offpeak: Block 1 | 5.183 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 2 | 2.504 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 3 | 2.256 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. | |
| Winter Period | Onpeak | 6.511 cents per kWh per month for all metered onpeak kWh, plus | |
| | Offpeak: Block 1 | 5.401 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 2 | 2.504 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 3 | 2.256 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. | |
| Transition Period | Onpeak | 5.487 cents per kWh per month for all metered onpeak kWh, plus | |
| | Offpeak: Block 1 | 5.487 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 2 | 2.504 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus | |
| | Block 3 | 2.256 cents per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy. | |
| | | For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of 1.703 cents per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy. | |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Electric Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 5

| Rate Class | Base Charge | Number of Customers |
|--------------------------------|---|---|
| Outdoor Lighting | | |
| | Part A - Charges for Street and Park Lighting Systems, Traffic Signal Systems, and Athletic Field Lighting Installations | 54 |
| | Energy Charge: Summer Period 7.804 cents per kWh per month. Winter Period 7.804 cents per kWh per month. Transition Period 7.804 cents per kWh per month. | |
| | Facility Charge: The annual facility charge shall be 15.28 percent of the installed cost to KUB's electric system of the facilities devoted to street and park lighting service specified in this Part A. Such installed cost shall be recomputed on July 1 of each year, or more often if substantial changes in the facilities are made. Each month, one-twelfth of the then total annual facility charge shall be billed to the customer. If any part of the facilities has not been provided at the electric system's expense, or if the installed cost of any portion thereof is reflected on the books of another municipality or agency or department, the annual facility charge shall be adjusted to reflect properly the remaining cost to be borne by the electric system. | |
| | Customer Charge: \$2.50. | |
| | Part B - Charges for Outdoor Lighting for Individual Customers | 1470 |
| | Charges Per Fixture Per Month | |
| a. Type of Fixture | (Watts) (Lumens) | Rated kWh Facility Charge Total Lamp Charge |
| | | \$ \$ |
| Mercury Vapor or Incandescent* | 175 7,650 | 70 4.78 10.24 |
| | 400 19,100 | 155 6.67 18.77 |
| | 1000** 47,500 | 378 10.68 40.18 |
| High Pressure Sodium | 100 8,550 | 42 4.78 8.06 |
| | 250 23,000 | 105 5.67 13.86 |
| | 400 45,000 | 165 6.67 19.55 |
| | 1000** 126,000 | 385 10.68 40.73 |
| Decorative | 100 8,550 | 42 5.44 8.72 |
| | * Mercury Vapor and Incandescent fixtures not offered for new service. | |
| | ** 1,000 watt fixtures not offered for new service. | |
| b. Energy Charge: | For each lamp size under a. above, 7.804 cents per rated kWh per month. | |
| Additional pole charge: | \$5.00 per pole. | |

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Knoxville Utilities Board Electric Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 5

| Rate Class | Base Charge | | | | Number of Customers |
|-----------------------------|-------------------------|--|--------------------|----------------------|---------------------|
| LED Outdoor Lighting | | | | | - |
| | | Charges Per Fixture Per Month | | | |
| | | Rated kWh | Facility Charge | Total Lamp Charge | |
| a. Lamp Size | | | | | |
| | 100 WE | 21 | \$ 5.50 | \$ 7.14 | |
| | 250 WE | 58 | 6.80 | 11.33 | |
| | 400 WE | 79 | 9.34 | 15.51 | |
| b. | Energy Charge: | For each lamp size under a. above, 7.804 cents per rated kWh per month. | | | |
| | Additional pole charge: | \$5.00 per pole. | | | |

See accompanying Report of Independent Auditors on Supplemental Information.



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
Electric Division of the 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 Electric Division (the Division) of the Knoxville Utilities Board, 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 the Division'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 the Division'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 the Division's internal control. Accordingly, we do not express an opinion on the effectiveness of the Division'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 the Division'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
Electric Division of the Knoxville Utilities Board
Knoxville, Tennessee

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Division'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 the Division's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Division's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Coulter & Justus, P.C.

Knoxville, Tennessee
October 25, 2018



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 Electric Division (the Division) of the Knoxville Utilities Board, 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. The Division'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 the Division'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 the Division'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 the Division's compliance.

Board of Commissioners
Knoxville Utilities Board
Knoxville, Tennessee

Opinion

In our opinion, the Division 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 the Division 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 the Division'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 the Division'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



Gas Division

Financial Statements and Supplemental Information June 30, 2018 and 2017

KUB Board of Commissioners

Celeste Herbert - Chair
Dr. Jerry W. Askew - Vice Chair
John Worden
Kathy Hamilton
Sara Hedstrom Pinnell
Tyvi Small
Adrienne Simpson-Brown

Management

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President and
Chief Executive Officer

Mark Walker
Senior Vice President and
Chief Financial Officer

Susan Edwards
Senior Vice President and
Chief Administrative Officer

Gabe Bolas
Senior Vice President and
Chief Engineer

Eddie Black
Senior Vice President

Derwin Hagood
Senior Vice President of Operations

Mike Bolin
Vice President

Julie Childers
Vice President

John Gresham
Vice President

Dawn Mosteit
Vice President

Paul Randolph
Vice President

Knoxville Utilities Board Gas Division

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June 30, 2018 and 2017

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Independent Auditors' Report

Board of Commissioners
Gas Division of the Knoxville Utilities Board
Knoxville, Tennessee

We have audited the accompanying financial statements of the Gas Division (the Division) of the Knoxville Utilities Board, 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 the Division's basic financial statements as listed in the index.

Management's Responsibility for the Financial Statements

The Division'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 the Division'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 the Division'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 the Gas Division of the Knoxville Utilities Board 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, the Division 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
Gas Division of the 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 25 and the required supplementary information on pages 61 through 65 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 the Division's basic financial statements. The supplemental information is presented for purposes of additional analysis and is not a required part of the basic financial statements. The supplemental information 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.

Emphasis of Matter

As discussed in Note 1, the financial statements present only the Gas Division and do not purport to, and do not, present fairly the financial position of the Knoxville Utilities Board, as of June 30, 2018 and 2017, and the changes in its financial position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

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 the Division'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 the Division's internal control over financial reporting and compliance.

Coulter & Justus, P.C.

Knoxville, Tennessee
October 25, 2018

Knoxville Utilities Board Gas Division Management's Discussion and Analysis June 30, 2018 and 2017

Knoxville Utilities Board (KUB), comprised of 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. The Gas Division (Division) provides services to certain customers in Knox County and portions of Anderson and Loudon counties. The Division's accounts are maintained in conformity with the Uniform System of Accounts of the Federal Energy Regulatory Commission and the Governmental Accounting Standards Board, as applicable. The financial statements present only the Gas Division and do not purport to, and do not, present fairly the consolidated financial position of Knoxville Utilities Board at June 30, 2018 and 2017, and the changes in its financial position for the years then ended in conformity with accounting principles generally accepted in the United States of America.

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

The Division's 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 the Division's financial statements.

Gas Division Highlights

System Highlights

KUB's natural gas system serves 102,199 customers, and its service territory covers 289 square miles. KUB maintains 2,444 miles of service mains to provide 13 million dekatherms of natural gas to its customers annually.

KUB's natural gas system service territory experienced colder temperatures this past winter compared to the previous year. As a result, billed natural gas sales increased 20.8 percent when compared to fiscal year 2017. Gas Division margin (operating revenue less purchased gas cost) was \$10.3 million higher in fiscal year 2018. The increase is the result of higher billed sales volumes due to a colder winter and additional revenue from the natural gas system rate increase effective October 2017.

The natural gas system's peak demand occurred in January 2018 at 140,204 dekatherms. The previous natural gas system peak was 136,356 dekatherms in February 2015.

The typical residential gas customer's average monthly gas bill was \$58.39 for the twelve months ending June 30, 2018. The average monthly bill increased \$1.69 compared to last fiscal year, the result of the October 2017 gas rate increase and the flow-through of under recovered purchased gas costs from fiscal year 2017.

The natural gas system has added approximately 3,506 customers over the past three years representing annual growth of one percent. In fiscal year 2018, 1,176 customers were added.

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 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.

Knoxville Utilities Board Gas Division Management's Discussion and Analysis June 30, 2018 and 2017

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.

In 2013, the Board extended the funding approach for Century II to include the natural gas system. The Board formally endorsed by resolution a ten-year funding plan for the Gas Division, which included a combination of rate increases and debt issues to fully fund the natural gas system's Century II program.

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 three annual rate increases for the Gas Division. The October 2014, October 2015, and October 2016 rate increases each provided an additional \$1.8 million in annual revenue to help fund infrastructure replacement and maintenance.

The South Loop project that included a new 8-mile transmission main in the southwest portion of KUB's service territory was completed in October 2015. 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, of which the Gas Division's share is \$19.2 million. The deployment is funded in large part by debt issues and system revenues. As of June 30, 2018, KUB completed its second year of the advanced meters deployment, including the installation of network communication devices on 33 percent of KUB's natural gas meters at a total cost of \$6.3 million.

In May 2017, a new Century II funding resolution was adopted by the KUB Board of Commissioners to express the continued commitment to funding Century II programs for the next ten years. The funding will be achieved through a combination of rate increases and debt issues supplemented by cost savings and new revenue from net customer additions.

In June 2017, the Board approved the next phase of gas rate increases to support the Century II program. 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 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.

During the fiscal year, KUB replaced 6 miles of steel gas mains, while staying on track with Century II goals and within the Gas Division's total capital budget.

Knoxville Utilities Board Gas Division Management's Discussion and Analysis June 30, 2018 and 2017

Financial Highlights

Fiscal Year 2018 Compared to Fiscal Year 2017

The Division's net position increased \$17.9 million in fiscal year 2018. This increase was \$11.8 million higher than the prior year's change in net position. 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 \$0.8 million during the fiscal year 2018. The change resulted in a total increase of \$18.7 million in the Division's net position.

Operating revenue increased \$22.7 million or 24.7 percent. The increase is attributable to higher billed volumes of 20.8 percent, additional revenue from the October 2017 rate increase and the flow through of prior year under recovered purchased gas costs to KUB's gas customers. KUB flows changes to wholesale gas costs directly through to its retail gas rates via the Purchased Gas Adjustment. Purchased gas expense was \$12.4 million or 28.3 percent higher primarily due to higher customer demand. Margin on gas sales (operating revenue less purchased gas expense) increased \$10.3 million or 21.4 percent, reflecting the increase in gas sales volumes and additional revenue from the rate increases.

Operating expenses (excluding purchased gas expense) decreased \$1.3 million or 3.4 percent. Operating and maintenance (O&M) expenses were \$1.7 million less than the prior fiscal year. Depreciation expense increased \$0.5 million and taxes and tax equivalents were less than \$0.1 million lower than the prior year.

Wholesale purchased gas expense represented 50 percent of natural gas sales revenue for the fiscal year ended June 30, 2018.

Interest income increased \$0.3 million compared to the prior fiscal year. Interest expense increased \$0.1 million.

Total plant assets (net) increased \$6.8 million or 2.5 percent reflecting capital investment associated with the replacement of key gas system assets and other major system projects.

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.

Long-term debt represented 34.1 percent of the Division's capital structure as of June 30, 2018, as compared to 34.9 percent last year. Capital structure equals long-term debt (which includes the current and long-term portion of revenue bonds and notes) plus net position.

The Division's bond covenants require a debt service coverage ratio of at least 1.2 times the maximum principal and interest payments over the life of the Division's outstanding bonds. Current year debt coverage for the fiscal year was 4.10. Maximum debt service coverage was 4.00.

Fiscal Year 2017 Compared to Fiscal Year 2016

The Division's net position increased \$6.1 million in fiscal year 2017. This increase was \$1.5 million less than the prior year's change in net position.

Operating revenue increased \$3.4 million or 3.9 percent. The increase is attributable to higher billed volumes for industrial natural gas system customers and higher wholesale gas costs, which were directly flowed through to KUB's natural gas rates through the Purchased Gas Adjustment mechanism. Purchased gas expense was \$2.5 million or 6.1 percent higher due to higher natural gas commodity prices offset by reduced customer demand from the mild winter. Margin on gas sales (operating revenue less purchased

Knoxville Utilities Board Gas Division Management's Discussion and Analysis June 30, 2018 and 2017

gas expense) increased \$0.9 million or 2 percent, reflecting the decrease in gas sales volumes partially offset by additional revenue from the rate increases.

Operating expenses (excluding purchased gas expense) increased \$2.2 million or 6.2 percent. Operating and maintenance (O&M) expenses were \$1.1 million more than the prior fiscal year. Depreciation expense increased \$0.8 million and taxes and tax equivalents were \$0.3 million higher than the prior year.

Wholesale purchased gas expense represented 49 percent of natural gas sales revenue for the fiscal year ended June 30, 2017.

Interest income increased \$0.1 million compared to the prior fiscal year. Interest expense increased \$0.2 million, the result of the issuance of new bonds during the fiscal year.

Total plant assets (net) increased \$7.8 million or 2.9 percent reflecting capital investment associated with the replacement of key gas system assets and other major system projects.

During fiscal year 2017, KUB sold \$12 million in gas system revenue bonds for the purpose of funding gas system capital improvements and also sold \$8.1 million in gas system revenue refunding bonds to refinance existing gas system bonds at lower interest rates. The refunding produced total debt service savings of \$1.2 million over the life of the bonds (\$1 million on a net present value basis).

Long-term debt represented 34.9 percent of the Division's capital structure as of June 30, 2017, as compared to 34.5 percent last year. Capital structure equals long-term debt (which includes the current and long-term portion of revenue bonds and notes) plus net position.

The Division's bond covenants require a debt service coverage ratio of at least 1.2 times the maximum principal and interest payments over the life of the Division's outstanding bonds. Current year debt coverage for the fiscal year was 3.00. Maximum debt service coverage was 3.01.

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Knoxville Utilities Board Gas Division Management's Discussion and Analysis June 30, 2018 and 2017

Knoxville Utilities Board Gas Division - Financial Statements

The Division's financial performance is reported under three basic 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

The Division 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, gas 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 represents what was previously reported as accumulated or retained earnings. Net position tells the user what the Division has done with its accumulated earnings, not just the balance.

Net investment in capital assets is the net 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 the Division'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

The Division reports its revenues and expenses (both operating and non-operating) on the Statement of Revenues, Expenses and Changes in Net Position. In addition, any contributions in aid of construction (funds received via grants, developers, etc. to fund capital projects) and associated write-downs of plant assets are reported on this statement.

Total revenue less total expense equals the change in net position for the reporting. Net position at the beginning of the period are 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

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

The statement indicates the Division's 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 back to operating income as it appears on the Statement of Revenues, Expenses and Changes in Net Position.

**Knoxville Utilities Board Gas Division
Management's Discussion and Analysis
June 30, 2018 and 2017**

Condensed Financial Statements

Statement of Net Position

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

**Statements of Net Position
As of June 30**

| <i>(in thousands of dollars)</i> | 2018 | 2017 | 2016 |
|---|-------------------|-------------------|-------------------|
| Current, restricted and other assets | \$ 75,388 | \$ 55,347 | \$ 47,676 |
| Capital assets, net | 278,095 | 271,285 | 263,531 |
| Deferred outflows of resources | 1,438 | 2,646 | 3,005 |
| Total assets and deferred outflows of resources | <u>354,921</u> | <u>329,278</u> | <u>314,212</u> |
| Current and other liabilities | 22,132 | 22,214 | 19,875 |
| Long-term debt outstanding | 111,661 | 106,162 | 100,164 |
| Deferred inflows of resources | 2,424 | 895 | 257 |
| Total liabilities and deferred inflows of resources | <u>136,217</u> | <u>129,271</u> | <u>120,296</u> |
| Net position | | | |
| Net investment in capital assets | 161,294 | 160,725 | 159,696 |
| Restricted | 2,050 | 1,875 | 1,820 |
| Unrestricted | 55,360 | 37,407 | 32,400 |
| Total net position | <u>\$ 218,704</u> | <u>\$ 200,007</u> | <u>\$ 193,916</u> |

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.

Knoxville Utilities Board Gas Division Management's Discussion and Analysis June 30, 2018 and 2017

Impacts and Analysis

Current, Restricted and Other Assets

Fiscal Year 2018 Compared to Fiscal Year 2017

Current, restricted and other assets increased \$20 million or 36.2 percent, primarily due to a \$18 million increase in general fund cash (consisting of cash and cash equivalents, short-term investments and long-term investments), an increase in the actuarially determined net pension asset of \$3.3 million, and an increase of \$1.2 million in accounts receivable.

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. Gas storage decreased \$0.8 million, reflecting 12.9 percent lower storage volumes compared to the prior fiscal year.

Fiscal Year 2017 Compared to Fiscal Year 2016

Current, restricted and other assets increased \$7.7 million or 16 percent. General fund cash (consisting of cash and cash equivalents, short-term investments and long-term investments) increased \$2.4 million primarily to fund capital expenditures. Inventories increased \$1.2 million due to advanced metering materials and accounts receivable increased \$1.1 million compared to June 2016. Operating contingency reserves increased \$0.9 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. Gas storage decreased \$0.1 million, reflecting higher commodity prices for natural gas for 6.3 percent lower storage volumes compared to the prior fiscal year.

Capital Assets

Fiscal Year 2018 Compared to Fiscal Year 2017

Capital assets increased \$6.8 million or 2.5 percent. Major capital expenditures during the year included \$4.8 million for the replacement and relocation of gas system assets to accommodate Tennessee Department of Transportation (TDOT) highway improvement projects, \$4.5 million for the construction of service extensions, \$2.8 million for steel service replacements, \$1.2 million for the deployment of advanced metering equipment and \$0.6 million for trucks and equipment. The Gas Division retired \$6.8 million of natural gas system assets during the fiscal year.

Fiscal Year 2017 Compared to Fiscal Year 2016

Capital assets increased \$7.8 million or 2.9 percent. Major capital expenditures during the year included \$7.3 million for the construction of mains and service extensions, \$3.1 million for gas main replacement, \$2.3 million for the replacement and relocation of gas system assets to accommodate Tennessee Department of Transportation (TDOT) highway improvement projects, \$1.5 million for tools and equipment, and \$1.5 million for trucks and equipment. The Gas Division retired \$5.8 million of natural gas system assets during the fiscal year.

**Knoxville Utilities Board Gas Division
Management's Discussion and Analysis
June 30, 2018 and 2017**

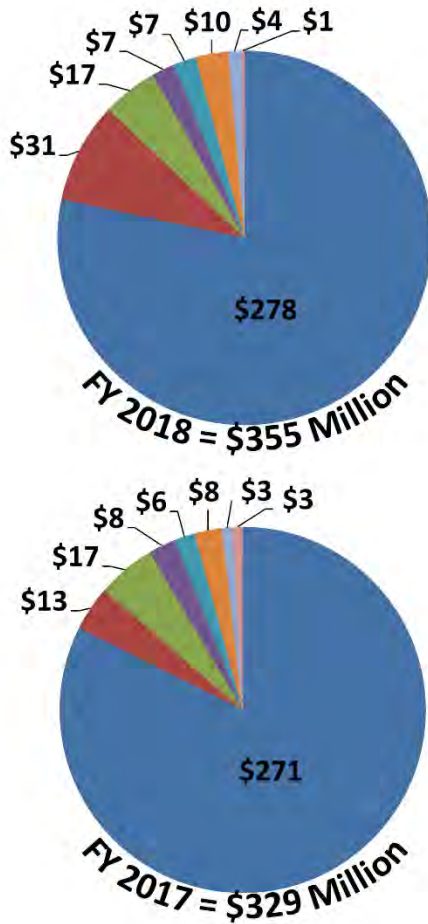
Deferred Outflows of Resources

Fiscal Year 2018 Compared to Fiscal Year 2017

Deferred outflows of resources decreased \$1.2 million compared to the prior fiscal year. This decrease is attributable to a \$1.2 million decrease in pension outflow.

Fiscal Year 2017 Compared to Fiscal Year 2016

Deferred outflows of resources decreased \$0.4 million compared to the prior fiscal year. This decrease is attributable to a \$0.2 million decrease in pension outflow and a \$0.1 million decrease in unamortized bond refunding costs.



**Gas Division Total Assets and
Deferred Outflows of Resources
(in Millions)**

| | <u>FY18</u> | <u>FY17</u> |
|--------------------------------|-------------|-------------|
| Plant | 78% | 83% |
| General Fund | 9% | 4% |
| Contingency Fund | 5% | 5% |
| Gas Storage | 2% | 2% |
| Accounts Receivable | 2% | 2% |
| Other Assets | 3% | 2% |
| Restricted Assets | 1% | 1% |
| Deferred Outflows of Resources | <1% | 1% |

Knoxville Utilities Board Gas Division Management's Discussion and Analysis June 30, 2018 and 2017

Current and Other Liabilities

Fiscal Year 2018 Compared to Fiscal Year 2017

Current and other liabilities decreased \$0.1 million compared to the prior fiscal year. 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. The current portion of revenue bonds increased \$0.4 million and customer advances for construction increased \$0.3 million. These increases were offset by a decrease of \$2.5 million in accounts payable compared to the prior fiscal year.

Fiscal Year 2017 Compared to Fiscal Year 2016

Current and other liabilities increased \$2.3 million or 11.7 percent. Accounts payable increased \$2 million compared to the prior fiscal year. Customer advances for construction increased \$0.4 million and the current portion of revenue bonds increased \$0.3 million. The increases were offset by a decrease of \$0.8 million in the actuarially determined net pension obligation.

Long-Term Debt

Fiscal Year 2018 Compared to Fiscal Year 2017

Long-term debt was \$5.5 million or 5.2 percent higher than the prior year. Natural gas system revenue bonds of \$12 million, sold in August 2017, were offset by the scheduled repayment of debt.

Fiscal Year 2017 Compared to Fiscal Year 2016

Long-term debt was \$6 million or 6 percent higher than the prior year. \$12 million in new revenue bonds, issued in July 2016, added to KUB's outstanding debt. In March 2017, revenue refunding bonds of \$8.1 million were issued to refinance bonds sold in 2005. The additional issuances offset by the defeased bonds and scheduled debt repayments accounted for the change in long-term debt.

Deferred Inflows of Resources

Fiscal Year 2018 Compared to Fiscal Year 2017

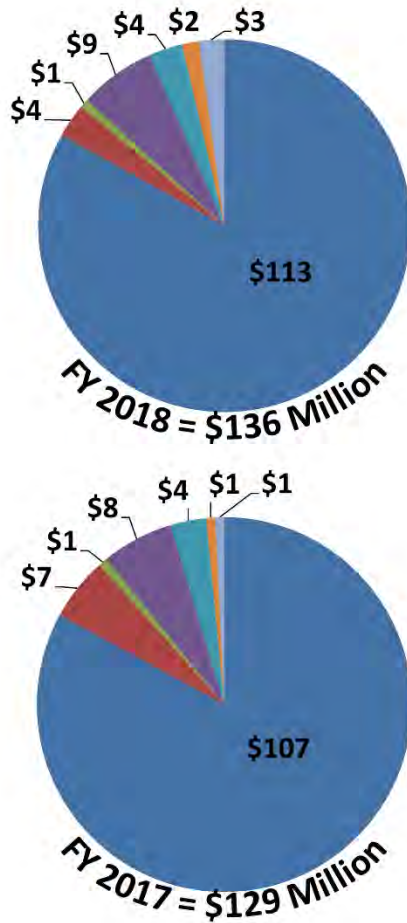
Deferred inflows of resources increased \$1.5 million compared to the prior fiscal year due to differences in pension inflows.

Fiscal Year 2017 Compared to Fiscal Year 2016

Deferred inflows of resources increased \$0.6 million compared to the prior fiscal year due to differences in pension inflows.

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**Knoxville Utilities Board Gas Division
Management's Discussion and Analysis
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**Gas Division Total Liabilities and
Deferred Inflows of Resources
(in Millions)**

| | <u>FY18</u> | <u>FY17</u> |
|-------------------------------|-------------|-------------|
| Bond Debt | 83% | 83% |
| Payables | 3% | 5% |
| Misc Current | 1% | 1% |
| Other Liabilities | 7% | 6% |
| Customer Deposits | 3% | 3% |
| Interest Accrued | 1% | 1% |
| Deferred Inflows of Resources | 2% | 1% |

Net Position

Fiscal Year 2018 Compared to Fiscal Year 2017

Unrestricted net position increased \$18 million, primarily due to a \$19.8 million increase in current and other assets compared to last fiscal year, which includes an increase of \$18 million in general fund cash. Investment in capital assets, net of debt, increased \$0.6 million, primarily from an increase in net plant in service of \$6.8 million offset by an increase of \$5.9 million in the current portion of revenue bonds and total long-term debt. Restricted net position was \$0.2 million higher than the prior fiscal year, based on increases in debt service.

Fiscal Year 2017 Compared to Fiscal Year 2016

Unrestricted net position increased \$5 million, primarily due to a \$7.6 million increase in current and other assets compared to last fiscal year, which includes an increase of \$2.4 million in general fund cash. Investment in capital assets, net of debt, increased \$1 million, primarily from an increase in net plant in service of \$7.8 million offset by an increase of \$6.3 million in the current portion of revenue bonds and total long-term debt. Restricted net position was less than \$0.1 million higher than the prior fiscal year, based on increases in debt service.

**Knoxville Utilities Board Gas Division
Management's Discussion and Analysis
June 30, 2018 and 2017**

Statement of Revenues, Expenses and Changes in Net Position

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

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

| <i>(in thousands of dollars)</i> | 2018 | 2017 | 2016 |
|---|------------------|-----------------|-----------------|
| Operating revenues | \$ 114,539 | \$ 91,868 | \$ 88,441 |
| Less: Purchased gas expense | <u>56,077</u> | <u>43,714</u> | <u>41,212</u> |
| Margin from sales | <u>58,462</u> | <u>48,154</u> | <u>47,229</u> |
| Operating expenses | | | |
| Distribution | 8,657 | 9,139 | 8,305 |
| Customer service | 2,486 | 2,718 | 2,676 |
| Administrative and general | 5,265 | 6,232 | 5,984 |
| Depreciation | 12,717 | 12,262 | 11,481 |
| Taxes and tax equivalents | <u>7,615</u> | <u>7,692</u> | <u>7,391</u> |
| Total operating expenses | <u>36,740</u> | <u>38,043</u> | <u>35,837</u> |
| Operating income | <u>21,722</u> | <u>10,111</u> | <u>11,392</u> |
| Interest income | 634 | 291 | 183 |
| Interest expense | (4,260) | (4,190) | (4,033) |
| Other income/(expense) | <u>(188)</u> | <u>(121)</u> | <u>34</u> |
| Change in net position before capital contributions | <u>17,908</u> | <u>6,091</u> | <u>7,576</u> |
| Capital contributions | <u>20</u> | <u>-</u> | <u>-</u> |
| Change in net position | <u>\$ 17,928</u> | <u>\$ 6,091</u> | <u>\$ 7,576</u> |

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 natural gas sales for the fiscal year. Any change (increase/decrease) in retail gas rates would also be a cause of change in operating revenue. The Division utilizes a Purchased Gas Adjustment (PGA) mechanism in setting its monthly retail gas rates. Through the PGA, the Division adjusts its retail rates each month based on current wholesale gas prices. If wholesale gas prices increase/decrease, the Division increases/decreases its retail gas rates accordingly.
- Volumes of gas purchased from the Division's wholesale gas suppliers for resale to customers impact purchased gas expense. The Division purchases gas for resale to its customers from a variety of wholesale suppliers. Changes (increase/decrease) in wholesale gas prices would also result in a change in purchased gas expense.
- Operating expenses (distribution, customer service, administrative and general) are normally impacted by changes in areas including, but not limited to, labor costs (staffing, wage rates), active employee and retiree medical costs, and gas distribution system maintenance.
- Depreciation expense is impacted by plant additions and retirements during the fiscal year.

Knoxville Utilities Board Gas Division

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- Taxes and tax equivalents are impacted by plant additions/retirements, changes in property tax rates, and margin (operating revenue less purchased gas expense) levels.
- Interest income is impacted by the level of interest rates and investments.
- Interest expense on debt is impacted by the level of outstanding debt and the interest rates on the outstanding debt.
- Other income/(expense) is impacted by miscellaneous non-operating revenues and expenses.

Impacts and Analysis

Change in Net Position

Fiscal Year 2018 Compared to Fiscal Year 2017

The Division's Change in Net Position increased \$17.9 million in fiscal year 2018, reflecting a colder winter and decreased operating expenses. 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 \$0.8 million. The change resulted in a total increase of \$18.7 million in the Division's net position. Comparatively, net position increased by \$6.1 million in fiscal year 2017.

Fiscal Year 2017 Compared to Fiscal Year 2016

The Division's net position increased \$6.1 million. This was \$1.5 million lower than the prior year's change in net position, reflecting the mild winter and increased operating expenses.

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Knoxville Utilities Board Gas Division Management's Discussion and Analysis June 30, 2018 and 2017

Margin from Sales

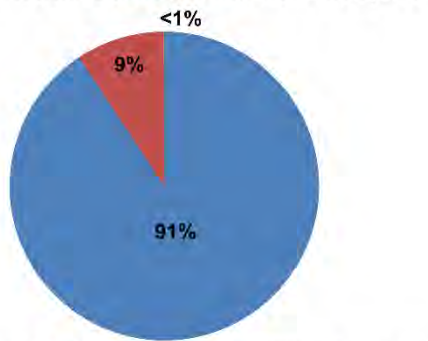
Fiscal Year 2018 Compared to Fiscal Year 2017

Margin on gas sales (operating revenue less purchased gas expense) increased \$10.3 million or 21.4 percent due to revenue from the rate increase effective October 2017 and a 20.8 percent increase in billed sales volumes.

Operating revenue increased \$22.7 million or 24.7 percent for the fiscal year ending June 30, 2018. The gas system service territory experienced a colder winter than the prior fiscal year's extremely mild winter. Billed sales were up 20.8 percent. The increase in operating revenue reflected increased customer demand and additional revenue from the October 2017 rate increase.

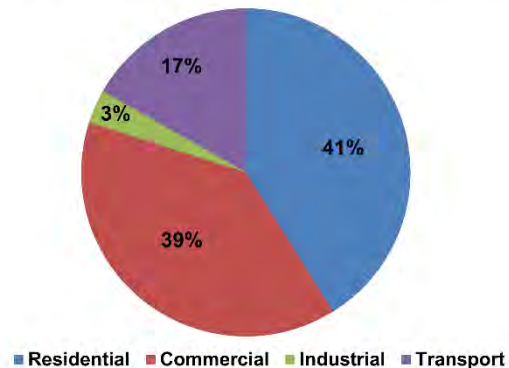
Purchased gas expense increased \$12.4 million or 28.3 percent, due to increased customer demand. KUB purchased 21 percent more gas from its suppliers during the fiscal year to meet customer demand and maintain gas storage levels. This resulted in a 25.7 percent increase in total volumes delivered to KUB's gas distribution system. The Division's weighted average cost of gas purchased for fiscal year 2018 was \$2.98 per dekatherm, as compared to \$3.07 per dekatherm last year.

FY 2018 Total Gas Customers = 102,199



*Industrial and Transport customers represent less than 1% of the total.

FY 2018 Gas Sales = 13.3 million Dekatherms



Residential customers, whose natural gas is primarily used as a heating source during winter months, accounted for 91 percent of customers billed and 41 percent of total volumes sold during the year.

Residential sales volumes increased 33 percent, commercial sales volumes increased 19.5 percent, and transport sales volumes increased 7.6 percent. Increased consumption due to normalized winter conditions experienced by the service area were offset by a 12.8 percent decline in industrial sales volumes compared to the prior fiscal year.

KUB's ten largest gas customers accounted for 23 percent of KUB's billed gas volumes. Those ten customers represent six industrial and four commercial customers, including three governmental customer.

KUB has 17 transport customers who purchase gas directly from a supplier other than KUB. KUB provides transportation service on its gas distribution system to those customers.

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Knoxville Utilities Board Gas Division Management's Discussion and Analysis June 30, 2018 and 2017

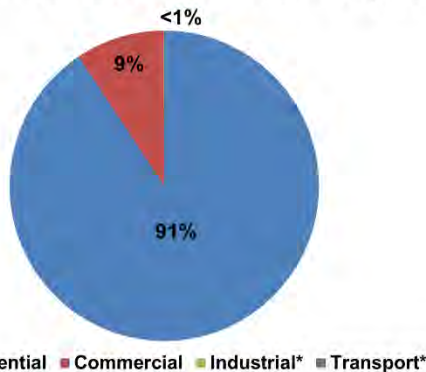
Fiscal Year 2017 Compared to Fiscal Year 2016

Margin on gas sales (operating revenue less purchased gas expense) increased \$0.9 million or 2 percent due to revenue from the rate increase effective October 2016 offset by a 2.5 percent decrease in billed sales volumes.

Operating revenue increased \$3.4 million or 3.9 percent for the fiscal year ending June 30, 2017. The gas system service territory experienced an extremely mild winter. Billed sales were down 2.5 percent due to the warm winter. The overall increase in operating revenue reflected the flow-through of higher purchased gas commodity prices, increased industrial sales, and the additional revenue from the 2016 rate increase.

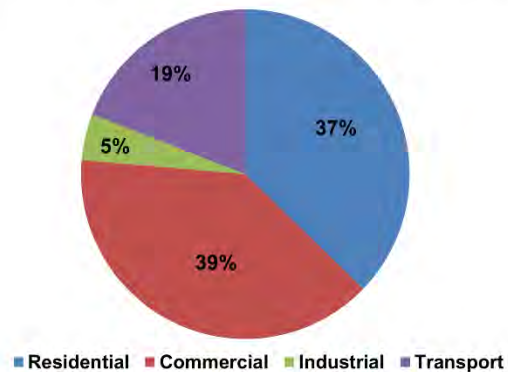
Purchased gas expense increased \$2.5 million or 6.1 percent, due to higher commodity prices for natural gas during the fiscal year. KUB purchased 8 percent less gas from its suppliers during the fiscal year to meet customer demand and maintain gas storage levels. The net result was a 9.5 percent decrease in total volumes delivered to KUB's gas distribution system. The Division's weighted average cost of gas purchased for fiscal year 2017 was \$3.07 per dekatherm, as compared to \$2.49 per dekatherm last year.

FY 2017 Total Gas Customers = 101,023



*Industrial and Transport customers represent less than 1% of the total.

FY 2017 Gas Sales = 11 million Dekatherms



Residential customers, whose natural gas is primarily used as a heating source during winter months, accounted for 91 percent of customers billed and 37 percent of total volumes sold during the year.

Residential sales volumes declined 6.2 percent, transport sales volumes declined 3.3 percent and commercial sales volumes declined 1.1 percent. Consumption declines due to a mild winter were offset by a 27.3 percent increase in industrial sales volumes compared to the prior fiscal year.

KUB's ten largest gas customers accounted for 29 percent of KUB's billed gas volumes. Those ten customers represent six industrial and four commercial customers, including one governmental customer.

KUB has 17 transport customers who purchase gas directly from a supplier other than KUB. KUB provides transportation service on its gas distribution system to those customers.

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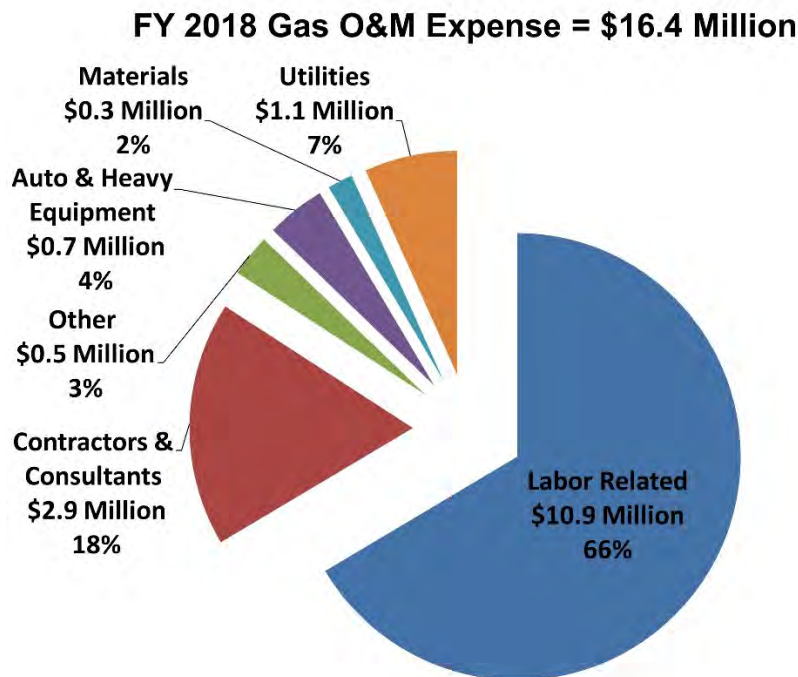
Knoxville Utilities Board Gas Division Management's Discussion and Analysis June 30, 2018 and 2017

Operating Expenses

Fiscal Year 2018 Compared to Fiscal Year 2017

Operating expenses (excluding purchased gas expense) decreased \$1.3 million or 3.4 percent 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 distribution, customer service and administrative and general.

- Distribution system O&M expenses were \$0.5 million lower than the prior fiscal year due to a decrease in outside contractors and consultants.
- Customer service expenses were \$0.2 million lower than the prior fiscal year.
- Administrative and general expenses decreased \$1 million or 15.5 percent, primarily due to labor related expenses.



- Depreciation expense was \$0.5 million higher than the prior year, primarily due to increased depreciation due to Century II replacement programs, including advanced meters.
- Taxes and tax equivalents were less than \$0.1 million lower than the prior fiscal year.

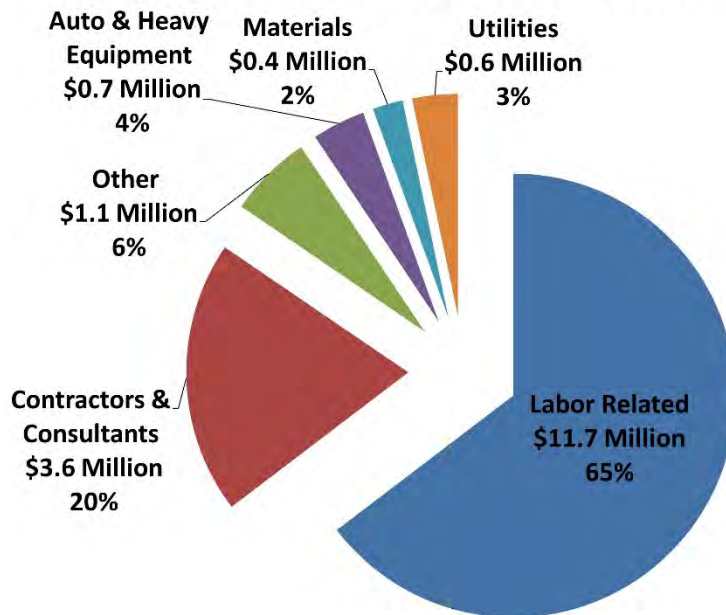
Knoxville Utilities Board Gas Division Management's Discussion and Analysis June 30, 2018 and 2017

Fiscal Year 2017 Compared to Fiscal Year 2016

Operating expenses (excluding purchased gas expense) increased \$2.2 million or 6.2 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 distribution, customer service and administrative and general.

- Distribution system O&M expenses were \$0.8 million higher than the prior fiscal year due to an increase in outside contractors and an increase in labor related expenses.
- Customer service expenses were consistent with the prior fiscal year.
- Administrative and general expenses increased \$0.2 million or 4.1 percent, primarily due to labor related expenses.

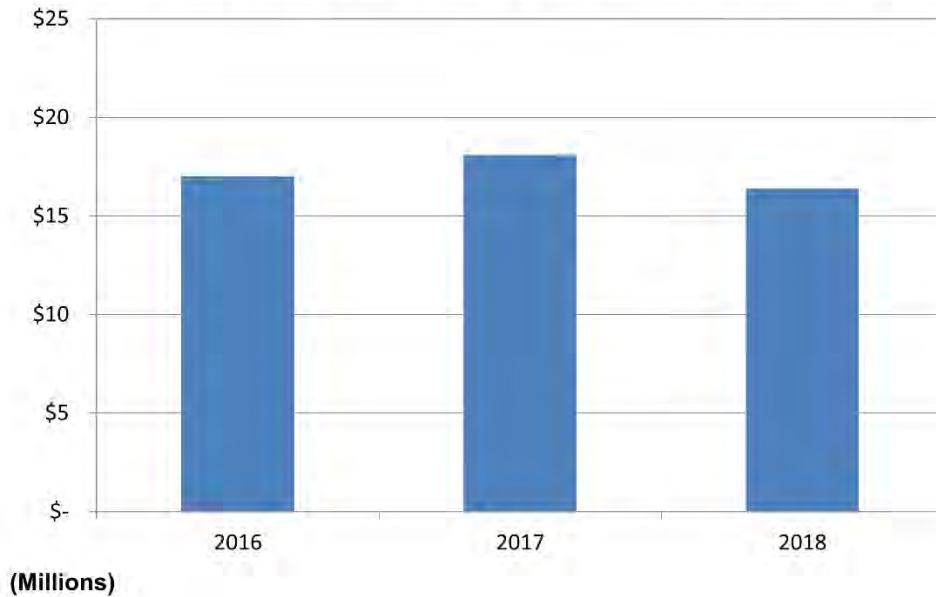
FY 2017 Gas O&M Expense = \$18.1 Million



- Depreciation expense was \$0.8 million higher than the prior year, primarily due to increased depreciation on mains due to Century II replacement programs, upgrades to various information systems and the completion of the South Loop project.
- Taxes and tax equivalents were \$0.3 million higher than the prior fiscal year due to increased plant in service levels.

**Knoxville Utilities Board Gas Division
Management's Discussion and Analysis
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Gas Division Operation & Maintenance Expense



Other Income and Expense

Fiscal Year 2018 Compared to Fiscal Year 2017

Interest income was \$0.3 million higher than the prior fiscal year, primarily due to higher short-term interest rates.

Interest expense increased \$0.1 million compared with the prior year.

Other income (net) was down less than \$0.1 million from the prior fiscal year.

Fiscal Year 2017 Compared to Fiscal Year 2016

Interest income was \$0.1 million higher than the prior fiscal year.

Interest expense increased \$0.2 million compared with the prior year, reflecting interest from new bonds issued during the fiscal year.

Other income (net) was down \$0.2 million from the prior fiscal year.

Knoxville Utilities Board Gas Division
Management's Discussion and Analysis
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Capital Assets

Capital Assets
As of June 30
(Net of Depreciation)

| <i>(in thousands of dollars)</i> | 2018 | 2017 | 2016 |
|----------------------------------|--------------------------|--------------------------|--------------------------|
| Distribution Plant | | | |
| Mains | \$ 185,208 | 182,159 | 176,253 |
| Services and Meters/Regulators | 66,914 | 61,427 | 57,053 |
| Other Accounts | 841 | 821 | 845 |
| Total Distribution Plant | <u>252,963</u> | <u>\$ 244,407</u> | <u>\$ 234,151</u> |
| Total General Plant | <u>\$ 9,953</u> | <u>9,969</u> | <u>8,549</u> |
| Total Plant Assets | <u>262,916</u> | <u>\$ 254,376</u> | <u>\$ 242,700</u> |
| Work In Progress | 15,179 | 16,909 | 20,831 |
| Total Net Plant | <u><u>\$ 278,095</u></u> | <u><u>\$ 271,285</u></u> | <u><u>\$ 263,531</u></u> |

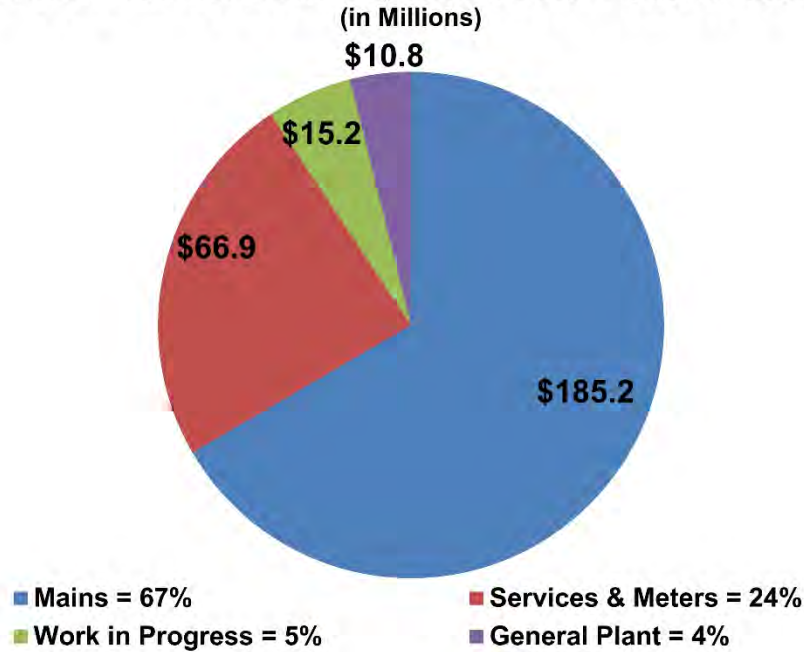
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Knoxville Utilities Board Gas Division Management's Discussion and Analysis June 30, 2018 and 2017

Fiscal Year 2018 Compared to Fiscal Year 2017

As of June 30, 2018, the Division had \$278.1 million invested in a variety of capital assets, as reflected in the schedule of capital assets, which represents a net increase (including additions, retirements, and depreciation) of \$6.8 million or 2.5 percent over the end of last fiscal year.

FY 2018 Gas Division Capital Assets = \$278.1 Million



Major capital asset expenditures during the year were as follows:

- \$4.8 million for replacement and relocation of gas system assets to accommodate TDOT highway improvement projects
- \$4.5 million for service extensions
- \$2.8 million for steel service replacements
- \$1.2 million for deployment of advanced metering equipment
- \$0.6 million for trucks and equipment

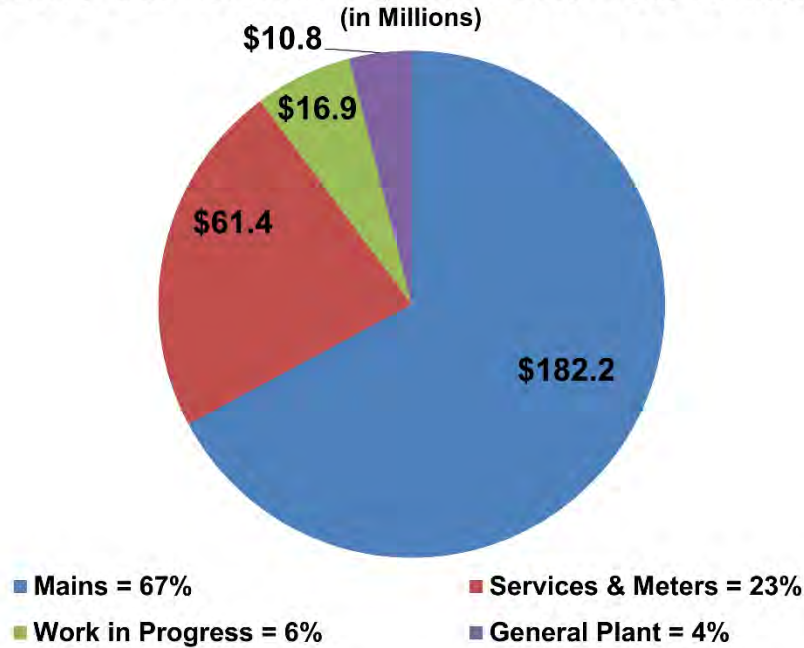
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**Knoxville Utilities Board Gas Division
Management's Discussion and Analysis
June 30, 2018 and 2017**

Fiscal Year 2017 Compared to Fiscal Year 2016

As of June 30, 2017, the Division had \$271.3 million invested in a variety of capital assets, as reflected in the schedule of capital assets, which represents a net increase (including additions, retirements, and depreciation) of \$7.8 million or 2.9 percent over the end of last fiscal year.

FY 2017 Gas Division Capital Assets = \$271.3 Million



Major capital asset expenditures during the year were as follows:

- \$7.3 million for construction of mains and service extensions
- \$3.1 million for main replacement
- \$2.3 million for replacement and relocation of gas system assets to accommodate TDOT highway improvement projects
- \$1.5 million for tools and equipment
- \$1.5 million for trucks and equipment

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Knoxville Utilities Board Gas Division Management's Discussion and Analysis June 30, 2018 and 2017

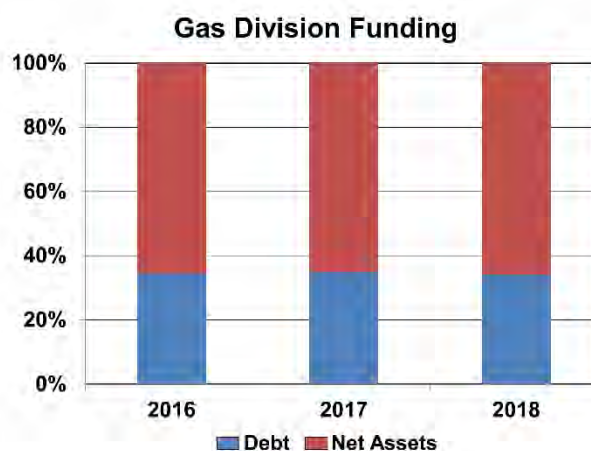
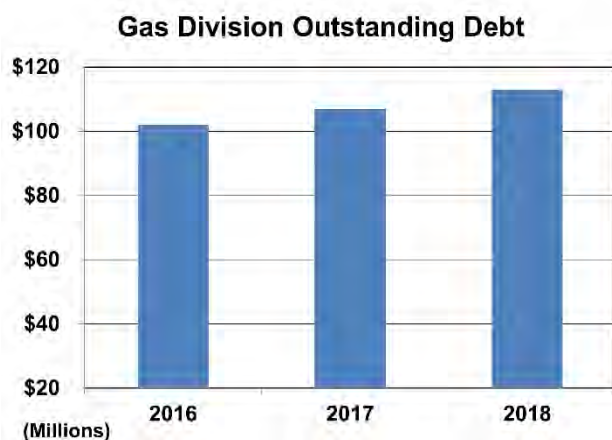
Debt Administration

As of June 30, 2018, the Gas Division had \$113.3 million in outstanding gas system bonds. The bonds are secured solely by revenues of the Gas Division. Debt as a percentage of the Division's capital structure represented 34.1 percent in 2018, 34.9 percent in 2017, and 34.5 percent at the end of fiscal year 2016. KUB's Debt Management Policy limits the Division's debt ratio to 60 percent or less.

Outstanding Debt As of June 30

(in thousands of dollars)

| | 2018 | 2017 | 2016 |
|------------------------|------------|------------|------------|
| Revenue bonds | \$ 113,290 | \$ 107,220 | \$ 102,125 |
| Total outstanding debt | \$ 113,290 | \$ 107,220 | \$ 102,125 |



The Division will pay \$68.2 million in principal payments over the next ten years, representing 60.2 percent of the outstanding bonds. KUB's Debt Management Policy requires a minimum of 30 percent of gas debt principal be repaid over the next ten years.

Fiscal Year 2018 Compared to Fiscal Year 2017

As of June 30, 2018, the Division had \$113.3 million in outstanding debt (including current portions of revenue bonds), compared to \$107.2 million last year, representing an increase of \$6.1 million or 5.7 percent. The increase is attributable to new revenue bonds issued during the fiscal year offset by the scheduled repayment of debt. The Division's weighted average cost of debt as of June 30, 2018, was 3.84 percent (3.66 percent including the impact of Build America Bonds rebates).

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.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2018, the Division's revenue bonds were rated AA by Standard & Poor's and Aa2 by Moody's Investors Service.

Knoxville Utilities Board Gas Division Management's Discussion and Analysis June 30, 2018 and 2017

Fiscal Year 2017 Compared to Fiscal Year 2016

As of June 30, 2017, the Division had \$107.2 million in outstanding debt (including current portions of revenue bonds), compared to \$102.1 million last year, representing an increase of \$5.1 million or 5 percent. The increase is attributable to the net effect of new revenue and refunding bond issuances. The Division's weighted average cost of debt as of June 30, 2017, was 3.88 percent (3.69 percent including the impact of Build America Bonds rebates).

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.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2017, the Division's revenue bonds were rated AA by Standard & Poor's and Aa2 by Moody's Investors Service.

Impacts on Future Financial Position

KUB expects to add 1,300 new gas customers in fiscal year 2019.

In June 2017, the KUB Board adopted three years of rate increases for all four utility Divisions to help fund the ongoing Century II infrastructure programs for each system. The two remaining approved gas rate increases are effective 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.

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 long-term debt includes \$10.9 million of Gas Division 2010 Build America Bonds (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. The Gas Division's portion of this contribution is \$536,632. 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. The Gas Division's portion of this contribution is \$439,590. 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 Gas Division's portion of this contribution is \$52,925. The Plan's actuarial funded ratio was 102.78 percent.

Knoxville Utilities Board Gas Division

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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 the Division's financial position or results of operations during fiscal year 2018.

Financial Contact

The Division's financial statements are designed to present users (citizens, customers, investors, and creditors) with a general overview of the Division'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 Gas Division
Statements of Net Position
June 30, 2018 and 2017

| | 2018 | 2017 |
|---|-----------------------|-----------------------|
| Assets and Deferred Outflows of Resources | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 31,436,054 | \$ 13,391,230 |
| Short-term contingency fund investments | 4,602,663 | 8,522,367 |
| Other current assets | 1,160,707 | 812,562 |
| Accrued interest receivable | 8,452 | 7,586 |
| Accounts receivable, less allowance of uncollectible accounts of \$34,801 in 2018 and \$28,971 in 2017 | 6,657,767 | 5,494,510 |
| Inventories | 2,718,546 | 1,824,057 |
| Gas storage | 7,037,629 | 7,884,634 |
| Prepaid expenses | 55,999 | 60,816 |
| Total current assets | <u>53,677,817</u> | <u>37,997,762</u> |
| Restricted assets: | | |
| Gas bond fund | 3,496,022 | 3,216,035 |
| Other funds | 3,646 | 5,344 |
| Total restricted assets | <u>3,499,668</u> | <u>3,221,379</u> |
| Gas plant in service | 397,538,105 | 382,843,199 |
| Less accumulated depreciation | <u>(134,622,473)</u> | <u>(128,466,807)</u> |
| | 262,915,632 | 254,376,392 |
| Retirement in progress | 171,851 | 139,420 |
| Construction in progress | 15,007,964 | 16,769,035 |
| Net plant in service | <u>278,095,447</u> | <u>271,284,847</u> |
| Other assets: | | |
| Net pension asset | 3,362,323 | 21,070 |
| Net OPEB asset | 637,682 | - |
| Long-term contingency fund investments | 12,448,693 | 8,696,439 |
| Under recovered purchased gas costs | - | 3,744,086 |
| Other | 1,761,696 | 1,666,951 |
| Total other assets | <u>18,210,394</u> | <u>14,128,546</u> |
| Total assets | <u>353,483,326</u> | <u>326,632,534</u> |
| Deferred outflows of resources: | | |
| Pension outflow | 331,137 | 1,545,438 |
| OPEB outflow | 112,605 | - |
| Unamortized bond refunding costs | 993,715 | 1,100,393 |
| Total deferred outflows of resources | <u>1,437,457</u> | <u>2,645,831</u> |
| Total assets and deferred outflows of resources | <u>\$ 354,920,783</u> | <u>\$ 329,278,365</u> |

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

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

| | 2018 | 2017 |
|--|-----------------------|-----------------------|
| Liabilities, Deferred Inflows, and Net Position | | |
| Current liabilities: | | |
| Current portion of revenue bonds | \$ 6,140,000 | \$ 5,730,000 |
| Sales tax collections payable | 91,873 | 91,121 |
| Accounts payable | 4,378,905 | 6,897,851 |
| Accrued expenses | 1,289,179 | 1,239,156 |
| Customer deposits plus accrued interest | 3,981,947 | 3,862,132 |
| Accrued interest on revenue bonds | 1,449,255 | 1,346,844 |
| Total current liabilities | <u>17,331,159</u> | <u>19,167,104</u> |
| Other liabilities: | | |
| Accrued compensated absences | 1,577,505 | 1,617,834 |
| Customer advances for construction | 1,686,824 | 1,379,150 |
| Net pension liability - QEBA | 47,658 | 31,463 |
| Over recovered purchased gas costs | 1,466,723 | - |
| Other | 22,019 | 18,881 |
| Total other liabilities | <u>4,800,729</u> | <u>3,047,328</u> |
| Long-term debt: | | |
| Gas revenue bonds | 107,150,000 | 101,490,000 |
| Unamortized premiums/discounts | 4,510,823 | 4,671,708 |
| Total long-term debt | <u>111,660,823</u> | <u>106,161,708</u> |
| Total liabilities | <u>133,792,711</u> | <u>128,376,140</u> |
| Deferred inflows of resources: | | |
| Pension inflow | 2,369,348 | 895,478 |
| OPEB inflow | 54,678 | - |
| Total deferred inflows of resources | <u>2,424,026</u> | <u>895,478</u> |
| Total liabilities and deferred inflows of resources | <u>136,216,737</u> | <u>129,271,618</u> |
| Net position | | |
| Net investment in capital assets | 161,294,129 | 160,724,983 |
| Restricted for: | | |
| Debt service | 2,046,767 | 1,869,191 |
| Other | 3,646 | 5,344 |
| Unrestricted | 55,359,504 | 37,407,229 |
| Total net position | <u>218,704,046</u> | <u>200,006,747</u> |
| Total liabilities, deferred inflows, and net position | <u>\$ 354,920,783</u> | <u>\$ 329,278,365</u> |

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

Knoxville Utilities Board Gas Division
Statements of Revenues, Expenses and Changes in Net Position
Years Ended June 30, 2018 and 2017

| | 2018 | 2017 |
|---|-----------------------|-----------------------|
| Operating revenues | \$ 114,539,188 | \$ 91,868,316 |
| Operating expenses | | |
| Purchased gas | 56,077,555 | 43,714,612 |
| Distribution | 8,656,548 | 9,138,948 |
| Customer service | 2,485,604 | 2,718,267 |
| Administrative and general | 5,265,333 | 6,231,842 |
| Provision for depreciation | 12,717,222 | 12,261,903 |
| Taxes and tax equivalents | 7,614,735 | 7,692,016 |
| Total operating expenses | <u>92,816,997</u> | <u>81,757,588</u> |
| Operating income | <u>21,722,191</u> | <u>10,110,728</u> |
| Non-operating revenues (expenses) | | |
| Contributions in aid of construction | 3,954,439 | 1,129,503 |
| Interest and dividend income | 634,149 | 290,772 |
| Interest expense | (4,420,436) | (4,259,626) |
| Amortization of debt costs | 160,002 | 69,727 |
| Write-down of plant for costs recovered through contributions | (3,954,439) | (1,129,503) |
| Other | <u>(187,590)</u> | <u>(121,591)</u> |
| Total non-operating revenues (expenses) | <u>(3,813,875)</u> | <u>(4,020,718)</u> |
| Change in net position before capital contributions | 17,908,316 | 6,090,010 |
| Capital contributions | <u>20,125</u> | <u>-</u> |
| Change in net position | 17,928,441 | 6,090,010 |
| Net position, beginning of year, as previously reported | 200,006,747 | 193,916,737 |
| Change in method of accounting for OPEB | <u>768,858</u> | <u>-</u> |
| Net position, beginning of year, as restated | <u>200,775,605</u> | <u>193,916,737</u> |
| Net position, end of year | <u>\$ 218,704,046</u> | <u>\$ 200,006,747</u> |

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

Knoxville Utilities Board Gas Division

Statements of Cash Flows

June 30, 2018 and 2017

| | 2018 | 2017 |
|---|----------------------|----------------------|
| Cash flows from operating activities: | | |
| Cash receipts from customers | \$ 112,856,639 | \$ 90,320,835 |
| Cash (payments to) receipts from other operations | 602,728 | 233,101 |
| Cash payments to suppliers of goods or services | (61,649,614) | (53,375,200) |
| Cash payments to employees for services | (9,420,861) | (9,312,276) |
| Payment in lieu of taxes | (6,859,312) | (6,987,365) |
| Net cash provided by operating activities | <u>35,529,580</u> | <u>20,879,095</u> |
| Cash flows from capital and related financing activities: | | |
| Net proceeds from bond issuance | 12,023,782 | 21,370,188 |
| Principal paid on revenue bonds and notes payable | (5,930,000) | (14,970,000) |
| Interest paid on revenue bonds and notes payable | (4,318,025) | (4,241,869) |
| Acquisition and construction of gas plant | (23,878,125) | (21,462,958) |
| Changes in gas bond fund, restricted | (279,987) | (70,181) |
| Customer advances for construction | 328,310 | 409,440 |
| Proceeds received on disposal of plant | 1,709 | 13,776 |
| Cash received from developers and individuals for capital purposes | 3,954,439 | 1,129,503 |
| Net cash used in capital and related financing activities | <u>(18,097,897)</u> | <u>(17,822,101)</u> |
| Cash flows from investing activities: | | |
| Changes in deposit and investment accounts: | | |
| Purchase of investment securities | (8,517,352) | (4,556,524) |
| Maturities of investment securities | 8,527,075 | 3,590,286 |
| Interest received | 622,003 | 270,992 |
| Other property and investments | (18,585) | (6,667) |
| Net cash provided by (used in) investing activities | <u>613,141</u> | <u>(701,913)</u> |
| Net increase (decrease) in cash and cash equivalents | 18,044,824 | 2,355,081 |
| Cash and cash equivalents, beginning of year | <u>13,391,230</u> | <u>11,036,149</u> |
| Cash and cash equivalents, end of year | <u>\$ 31,436,054</u> | <u>\$ 13,391,230</u> |
| Reconciliation of operating income to net cash provided by operating activities | | |
| Operating income | \$ 21,722,191 | \$ 10,110,728 |
| Adjustments to reconcile operating income to net cash provided by operating activities: | | |
| Depreciation expense | 13,110,866 | 12,551,251 |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | (1,163,257) | (1,054,365) |
| Inventories | (894,489) | (1,193,522) |
| Prepaid expenses | 851,822 | 130,654 |
| Other assets | (359,177) | (580,225) |
| Sales tax collections payable | 752 | 18,658 |
| Accounts payable and accrued expenses | (3,072,890) | 2,295,811 |
| Underrecovered gas costs | 5,210,809 | (1,565,433) |
| Customer deposits plus accrued interest | 119,815 | 184,408 |
| Other liabilities | 3,138 | (18,870) |
| Net cash provided by operating activities | <u>\$ 35,529,580</u> | <u>\$ 20,879,095</u> |
| Noncash capital activities: | | |
| Acquisition of plant assets through developer contributions | \$ 20,125 | \$ - |

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

Knoxville Utilities Board Gas Division

Notes to Financial Statements

June 30, 2018 and 2017

1. Description of Business

Knoxville Utilities Board (KUB), comprised of 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. The Gas Division (Division) provides services to certain customers in Knox County and in two surrounding counties in East Tennessee. The Division's accounts are maintained in conformity with the Uniform System of Accounts of the Federal Energy Regulatory Commission (FERC) and the Governmental Accounting Standards Board (GASB), as applicable. The financial statements present only the Gas Division and do not purport to, and do not, present fairly the consolidated financial position of Knoxville Utilities Board at June 30, 2018 and 2017, and the changes in its financial position for the years then ended in conformity with accounting principles generally accepted in the United States of America.

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 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 to the Division is determined by measurement focus. The transactions of the Division 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.

Knoxville Utilities Board Gas Division

Notes to Financial Statements

June 30, 2018 and 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.

Gas Plant

Gas plant and other property are stated on the basis of original cost. The cost of current repairs and minor replacements is charged to operating expense. The cost of renewals and improvements is 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 gas plant in service is based on the estimated useful lives of the assets, which range from three to thirty-three years, and is computed using the straight-line method. Pursuant to FERC, the caption "Provision for depreciation" in the Statements of Revenues, Expenses and Changes in Net Position does not include depreciation for transportation equipment of \$393,644 in fiscal year 2018 and \$289,348 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 the KUB Gas Division. 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 \$128,259 in fiscal year 2018 and \$48,832 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 net assets available, it is KUB's policy to apply those expenses to restricted net assets to the extent such are available and then to unrestricted net 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

Knoxville Utilities Board Gas Division

Notes to Financial Statements

June 30, 2018 and 2017

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 (Division's share \$768,858) to increase the net OPEB asset by \$4,522,695 (Division's share \$768,858) 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.

Knoxville Utilities Board Gas Division

Notes to Financial Statements

June 30, 2018 and 2017

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 (Division's share \$3,362,323) as of June 30, 2018 and \$123,941 (Division's share \$21,070) 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 (Division's share \$47,658) as of June 30, 2018 and \$185,077 (Division's share \$31,463) 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.

Knoxville Utilities Board Gas Division

Notes to Financial Statements

June 30, 2018 and 2017

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.

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 \$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.

Reclassifications

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

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

Knoxville Utilities Board Gas Division

Notes to Financial Statements

June 30, 2018 and 2017

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.

Knoxville Utilities Board Gas Division

Notes to Financial Statements

June 30, 2018 and 2017

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.

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Knoxville Utilities Board Gas Division
Notes to Financial Statements
June 30, 2018 and 2017

Classification of deposits and investments per Statement of Net Position:

| | 2018 | 2017 |
|---|----------------------|----------------------|
| Current assets | | |
| Cash and cash equivalents | \$ 31,436,054 | \$ 13,391,230 |
| Short-term contingency fund investments | 4,602,663 | 8,522,367 |
| Other assets | | |
| Long-term contingency fund investments | 12,380,543 | 8,639,570 |
| Restricted assets | | |
| Gas bond fund | 3,496,022 | 3,216,035 |
| Other funds | 3,646 | 5,344 |
| | <u>\$ 51,918,928</u> | <u>\$ 33,774,546</u> |

The above amounts do not include accrued interest of \$68,150 in fiscal year 2018 and \$56,869 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) | | |
|-----------------------------------|---|----------------------|----------------------|
| | <u>Fair Value</u> | <u>Less Than 1</u> | <u>1-5</u> |
| Supersweep NOW and Other Deposits | \$ 32,877,901 | \$ 32,877,901 | \$ - |
| State Treasurer's Investment Pool | 1,960,922 | 1,960,922 | - |
| Agency Bonds | 16,983,207 | 4,602,664 | 12,380,543 |
| Certificates of Deposits | 1,535,000 | 1,535,000 | - |
| | <u>\$ 53,357,030</u> | <u>\$ 40,976,487</u> | <u>\$ 12,380,543</u> |

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 \$12,380,543, 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.

Knoxville Utilities Board Gas Division
Notes to Financial Statements
June 30, 2018 and 2017

4. Accounts Receivable

Accounts receivable consists of the following:

| | 2018 | 2017 |
|--------------------------------------|---------------------|---------------------|
| Wholesale and retail customers | | |
| Billed services | \$ 4,834,427 | \$ 3,838,388 |
| Unbilled services | 1,463,602 | 1,327,664 |
| Other | 394,539 | 357,429 |
| Allowance for uncollectible accounts | <u>(34,801)</u> | <u>(28,971)</u> |
| | <u>\$ 6,657,767</u> | <u>\$ 5,494,510</u> |

5. Accounts Payable and Accruals

Accounts payable and accruals were composed of the following:

| | 2018 | 2017 |
|----------------------------|---------------------|---------------------|
| Trade accounts | \$ 4,378,905 | \$ 6,897,851 |
| Salaries and wages | 456,117 | 407,720 |
| Self-insurance liabilities | 309,857 | 321,604 |
| Other current liabilities | <u>523,205</u> | <u>509,832</u> |
| | <u>\$ 5,668,084</u> | <u>\$ 8,137,007</u> |

6. Long-Term Obligations

Long-term debt consists of the following:

| | Balance | | | | Balance | Amounts |
|-----------------------|-----------------------|----------------------|---------------------|-----------------|-----------------------|---------------------|
| | June 30, | Additions | Payments | Defeased | June 30, | Due |
| | 2017 | | | | 2018 | Within |
| | | | | | | One Year |
| 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% | <u>-</u> | <u>12,000,000</u> | <u>200,000</u> | <u>-</u> | <u>11,800,000</u> | <u>235,000</u> |
| Total bonds | <u>\$ 107,220,000</u> | <u>\$ 12,000,000</u> | <u>\$ 5,930,000</u> | <u>\$ -</u> | <u>\$ 113,290,000</u> | <u>\$ 6,140,000</u> |
| Unamortized Premium | 4,671,708 | 222,730 | 383,615 | - | 4,510,823 | - |
| Total long term debt | <u>\$ 111,891,708</u> | <u>\$ 12,222,730</u> | <u>\$ 6,313,615</u> | <u>\$ -</u> | <u>\$ 117,800,823</u> | <u>\$ 6,140,000</u> |

Knoxville Utilities Board Gas Division
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| | Balance | | | | Amounts | |
|----------------------|----------------|---------------|--------------|--------------|----------------|--------------|
| | June 30, | | | | June 30, | Due |
| | 2016 | Additions | Payments | Defeased | 2017 | Within |
| | | | | | | One Year |
| 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 |

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

| Fiscal Year | Total | | Grand Total |
|-------------|----------------|---------------|----------------|
| | Principal | Interest | |
| 2019 | \$ 6,140,000 | \$ 4,347,765 | \$ 10,487,765 |
| 2020 | 6,355,000 | 4,117,629 | 10,472,629 |
| 2021 | 6,620,000 | 3,841,529 | 10,461,529 |
| 2022 | 6,870,000 | 3,551,535 | 10,421,535 |
| 2023 | 7,160,000 | 3,261,536 | 10,421,536 |
| 2024 - 2028 | 35,060,000 | 12,176,588 | 47,236,588 |
| 2029 - 2033 | 27,355,000 | 5,881,976 | 33,236,976 |
| 2034 - 2038 | 8,595,000 | 2,063,003 | 10,658,003 |
| 2039 - 2043 | 5,100,000 | 1,097,909 | 6,197,909 |
| 2044 - 2047 | 4,035,000 | 293,500 | 4,328,500 |
| Total | \$ 113,290,000 | \$ 40,632,970 | \$ 153,922,970 |

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

During fiscal year 2011, KUB's Gas Division issued Series P 2010 bonds to fund gas system 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 Gas Division issued Series Q 2012 bonds to retire Series K 2004 bonds.

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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 a portion of 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.

Other liabilities consist of the following:

| | Balance June 30, 2017 | Increase | Decrease | Balance June 30, 2018 |
|------------------------------------|--------------------------------------|---------------------|-----------------------|--------------------------------------|
| Accrued compensated absences | \$ 1,617,834 | \$ 2,861,613 | (2,901,942) | \$ 1,577,505 |
| Customer advances for construction | 1,379,150 | 754,602 | (446,928) | 1,686,824 |
| Other | 18,881 | 13,632 | (10,494) | 22,019 |
| | <u>\$ 3,015,865</u> | <u>\$ 3,629,847</u> | <u>\$ (3,359,364)</u> | <u>\$ 3,286,348</u> |

| | Balance June 30, 2016 | Increase | Decrease | Balance June 30, 2017 |
|------------------------------------|--------------------------------------|---------------------|-----------------------|--------------------------------------|
| Accrued compensated absences | \$ 1,531,331 | \$ 2,543,663 | \$ (2,457,160) | \$ 1,617,834 |
| Customer advances for construction | 984,710 | 939,131 | (544,691) | 1,379,150 |
| Other | 37,751 | 12,287 | (31,157) | 18,881 |
| | <u>\$ 2,553,792</u> | <u>\$ 3,495,081</u> | <u>\$ (3,033,008)</u> | <u>\$ 3,015,865</u> |

Knoxville Utilities Board Gas Division
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June 30, 2018 and 2017

7. Lease Commitments

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

| | | |
|--|----|----------------------|
| 2019 | \$ | 55,467 |
| 2020 | | <u>38,981</u> |
| Total operating minimum lease payments | \$ | <u><u>94,448</u></u> |

8. Capital Assets

Capital asset activity was as follows:

| | Balance June 30, 2017 | Increase | Decrease | Balance June 30, 2018 |
|---------------------------------|------------------------------|-----------------------------|-------------------------------|------------------------------|
| Production Plant | \$ 14,640 | \$ - | \$ - | \$ 14,640 |
| Distribution Plant | | | | |
| Mains | 260,114,157 | 11,001,293 | (1,198,818) | 269,916,632 |
| Services and Meters/Regulators | 90,422,257 | 8,234,467 | (5,014,236) | 93,642,488 |
| Other Accounts | <u>1,428,647</u> | <u>46,045</u> | <u>(656)</u> | <u>1,474,036</u> |
| Total Distribution Plant | \$ <u>351,965,061</u> | \$ <u>19,281,805</u> | \$ <u>(6,213,710)</u> | \$ <u>365,033,156</u> |
| Total General Plant | <u>30,863,498</u> | <u>2,166,145</u> | <u>(539,334)</u> | <u>32,490,309</u> |
| Total Plant Assets | \$ <u>382,843,199</u> | \$ <u>21,447,950</u> | \$ <u>(6,753,044)</u> | \$ <u>397,538,105</u> |
| Less Accumulated Depreciation | <u>(128,466,807)</u> | <u>(13,119,621)</u> | <u>6,963,955</u> | <u>(134,622,473)</u> |
| Net Plant Assets | \$ <u>254,376,392</u> | \$ <u>8,328,329</u> | \$ <u>210,911</u> | \$ <u>262,915,632</u> |
| Work In Progress | <u>16,908,455</u> | <u>20,884,030</u> | <u>(22,612,670)</u> | <u>15,179,815</u> |
| Total Net Plant | \$ <u><u>271,284,847</u></u> | \$ <u><u>29,212,359</u></u> | \$ <u><u>(22,401,759)</u></u> | \$ <u><u>278,095,447</u></u> |

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Knoxville Utilities Board Gas Division
Notes to Financial Statements
June 30, 2018 and 2017

| | Balance | | Increase | | Decrease | | Balance |
|---------------------------------|------------------------------|-----------|--------------------------|-----------|----------------------------|-----------|---------------------------|
| | June 30, 2016 | | | | | | June 30, 2017 |
| Production Plant | \$ 14,640 | \$ | - | \$ | - | \$ | 14,640 |
| Distribution Plant | | | | | | | |
| Mains | 247,902,074 | | 13,527,191 | | (1,315,108) | | 260,114,157 |
| Services and Meters/Regulators | 87,482,037 | | 6,872,563 | | (3,932,343) | | 90,422,257 |
| Other Accounts | <u>1,428,647</u> | | <u>-</u> | | <u>-</u> | | <u>1,428,647</u> |
| Total Distribution Plant | \$ 336,812,758 | \$ | 20,399,754 | \$ | (5,247,451) | \$ | 351,965,061 |
| Total General Plant | <u>27,804,657</u> | | <u>3,578,403</u> | | <u>(519,562)</u> | | <u>30,863,498</u> |
| Total Plant Assets | \$ 364,632,055 | \$ | 23,978,157 | \$ | (5,767,013) | \$ | 382,843,199 |
| Less Accumulated Depreciation | <u>(121,932,008)</u> | | <u>(12,560,005)</u> | | <u>6,025,206</u> | | <u>(128,466,807)</u> |
| Net Plant Assets | \$ 242,700,047 | \$ | 11,418,152 | \$ | 258,193 | \$ | 254,376,392 |
| Work In Progress | <u>20,831,373</u> | | <u>20,302,490</u> | | <u>(24,225,408)</u> | | <u>16,908,455</u> |
| Total Net Plant | \$ <u>263,531,420</u> | \$ | <u>31,720,642</u> | \$ | <u>(23,967,215)</u> | \$ | <u>271,284,847</u> |

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 \$309,857 and \$321,604, respectively, resulting from the following changes:

| | 2018 | 2017 |
|--|--------------------------|--------------------------|
| Balance, beginning of year | \$ 321,604 | \$ 300,161 |
| Current year claims and changes in estimates | 2,649,288 | 2,720,095 |
| Claims payments | <u>(2,661,035)</u> | <u>(2,698,652)</u> |
| Balance, end of year | \$ <u>309,857</u> | \$ <u>321,604</u> |

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Knoxville Utilities Board Gas Division
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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. For purposes of this disclosure, presentation is on a consolidated basis unless division’s share is specified.

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 | <u>629</u> | <u>662</u> |
| Total | <u>1,265</u> | <u>1,310</u> |

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.

Knoxville Utilities Board Gas Division

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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 percent of the first \$4,800 of annual earnings and 5 percent 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 is 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. Of these amounts, \$638,568 and \$818,875 are attributable to the Gas Division. 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

Knoxville Utilities Board Gas Division
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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. The Division’s share of the net pension asset at June 30, 2018 is \$3,362,323 and at June 30, 2017 is \$21,070.

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 | <u>(227,377,105)</u> | <u>(204,514,679)</u> |
| Plan’s net pension (asset) liability | <u>\$ (19,778,372)</u> | <u>\$ (123,941)</u> |
| | | |
| 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 | <u>3,207,995</u> | <u>22,862,426</u> | <u>(19,654,431)</u> |
| Balances at December 31, 2017 | <u>\$ 207,598,733</u> | <u>\$ 227,377,105</u> | <u>\$ (19,778,372)</u> |

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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.

| Asset Class | Long Term Expected Real Rate of Return | |
|--------------------|---|-------------|
| | 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

Knoxville Utilities Board Gas Division
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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) |

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) (Division's share (\$2,662)).

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 (Division's share \$147,854). 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 (Division's share \$356,387).

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 (Division's share \$48,638). 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 (Division's share \$299,154).

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) (Division's share (\$1,517,315)). 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 (Division's share \$319,285) 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 | <u>\$ 1,878,146</u> | <u>\$ 13,937,342</u> |
| Division's share | <u>\$ 319,285</u> | <u>\$ 2,369,348</u> |

\$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 (Division's share \$794,672).

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 (Division's share \$303,792). 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 (Division's share \$192,814).

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 (Division's share \$398,872).

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 (Division's share \$1,136,000). 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

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recorded a deferred outflow of resources of \$2,408,459 (Division's share \$409,438) 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 |
| Division's share | \$ 1,545,438 | \$ 895,478 |

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

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30, 2018 and 2017 will be based on the December 31, 2017 and 2016 measurement dates, respectively. The Division's share of the total pension liability at June 30, 2018 is \$47,658 and at June 30, 2017 is \$31,463.

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 | <u>\$210,625</u> | <u>\$185,077</u> |
| | | |
| 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:

| | <u>Increase (Decrease)</u> |
|--|----------------------------|
| | 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 | <u>95,264</u> |
| Balances at December 31, 2017 | <u>\$ 280,341</u> |

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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 (Division's share \$5,020). 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 (Division's share \$1,861).

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 (Division's share \$9,991).

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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 | <u>58,769</u> | <u>-</u> |
| Total | <u>\$ 69,716</u> | <u>\$ -</u> |
| Division's share | <u>\$ 11,852</u> | <u>\$ -</u> |

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 (Division's share \$31,463). 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.

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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 (Division's share \$369,701) and \$1,963,541 (Division's share \$333,802), 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. For purposes of this disclosure, presentation is on a consolidated basis unless division's share is specified.

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 OPEB 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.

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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

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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:

| <u>Asset Class</u> | <u>Target Allocation</u> |
|-----------------------|--------------------------|
| Domestic Equity: | |
| Large Cap | 30% |
| Small Cap | 8% |
| International Equity: | |
| Developed | 16% |
| Emerging | 8% |
| Real Estate Equity | 8% |
| Debt Securities | 30% |
| Total | <u>100%</u> |

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. Of these amounts, zero and \$105,403 were attributable to the Gas Division.

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 Division's share of the total net OPEB asset at June 30, 2018 is \$637,682 and at June 30, 2017 is \$768,858.

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 | <u>\$ (3,751,068)</u> | <u>\$ (4,522,695)</u> |

| | | |
|---|---------|---------|
| Plan fiduciary net position as a percentage of the total OPEB liability | 108.23% | 110.17% |
|---|---------|---------|

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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

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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.

| Asset Class | Long Term Expected Real Rate of Return | |
|----------------------|---|-------------|
| | 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 |

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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 (Division's share \$73,250).

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 (Division's share \$112,605).

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 (Division's share \$33,760).

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 \$153,809. \$30,762 of that was recognized in the current year and \$123,047 (Division's share \$20,918) 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 |
| Division's share | \$ 112,605 | \$ 54,678 |

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 | - |

Knoxville Utilities Board Gas Division
Notes to Financial Statements
June 30, 2018 and 2017

14. Related Party Transactions

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

| | 2018 | 2017 |
|---|-------------|-------------|
| City of Knoxville | | |
| Amounts billed by the Division for utilities and related services | \$ 812,116 | \$ 665,091 |
| Payments by the Division in lieu of property tax | 3,674,591 | 3,739,824 |
| Payments by the Division for services provided | 126,924 | 173,175 |
| Other divisions of KUB | | |
| Amounts billed to other divisions for utilities and related services provided | 290,724 | 258,237 |
| Interdivisional rental expense | 542,469 | 542,405 |
| Amounts billed to the Division by other divisions for utilities services provided | 299,701 | 302,158 |

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 | \$ 13,253 | \$ 11,122 |

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.

The Gas Division 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 | <u>\$ 17,753,704</u> | <u>\$ 5,918,528</u> | <u>\$ 1,290,120</u> | <u>\$ 1,290,120</u> | <u>\$ 967,590</u> |

Knoxville Utilities Board Gas Division
Notes to Financial Statements
June 30, 2018 and 2017

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 | <u>\$ 11,471,426</u> | <u>\$ 1,619,500</u> | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> |

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.

Knoxville Utilities Board Gas Division
Required Supplemental 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 Gas Division
Required Supplemental 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 Gas Division
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 | <u>(3,298,739)</u> |
| Net change in total OPEB liability | 1,126,693 |
| Total OPEB liability - beginning | 44,477,738 |
| Total OPEB liability - ending (a) | <u>\$ 45,604,431</u> |
| Plan fiduciary net position | |
| Contributions - employer | \$ - |
| Net investment income | 3,705,473 |
| Benefit payments | (3,298,739) |
| Administrative expense | <u>(51,668)</u> |
| Net change in plan fiduciary net position | 355,066 |
| Plan fiduciary net position - beginning | 49,000,433 |
| Plan fiduciary net position - ending (b) | <u>\$ 49,355,499</u> |
| Net OPEB liability - ending (a) - (b) | <u>\$ (3,751,068)</u> |
| 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 Gas Division
Required Supplementary Information – Schedule of Employer OPEB Contributions
June 30, 2018
(Unaudited)

| | *Year ended June 30 |
|---|----------------------------|
| | 2018 |
| | <hr/> |
| Actuarially determined contribution | \$ - |
| Contribution in relation to the annual required contribution | <hr/> - |
| Contribution deficiency/(excess) | <hr/> \$ - <hr/> |
| | |
| 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 Gas Division
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 | <u>95,264</u> | <u>185,077</u> |
| Total pension liability - beginning | <u>185,077</u> | <u>-</u> |
| Total pension liability - ending | <u>\$ 280,341</u> | <u>\$ 185,077</u> |
| 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.

Knoxville Utilities Board Gas Division
Supplemental Information - Schedule of Insurance in Force
June 30, 2018
(Unaudited)

Schedule 1

Insurance coverage is for KUB as a consolidated entity.

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.

Knoxville Utilities Board Gas Division
Supplemental Information - Schedule of Debt Maturities by Fiscal Year
June 30, 2018
(Unaudited)

Schedule 2
Continued on Next Page

| FY | P-2010 | | | Q-2012 | | R-2012 | | S-2013 | | T-2013 | |
|-------|---------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|--------------|---------------|---------------|
| | Principal | Interest | Rebate* | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest |
| 18-19 | 595,000 | 606,363 | 212,227 | 2,190,000 | 680,848 | 425,000 | 257,780 | 615,000 | 327,500 | 500,000 | 976,825 |
| 19-20 | 620,000 | 581,075 | 203,376 | 2,260,000 | 615,148 | 450,000 | 240,781 | 645,000 | 302,900 | 500,000 | 956,825 |
| 20-21 | 645,000 | 553,175 | 193,611 | 2,350,000 | 524,748 | 475,000 | 222,781 | 695,000 | 277,100 | 500,000 | 936,825 |
| 21-22 | 670,000 | 521,731 | 182,606 | 2,445,000 | 430,748 | 475,000 | 203,781 | 715,000 | 249,300 | 500,000 | 916,825 |
| 22-23 | 695,000 | 488,231 | 170,881 | 2,540,000 | 332,948 | 500,000 | 184,781 | 730,000 | 227,850 | 500,000 | 901,825 |
| 23-24 | 725,000 | 453,481 | 158,718 | 2,645,000 | 231,348 | 525,000 | 169,781 | 745,000 | 205,950 | 500,000 | 886,200 |
| 24-25 | 750,000 | 413,606 | 144,762 | 760,000 | 125,548 | 550,000 | 159,281 | 790,000 | 183,600 | 1,550,000 | 869,950 |
| 25-26 | 785,000 | 372,358 | 130,325 | 780,000 | 102,748 | 575,000 | 142,781 | 800,000 | 159,900 | 1,600,000 | 813,763 |
| 26-27 | 815,000 | 328,200 | 114,870 | 800,000 | 79,348 | 575,000 | 130,560 | 840,000 | 135,900 | 1,650,000 | 749,763 |
| 27-28 | 845,000 | 279,300 | 97,755 | 830,000 | 54,348 | 600,000 | 117,625 | 875,000 | 110,700 | 1,700,000 | 683,763 |
| 28-29 | 880,000 | 228,600 | 80,010 | 855,000 | 27,788 | 625,000 | 99,625 | 905,000 | 84,450 | 1,750,000 | 615,763 |
| 29-30 | 915,000 | 175,800 | 61,530 | | | 650,000 | 84,000 | 940,000 | 57,300 | 1,950,000 | 543,575 |
| 30-31 | 950,000 | 120,900 | 42,315 | | | 675,000 | 64,500 | 970,000 | 29,100 | 2,000,000 | 460,700 |
| 31-32 | 1,000,000 | 62,000 | 21,700 | | | 725,000 | 44,250 | | | 2,000,000 | 373,200 |
| 32-33 | | | | | | 750,000 | 22,500 | | | 2,000,000 | 283,200 |
| 33-34 | | | | | | | | | | 2,100,000 | 193,200 |
| 34-35 | | | | | | | | | | 2,100,000 | 96,600 |
| 35-36 | | | | | | | | | | | |
| 36-37 | | | | | | | | | | | |
| 37-38 | | | | | | | | | | | |
| 38-39 | | | | | | | | | | | |
| 39-40 | | | | | | | | | | | |
| 40-41 | | | | | | | | | | | |
| 41-42 | | | | | | | | | | | |
| 42-43 | | | | | | | | | | | |
| 43-44 | | | | | | | | | | | |
| 44-45 | | | | | | | | | | | |
| 45-46 | | | | | | | | | | | |
| 46-47 | | | | | | | | | | | |
| Total | \$ 10,890,000 | \$ 5,184,820 | \$ 1,814,686 | \$ 18,455,000 | \$ 3,205,568 | \$ 8,575,000 | \$ 2,144,807 | \$ 10,265,000 | \$ 2,351,550 | \$ 23,400,000 | \$ 11,258,802 |

*Series P-2010 bonds were issued as federally taxable Build America Bonds. KUB will receive a 35 percent interest rebate payment from the United States Government for each interest payment. Effective October 1, 2017 these bonds became subject to a 6.6% reduction in rebate payment amounts due to the United States Government sequestration. The sequestration is in effect until intervening Congressional action, at which time the sequestration rate is subject to change.

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Gas Division
Supplemental Information - Schedule of Debt Maturities by Fiscal Year
June 30, 2018
(Unaudited)

Schedule 2

Continued from Previous Page

| FY | U-2015 | | V-2016 | | W-2017 | | X-2017 | | Totals | | Grand Total | Grand Total |
|-------|---------------|--------------|---------------|--------------|--------------|--------------|---------------|--------------|----------------|---------------|----------------|----------------|
| | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | (P + I) | (Less Rebate) |
| 18-19 | 660,000 | 377,187 | 250,000 | 360,093 | 670,000 | 369,500 | 235,000 | 391,669 | 6,140,000 | 4,347,765 | 10,487,765 | 10,275,538 |
| 19-20 | 680,000 | 357,387 | 250,000 | 347,594 | 705,000 | 336,000 | 245,000 | 379,919 | 6,355,000 | 4,117,629 | 10,472,629 | 10,269,253 |
| 20-21 | 710,000 | 323,387 | 250,000 | 335,094 | 735,000 | 300,750 | 260,000 | 367,669 | 6,620,000 | 3,841,529 | 10,461,529 | 10,267,918 |
| 21-22 | 740,000 | 287,887 | 275,000 | 322,594 | 780,000 | 264,000 | 270,000 | 354,669 | 6,870,000 | 3,551,535 | 10,421,535 | 10,238,929 |
| 22-23 | 795,000 | 250,888 | 300,000 | 308,844 | 815,000 | 225,000 | 285,000 | 341,169 | 7,160,000 | 3,261,536 | 10,421,536 | 10,250,655 |
| 23-24 | 805,000 | 233,000 | 325,000 | 293,844 | 850,000 | 184,250 | 300,000 | 326,919 | 7,420,000 | 2,984,773 | 10,404,773 | 10,246,055 |
| 24-25 | 845,000 | 208,850 | 325,000 | 280,844 | 900,000 | 141,750 | 315,000 | 311,919 | 6,785,000 | 2,695,348 | 9,480,348 | 9,335,586 |
| 25-26 | 880,000 | 183,500 | 350,000 | 267,844 | 940,000 | 96,750 | 330,000 | 296,168 | 7,040,000 | 2,435,812 | 9,475,812 | 9,345,487 |
| 26-27 | 895,000 | 154,900 | 350,000 | 253,844 | 995,000 | 49,750 | 340,000 | 286,268 | 7,260,000 | 2,168,533 | 9,428,533 | 9,313,663 |
| 27-28 | 985,000 | 123,573 | 375,000 | 243,344 | | | 345,000 | 279,469 | 6,555,000 | 1,892,122 | 8,447,122 | 8,349,367 |
| 28-29 | 975,000 | 89,100 | 375,000 | 232,094 | | | 355,000 | 272,138 | 6,720,000 | 1,649,558 | 8,369,558 | 8,289,548 |
| 29-30 | 955,000 | 59,850 | 375,000 | 220,844 | | | 360,000 | 263,706 | 6,145,000 | 1,405,075 | 7,550,075 | 7,488,545 |
| 30-31 | 1,040,000 | 31,200 | 400,000 | 212,875 | | | 375,000 | 252,906 | 6,410,000 | 1,172,181 | 7,582,181 | 7,539,866 |
| 31-32 | | | 400,000 | 203,875 | | | 385,000 | 241,656 | 4,510,000 | 924,981 | 5,434,981 | 5,413,281 |
| 32-33 | | | 425,000 | 194,375 | | | 395,000 | 230,106 | 3,570,000 | 730,181 | 4,300,181 | 4,300,181 |
| 33-34 | | | 425,000 | 183,750 | | | 410,000 | 218,256 | 2,935,000 | 595,206 | 3,530,206 | 3,530,206 |
| 34-35 | | | 425,000 | 173,125 | | | 420,000 | 205,956 | 2,945,000 | 475,681 | 3,420,681 | 3,420,681 |
| 35-36 | | | 450,000 | 162,500 | | | 435,000 | 193,356 | 885,000 | 355,856 | 1,240,856 | 1,240,856 |
| 36-37 | | | 450,000 | 150,686 | | | 445,000 | 180,306 | 895,000 | 330,992 | 1,225,992 | 1,225,992 |
| 37-38 | | | 475,000 | 138,312 | | | 460,000 | 166,956 | 935,000 | 305,268 | 1,240,268 | 1,240,268 |
| 38-39 | | | 475,000 | 125,250 | | | 475,000 | 152,582 | 950,000 | 277,832 | 1,227,832 | 1,227,832 |
| 39-40 | | | 500,000 | 112,188 | | | 490,000 | 137,738 | 990,000 | 249,926 | 1,239,926 | 1,239,926 |
| 40-41 | | | 525,000 | 98,438 | | | 505,000 | 122,425 | 1,030,000 | 220,863 | 1,250,863 | 1,250,863 |
| 41-42 | | | 525,000 | 84,000 | | | 520,000 | 106,644 | 1,045,000 | 190,644 | 1,235,644 | 1,235,644 |
| 42-43 | | | 550,000 | 68,250 | | | 535,000 | 90,394 | 1,085,000 | 158,644 | 1,243,644 | 1,243,644 |
| 43-44 | | | 550,000 | 51,750 | | | 550,000 | 73,675 | 1,100,000 | 125,425 | 1,225,425 | 1,225,425 |
| 44-45 | | | 575,000 | 35,250 | | | 570,000 | 56,488 | 1,145,000 | 91,738 | 1,236,738 | 1,236,738 |
| 45-46 | | | 600,000 | 18,000 | | | 585,000 | 38,675 | 1,185,000 | 56,675 | 1,241,675 | 1,241,675 |
| 46-47 | | | | | | | 605,000 | 19,662 | 605,000 | 19,662 | 624,662 | 624,662 |
| Total | \$ 10,965,000 | \$ 2,680,709 | \$ 11,550,000 | \$ 5,479,501 | \$ 7,390,000 | \$ 1,967,750 | \$ 11,800,000 | \$ 6,359,463 | \$ 113,290,000 | \$ 40,632,970 | \$ 153,922,970 | \$ 152,108,284 |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Gas Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 3

| Rate Class | Base Charge | Number of Customers |
|-------------------|--|----------------------------|
| Residential (G-2) | <p>For the regular monthly billing period for the months of November to April, inclusive:</p> <p>Customer charge per month \$9.40 First 30 therms per month at \$1.1047 per therm Excess over 30 therms per month at \$0.8925 per therm</p> <p>For the regular monthly billing periods for the months of May to October, inclusive:</p> <p>Customer charge per month \$9.40 First 50 therms per month \$0.9260 per therm Excess over 50 therms per month at \$0.8074 per therm</p> | 92,680 |
| Commercial (G-4) | <p>Available to any commercial or industrial customer:</p> <p>Customer charge per month \$23.00 First 250 therms per month at \$1.0502 per therm Excess over 250 therms per month at \$0.9342 per therm</p> | 9,244 |
| Commercial (G-6) | <p>Available to any commercial or industrial customer incurring a demand of twenty-seven therms or more during the current monthly billing period or during any of the eleven net preceding monthly billing periods.</p> <p>The net rate is the sum of the following demand and commodity charges:</p> <p>Customer charge: \$155.00 per month Demand charge: \$1.95 per therm of demand Commodity charge: First 30,000 therms per month at \$0.6847 per therm Excess over 30,000 therms per month at \$0.5907 per therm</p> | 247 |
| Industrial (G-7) | <p>Service under Rate Schedule G-7 shall be available to any customer who meets the following conditions:</p> <p>(a) Customer's annual Interruptible Gas use, on an actual or projected basis, shall not be less than 25,000 dekatherms;</p> <p>(b) Customer shall be permitted to purchase only one (1) dekatherm of Firm Gas under Rate Schedule G-7 for each two (2) dekatherms of Interruptible Gas which are purchased;</p> <p>(c) Customer must have standby equipment of sufficient capacity capable of providing the customer's normal gas service requirements for a period of five (5) working days without replenishment when Interruptible Gas is completely interrupted. Customer shall maintain such equipment ready for operation at any time and shall utilize a fuel other than gas furnished by KUB and shall be subject to periodic inspections by KUB to ensure compliance with this provision; and</p> <p>(d) KUB must determine that its existing distribution system facilities are adequate and available for the requested service.</p> | 11 |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Gas Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 3

| Rate Class | Base Charge | Number of Customers |
|------------|--|---------------------|
| | The net rate is the sum of the following demand and commodity charges: | |
| | Customer charge: \$425.00 per month | |
| | Demand charge: \$19.50 per month per dekatherm of demand | |
| | Commodity charge: (a) Firm Gas - \$5.907 per dekatherm (b) Interruptible Gas - (i) First 3,000 dekatherms per month at \$5.157 per dekatherm; excess of 3,000 to 20,000 dekatherms per month at \$4.558 per dekatherm; plus excess over 20,000 to 50,000 dekatherms per month at \$3.760 per dekatherm; excess over 50,000 dekatherms per month at \$3.490 per dekatherm (c) Supplemental Gas - The Commodity Charge for Supplemental Gas shall be the total of: (a) the cost per dekatherm to KUB for the applicable Day of acquiring Supplemental Gas on the open market, subject to the approval of the Customer to purchase Supplemental Gas at or above such price and (b) the costs incurred by KUB in transporting such Supplemental Gas via connecting pipelines to one or more of KUB's delivery points. | |
| | Transportation charge: \$2.190 per dekatherm for the first 3,000 dekatherms of gas Redelivered plus Unauthorized Gas; plus \$1.591 per dekatherm for each dekatherm from 3,000 to and including 20,000 dekatherms of gas Redelivered plus Unauthorized Gas; plus \$.793 per dekatherm for each dekatherm from 20,000 to and including 50,000 dekatherms of gas Redelivered plus Unauthorized Gas; plus \$.523 per dekatherm for the excess over 50,000 dekatherms of gas Redelivered plus Unauthorized Gas. | |
| | Unauthorized Gas charge: \$15.00 per dekatherm of Unauthorized Gas as a penalty, plus the total of: (a) the cost per dekatherm of obtaining such gas on the open market as determined by the higher of (1) the applicable Gulf Coast Price Index for the applicable Day as published in <i>Gas Daily</i> or, if <i>Gas Daily</i> is no longer published, in a comparable reliable source for natural gas prices or (2) the applicable first of the month Gulf Coast Price Index as published in <i>Inside FERC</i> , or if <i>Inside FERC</i> is no longer published, in a comparable reliable source for natural gas prices and (b) the costs incurred by KUB in transporting such Unauthorized Gas via connecting pipelines to one or more of KUB's delivery points. | |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Gas Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 3

| Rate Class | Base Charge | Number of Customers |
|------------|---|---------------------|
| G-11 | <p>Service under Rate Schedule G-11 shall be available to any customer who meets the following conditions:</p> <ul style="list-style-type: none"> (a) Customer's annual gas usage (excluding Firm Gas), on an actual or projected basis, shall not be less than 25,000 dekatherms; (b) Customer shall be permitted to purchase only one (1) dekatherm of Firm Gas under Rate Schedule G-11 for each two (2) dekatherms of Transport Gas delivered by KUB to the Customer; (c) Customer must have standby equipment of sufficient capacity capable of providing the customer's normal gas service requirements for a period of five (5) working days without replenishment when Transport Gas is completely interrupted. Customer shall maintain such equipment ready for operation at any time and shall utilize a fuel other than gas furnished by KUB and shall be subject to periodic inspections by KUB to ensure compliance with this provision; (d) Customer's use under this rate shall not work a hardship on any other customers of KUB, nor adversely affect any other class of KUB's customers and further provided the Customer's use under this rate shall not adversely affect KUB's gas purchase plans and/or effective utilization of the daily demands under KUB's gas purchase contracts with its suppliers, as solely determined by KUB. (e) KUB must determine that its existing distribution system facilities are adequate and available for the requested service; and (f) Customer must execute a Transportation Service Agreement for interruptible transportation gas service. <p>The net rate is the sum of the following charges:</p> <ul style="list-style-type: none"> Customer charge: \$550.00 Demand charge: \$19.50 per dekatherm of demand Firm Gas charge: \$5.907 per dekatherm Transportation charge: \$2.190 per dekatherm for the first 3,000 dekatherms of non-Firm gas delivered to Customer; plus \$1.591 per dekatherm for each dekatherm from 3,000 to and including 20,000 dekatherms of non-Firm gas delivered to Customer; plus \$.793 per dekatherm for each dekatherm from 20,000 to and including 50,000 dekatherms of non-Firm gas delivered to Customer; plus \$.523 per dekatherm for the excess over 50,000 dekatherms of non-Firm gas delivered to Customer. Standby Gas charge: The charge for Standby Gas shall be the total of: (a) the cost per dekatherm to KUB for the applicable Day of acquiring Standby Gas on the open market, subject to the approval of the Customer to purchase Standby Gas at or above such price and (b) the costs incurred by KUB in transporting such Standby Gas via connecting pipelines to one or more of KUB's delivery points. | 14 |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Gas Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 3

| Rate Class | Base Charge | Number of Customers |
|------------|--|---------------------|
| G-12 | <p>Unauthorized Gas charge: \$15.00 per dekatherm of Unauthorized Gas as a penalty, plus (a), the total cost per dekatherm of obtaining such gas on the open market, as defined below, plus (b), the costs incurred by KUB in transporting such Unauthorized Gas via connecting pipelines to one or more of KUB's delivery points. The cost per dekatherm of obtaining such gas on the open market, (a) above, is defined as an index price based on the High Common price for "Transco zone 5 delivered" or "Tennessee 500 Leg," whichever is higher for the applicable Day as published in <i>Gas Daily</i>. If <i>Gas Daily</i> is no longer published, or one of the aforementioned indices is not published, or for any other reason as determined by KUB, KUB will select an industry recognized index at its sole discretion.</p> <p>Other charges: Imbalance Charges, and any pipeline scheduling, balancing, transportation, or other similar charges incurred by KUB in connection with the transportation of gas on behalf of the Customer, as applicable.</p> <p>Service under Rate Schedule G-12 shall be available to any customer when the following conditions are met:</p> <ul style="list-style-type: none"> (a) Customer's annual gas usage, on an actual or projected basis, shall not be less than 12,500 dekatherms; (b) KUB must determine that its existing distribution system facilities are adequate and available for the requested service; (c) Customer must execute a Transportation Service Agreement for firm transportation gas service; and (d) Customer's use under this rate shall not work a hardship on any other customers of KUB, nor adversely affect any other class of KUB's customers and further provided the Customer's use under this rate shall not adversely affect KUB's gas purchase plans and/or effective utilization of the daily demands under KUB's gas purchase contracts with its suppliers, as solely determined by KUB. <p>The net rate is the sum of the following charges:</p> <p>Customer charge: \$550.00</p> <p>Demand charge: \$6.40 per dekatherm of demand</p> <p>Transportation charge: \$2.475 per dekatherm for the first 3,000 dekatherms of gas delivered to Customer; plus \$1.722 per dekatherm for each dekatherm from 3,000 to and including 20,000 dekatherms of gas delivered to Customer; plus \$.843 per dekatherm for each dekatherm from 20,000 to and including 50,000 dekatherms of gas delivered to Customer; plus \$.699 per dekatherm for the excess over 50,000 dekatherms of gas delivered to Customer.</p> | 3 |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Gas Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 3

| Rate Class | Base Charge | Number of Customers |
|--------------------------|---|---------------------|
| Standby Gas charge: | The charge for Standby Gas shall be the total of: (a) the cost per dekatherm to KUB for the applicable Day of acquiring Standby Gas on the open market, subject to the approval of the Customer to purchase Standby Gas at or above such price and (b) the costs incurred by KUB in transporting such Standby Gas via connecting pipelines to one or more of KUB's delivery points. | |
| Unauthorized Gas charge: | \$15.00 per dekatherm of Unauthorized Gas as a penalty, plus (a), the total cost per dekatherm of obtaining such gas on the open market, as defined below, plus (b), the costs incurred by KUB in transporting such Unauthorized Gas via connecting pipelines to one or more of KUB's delivery points. The cost per dekatherm of obtaining such gas on the open market, (a) above, is defined as an index price based on the High Common price for "Transco zone 5 delivered" or "Tennessee 500 Leg," whichever is higher for the applicable Day as published in <i>Gas Daily</i> . If <i>Gas Daily</i> is no longer published, or one of the aforementioned indices is not published, or for any other reason as determined by KUB, KUB will select an industry recognized index at its sole discretion. | |
| Other charges: | Imbalance Charges, and any pipeline scheduling, balancing, transportation, or other similar charges incurred by KUB in connection with the transportation of gas on behalf of the Customer, as applicable. | |

See accompanying Report of Independent Auditors on Supplemental Information.



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
Gas Division of the 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 Gas Division (the Division) of the Knoxville Utilities Board, 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 the Division'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 the Division'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 the Division's internal control. Accordingly, we do not express an opinion on the effectiveness of the Division'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 the Division'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
Gas Division of the Knoxville Utilities Board
Knoxville, Tennessee

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Division'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 the Division's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Division's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Coulter & Justus, P.C.

Knoxville, Tennessee
October 25, 2018



Water Division

Financial Statements and Supplemental Information June 30, 2018 and 2017

KUB Board of Commissioners

Celeste Herbert - Chair
Dr. Jerry W. Askew - Vice Chair
John Worden
Kathy Hamilton
Sara Hedstrom Pinnell
Tyvi Small
Adrienne Simpson-Brown

Management

Mintha Roach
President and
Chief Executive Officer

Mark Walker
Senior Vice President and
Chief Financial Officer

Susan Edwards
Senior Vice President and
Chief Administrative Officer

Gabe Bolas
Senior Vice President and
Chief Engineer

Eddie Black
Senior Vice President

Derwin Hagood
Senior Vice President of Operations

Mike Bolin
Vice President

Julie Childers
Vice President

John Gresham
Vice President

Dawn Mosteit
Vice President

Paul Randolph
Vice President

Knoxville Utilities Board Water Division

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June 30, 2018 and 2017

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Independent Auditors' Report

Board of Commissioners
Water Division of the Knoxville Utilities Board
Knoxville, Tennessee

We have audited the accompanying financial statements of the Water Division (the Division) of the Knoxville Utilities Board, 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 the Division's basic financial statements as listed in the index.

Management's Responsibility for the Financial Statements

The Division'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 the Division'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 the Division'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 the Water Division of the Knoxville Utilities Board 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, the Division 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
Water Division of the 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 25 and the required supplementary information on pages 60 through 64 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 the Division’s basic financial statements. The supplemental information is presented for purposes of additional analysis and is not a required part of the basic financial statements. The supplemental information 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.

Emphasis of Matter

As discussed in Note 1, the financial statements present only the Water Division and do not purport to, and do not, present fairly the financial position of the Knoxville Utilities Board, as of June 30, 2018 and 2017, and the changes in its financial position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

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 the Division’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 the Division’s internal control over financial reporting and compliance.

Coulter & Justus, P. C.

Knoxville, Tennessee
October 25, 2018

Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2018 and 2017

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. The Water Division (Division) provides services to certain customers in Knox County and in two surrounding counties in East Tennessee. The Division's accounts are maintained in conformity with the Uniform System of Accounts of the National Association of Regulatory Utility Commissioners (NARUC) and the Governmental Accounting Standards Board (GASB), as applicable. The financial statements present only the Water Division and do not purport to, and do not, present fairly the consolidated financial position of Knoxville Utilities Board at June 30, 2018 and 2017, and the changes in its financial position for the years then ended in conformity with accounting principles generally accepted in the United States of America.

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

The Division's 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 the Division's financial statements.

Water Division Highlights

System Highlights

KUB serves 79,923 water system customers over a 188-square mile service area. KUB maintains 1,407 miles of service mains, 28 storage facilities, 24 booster pump stations, and one treatment plant, which provided 12.4 billion gallons of water to KUB's water customers in fiscal year 2018. The average daily flow for fiscal year 2018 was 34.1 million gallons.

The water system has added approximately 1,370 customers over the past three years representing annual growth of less than one percent. In fiscal year 2018, 481 customers were added.

The Division generated \$3.1 million of additional revenue during the fiscal year as a result of the July 2017 water rate increase, which was adopted by the KUB Board to help fund the Division's Century II infrastructure program.

The typical residential water customer's average monthly bill was \$24.95 as of June 30, 2018 (based on monthly use of 500 cubic feet or 3,740 gallons). The monthly bill increased \$1.50 compared to the prior fiscal year, the result of the July 2017 water rate increase.

Water sales volumes have been impacted by more efficient appliances and the conservation efforts of customers. Based on historical trends, water sales volumes are anticipated to have an annual decline of one percent per year for both residential and non-residential customers.

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 the maintenance and asset replacement strategies for each system and establishes sustainable replacement cycles. Century II moves KUB into its second

Knoxville Utilities Board Water Division

Management's Discussion and Analysis

June 30, 2018 and 2017

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 formally endorsed a ten-year funding plan for the water system, including a combination of rate increases and debt issues. The Board also approved three years of annual water rate increases for fiscal years 2012 through 2014.

In April 2014, KUB management provided the Board an updated assessment of the overall condition of each utility system and the progress made during the resumption of the Century II program. A revised ten-year funding plan for the water system, including recommendations for annual rate increases and debt issues to fully fund the programs for each division, was included in the assessment.

In June 2014, the Board approved the proposed three annual rate increases for the Water Division. The three rate increases were effective July 2014, July 2015 and July 2016. The July 2014, July 2015, and July 2016 rate increases provided an additional \$3.6 million, \$2 million, and \$2 million of additional annual Water Division revenue, respectively.

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, of which the Water Division's share is \$25.1 million. 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 has replaced approximately 46 percent of its water meters, spending \$10.8 million on the advanced meter deployment.

In May 2017, a new Century II funding resolution was adopted by the KUB Board to express the continued commitment to funding Century II programs for the next ten years. The funding will be achieved through a combination of rate increases and debt issues supplemented by cost savings and new revenue from net customer additions.

In June 2017, the Board approved the next phase of water rate increases to support the Century II program. The first rate increase 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.

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

KUB remains on track with its Century II water system infrastructure program. In fiscal year 2018, KUB replaced 6.4 miles of galvanized water main and 6.6 miles of cast iron main.

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.

Knoxville Utilities Board Water Division

Management's Discussion and Analysis

June 30, 2018 and 2017

Financial Highlights

Fiscal Year 2018 Compared to Fiscal Year 2017

The Division's net position increased \$8.2 million in fiscal year 2018, which was \$2.2 million higher than the prior fiscal year. 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 \$0.6 million during fiscal year 2018. The change resulted in a total increase of \$8.8 million in the Division's net position.

Operating revenue increased \$3.6 million or 7.1 percent, the result of additional revenue from the water rate increase effective July 2017.

Operating expenses increased \$1.3 million or 3.3 percent. Operating and maintenance expenses (O&M) increased \$0.7 million compared to the prior year. Depreciation expense increased \$0.6 million or 6 percent. Taxes and tax equivalents were consistent with the prior year.

Interest income was up \$0.3 million from the prior fiscal year. Interest expense was \$0.3 million higher than the prior year, due to interest expense on new revenue bonds sold during the fiscal year.

Capital contributions were \$0.1 million lower than the prior fiscal year, the result of fewer assets contributed by developers.

Total plant assets (net) increased \$19.6 million or 6.6 percent due to water main replacement, treatment plant improvements, and the replacement and relocation of water system assets to accommodate Tennessee Department of Transportation (TDOT) highway improvement projects.

During fiscal year 2018, KUB sold \$20 million in water system revenue bonds 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.

Long-term debt represented 50.2 percent of the Division's capital structure as of June 30, 2018, as compared to 49.3 percent last year. Capital structure equals long-term debt (which includes the current and long-term portion of revenue bonds and notes) plus net position.

The Division's bond covenants require a debt service coverage ratio of at least 1.2 times the maximum principal and interest payments over the life of the Division's outstanding bonds. Current year debt coverage for the fiscal year was 2.44. Maximum debt service coverage was 2.30.

Fiscal Year 2017 Compared to Fiscal Year 2016

The Division's net position increased \$6 million in fiscal year 2017, which was consistent with the last fiscal year.

Operating revenue increased \$3.3 million or 7 percent, the result of additional revenue from the water rate increase effective July 2016 and a 5.2 percent increase in billed water sales volumes.

Operating expenses increased \$2.8 million or 7.8 percent. Operating and maintenance expenses (O&M) increased \$1.7 million compared to the prior year. Depreciation expense increased \$0.7 million or 8.1 percent. Taxes and tax equivalents increased \$0.4 million from the prior year.

Interest income was up \$0.1 million from the prior fiscal year. Interest expense was \$0.4 million higher than the prior year due to the interest expense on new bonds sold during the fiscal year.

Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2018 and 2017

Capital contributions were \$0.2 million lower than the prior fiscal year, the result of fewer assets contributed by developers.

Total plant assets (net) increased \$17.2 million or 6.1 percent due to water main replacement, treatment plant improvements, and the replacement and relocation of water system assets to accommodate Tennessee Department of Transportation (TDOT) highway improvement projects.

During fiscal year 2017, KUB sold \$25 million in water system revenue bonds for the purpose of funding water system capital improvements and also sold a total of \$26.2 million in water system revenue refunding bonds to refinance existing water system bonds at lower interest rates. The refunding produced total debt service savings of \$3.2 million over the life of the bonds (\$2.8 million on a net present value basis).

As part of the rating process for the \$25 million in revenue bonds and \$20.9 million in revenue refunding bonds, Moody's upgraded its rating on KUB's water system bonds to Aa1 from Aa2. Aa1 is the second 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."

Long-term debt represented 49.3 percent of the Division's capital structure as of June 30, 2017, as compared to 46.9 percent last year. Capital structure equals long-term debt (which includes the current and long-term portion of revenue bonds and notes) plus net position.

The Division's bond covenants require a debt service coverage ratio of at least 1.2 times the maximum principal and interest payments over the life of the Division's outstanding bonds. Current year debt coverage for the fiscal year was 2.35. Maximum debt service coverage was 2.23.

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Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2018 and 2017

Knoxville Utilities Board Water Division - Financial Statements

The Division's financial performance is reported under three basic 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

The Division 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, water 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 the Division 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 are assets that have been limited to specific uses by the Division'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

The Division 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

The Division 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 Division's sources and uses of cash during the reporting period.

The statement indicates the Division's 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.

**Knoxville Utilities Board Water Division
Management's Discussion and Analysis
June 30, 2018 and 2017**

Condensed Financial Statements

Statement of Net Position

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

**Statements of Net Position
As of June 30**

| <i>(in thousands of dollars)</i> | 2018 | 2017 | 2016 |
|---|-------------------|-------------------|-------------------|
| Current, restricted and other assets | \$ 50,268 | \$ 43,229 | \$ 33,888 |
| Capital assets, net | 318,177 | 298,533 | 281,258 |
| Deferred outflows of resources | <u>3,538</u> | <u>4,607</u> | <u>3,273</u> |
| Total assets and deferred outflows of resources | <u>371,983</u> | <u>346,369</u> | <u>318,419</u> |
| Current and other liabilities | 13,195 | 11,928 | 13,097 |
| Long-term debt outstanding | 179,094 | 164,722 | 142,132 |
| Deferred inflows of resources | <u>1,854</u> | <u>685</u> | <u>197</u> |
| Total liabilities and deferred inflows of resources | <u>194,143</u> | <u>177,335</u> | <u>155,426</u> |
| Net position | | | |
| Net investment in capital assets | 138,682 | 134,011 | 138,069 |
| Restricted | 1,941 | 1,732 | 1,523 |
| Unrestricted | <u>37,217</u> | <u>33,291</u> | <u>23,401</u> |
| Total net position | <u>\$ 177,840</u> | <u>\$ 169,034</u> | <u>\$ 162,993</u> |

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 Change 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.

Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2018 and 2017

Impacts and Analysis

Current, Restricted and Other Assets

Fiscal Year 2018 Compared to Fiscal Year 2017

Current, restricted and other assets increased \$7 million or 16.3 percent. This reflects an increase in the actuarially determined net pension asset of \$2.6 million, a \$2.3 million increase in the Division's general fund cash (consisting of cash and cash equivalents, short-term investments, and long-term investments) and a \$1.9 million increase in operating contingency reserves.

Fiscal Year 2017 Compared to Fiscal Year 2016

Current, restricted and other assets increased \$9.3 million or 27.5 percent. The increase reflects a \$2.6 million increase in inventories primarily due to advanced metering materials, a \$2.5 million increase in the Division's general fund cash (consisting of cash and cash equivalents, short-term investments, and long-term investments), a \$2.1 million increase in operating contingency reserves, and a \$1.3 million increase in other current assets.

Capital Assets

Fiscal Year 2018 Compared to Fiscal Year 2017

Capital assets, net of depreciation, increased \$19.6 million or 6.6 percent. Capital expenditures included \$12.4 million for treatment plant and system improvements, \$4.1 million for the replacement and relocation of water system assets to accommodate TDOT highway improvement projects and \$3.9 million for water main replacement. During the fiscal year, \$2.6 million of water system assets were retired.

Fiscal Year 2017 Compared to Fiscal Year 2016

Capital assets, net of depreciation, increased \$17.2 million or 6.1 percent. Capital expenditures included \$9.2 million for treatment plant and system improvements, \$7.7 million for water main replacement, \$3.9 million for the replacement and relocation of water system assets to accommodate TDOT highway improvement projects, and \$1.5 million for trucks and equipment. \$6.2 million of water system assets were retired during the fiscal year.

Deferred Outflows of Resources

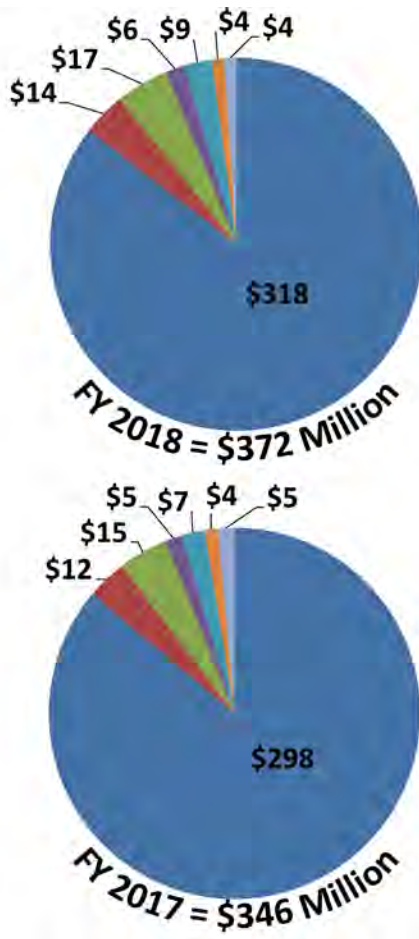
Fiscal Year 2018 Compared to Fiscal Year 2017

Deferred outflows of resources decreased \$1.1 million compared to the prior fiscal year. This decrease was due to a decrease in pension outflow of \$0.9 million and a decrease of unamortized bond refunding costs of \$0.2 million.

Fiscal Year 2017 Compared to Fiscal Year 2016

Deferred outflows of resources increased \$1.3 million compared to the prior fiscal year. This increase was the net effect of an increase of unamortized bond refunding costs of \$1.5 million offset by a decrease in pension outflow of \$0.2 million.

**Knoxville Utilities Board Water Division
Management's Discussion and Analysis
June 30, 2018 and 2017**



**Water Division Total Assets and
Deferred Outflows of Resources
(in Millions)**

| | <u>FY18</u> | <u>FY17</u> |
|--------------------------------|-------------|-------------|
| Plant | 86% | 86% |
| General Fund | 4% | 4% |
| Contingency Fund | 4% | 4% |
| Accounts Receivable | 2% | 2% |
| Other Assets | 2% | 2% |
| Restricted Assets | 1% | 1% |
| Deferred Outflows of Resources | 1% | 1% |

Current and Other Liabilities

Fiscal Year 2018 Compared to Fiscal Year 2017

Current and other liabilities increased \$1.3 million compared to the prior fiscal year. This increase reflects a \$0.5 million increase in accounts payable and a \$0.5 million increase in the current portion of revenue bonds.

Fiscal Year 2017 Compared to Fiscal Year 2016

Current and other liabilities decreased \$1.2 million compared to the prior fiscal year. This decrease reflects a \$1.5 million decline in accounts payable and a decrease of \$0.6 million in the actuarially determined net pension obligation, offset by a \$0.7 million increase in the current portion of revenue bonds.

**Knoxville Utilities Board Water Division
Management's Discussion and Analysis
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Long-Term Debt

Fiscal Year 2018 Compared to Fiscal Year 2017

Long-term debt increased \$14.4 million or 8.7 percent. Water system revenue bonds of \$20 million, sold in August 2017, were offset by the scheduled repayment of debt.

Fiscal Year 2017 Compared to Fiscal Year 2016

Long-term debt increased \$22.6 million or 15.9 percent. \$25 million in new revenue bonds were issued in July 2016. In July 2016 and March 2017, revenue refunding bonds of \$20.9 million and \$5.3 million were issued to refinance bonds sold in 2009 and 2005, respectively. The additional issuances offset by the defeased bonds and scheduled debt repayments accounted for the change in long-term debt.

Deferred Inflows of Resources

Fiscal Year 2018 Compared to Fiscal Year 2017

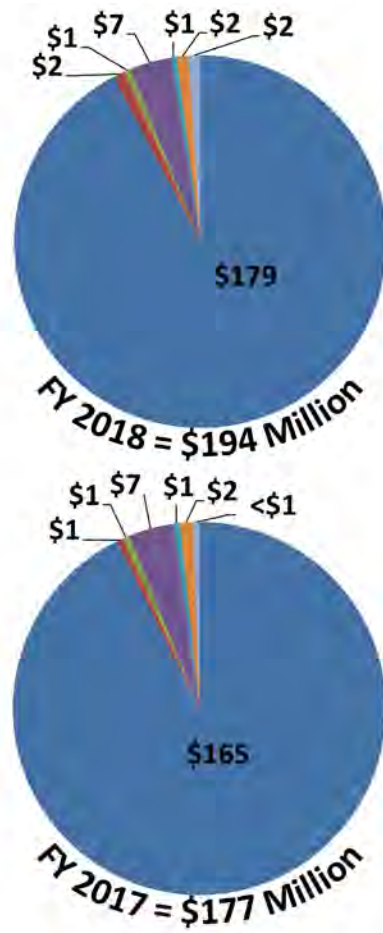
Deferred inflows increased \$1.2 million compared to the prior fiscal year due to differences in pension inflows.

Fiscal Year 2017 Compared to Fiscal Year 2016

Deferred inflows increased \$0.5 million compared to the prior fiscal year due to differences in pension inflows.

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**Knoxville Utilities Board Water Division
Management's Discussion and Analysis
June 30, 2018 and 2017**



**Water Division Total Liabilities and
Deferred Inflows of Resources
(in Millions)**

| | <u>FY18</u> | <u>FY17</u> |
|---------------------------------|-------------|-------------|
| ■ Bond Debt | 92% | 93% |
| ■ Payables | 1% | 1% |
| ■ Misc Current | 1% | 1% |
| ■ Other Liabilities | 4% | 4% |
| ■ Customer Deposits | <1% | <1% |
| ■ Interest Accrued | 1% | 1% |
| ■ Deferred Inflows of Resources | 1% | <1% |

Net Position

Fiscal Year 2018 Compared to Fiscal Year 2017

Net position increased \$8.8 million this fiscal year. Unrestricted net position increased \$3.9 million, primarily due to a \$6.7 million increase in current and other assets compared to the prior fiscal year. Net investment in capital assets increased \$4.7 million due to an increase in current portion of revenue bonds and total long-term debt of \$14.9 million offset by an increase to net plant in service of \$19.6 million. Restricted assets increased \$0.2 million due to additional funds restricted for debt service.

Fiscal Year 2017 Compared to Fiscal Year 2016

Net position increased \$6 million this fiscal year. Unrestricted net position increased \$9.9 million, primarily due to a \$9 million increase in current and other assets compared to the prior fiscal year. Net investment in capital assets decreased \$4.1 million due to an increase in current portion of revenue bonds and total long-term debt of \$23.3 million offset by an increase to net plant in service of \$17.2 million. Restricted assets increased \$0.2 million due to additional funds restricted for debt service.

**Knoxville Utilities Board Water Division
Management's Discussion and Analysis
June 30, 2018 and 2017**

Statement of Revenues, Expenses and Changes in Net Position

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

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

| <i>(in thousands of dollars)</i> | 2018 | 2017 | 2016 |
|---|-----------------|-----------------|-----------------|
| Operating revenues | \$ 54,365 | \$ 50,770 | \$ 47,453 |
| Operating expenses | | | |
| Treatment | 4,352 | 4,375 | 4,186 |
| Distribution | 14,940 | 13,986 | 12,645 |
| Customer service | 1,612 | 1,719 | 1,666 |
| Administrative and general | 4,776 | 4,956 | 4,838 |
| Depreciation | 10,380 | 9,793 | 9,055 |
| Taxes and tax equivalents | 4,151 | 4,087 | 3,717 |
| Total operating expenses | <u>40,211</u> | <u>38,916</u> | <u>36,107</u> |
| Operating income | <u>14,154</u> | <u>11,854</u> | <u>11,346</u> |
| Interest income | 588 | 308 | 194 |
| Interest expense | (6,340) | (6,022) | (5,612) |
| Other income/(expense) | <u>(233)</u> | <u>(223)</u> | <u>(235)</u> |
| Change in net position before capital contributions | <u>8,169</u> | <u>5,917</u> | <u>5,693</u> |
| Capital Contributions | 49 | 124 | 301 |
| Change in net position | <u>\$ 8,218</u> | <u>\$ 6,041</u> | <u>\$ 5,994</u> |

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 Change in Net Position presentation.

- Operating revenues are largely determined by the volumes of water sold during the fiscal year. Any change (increase/decrease) in retail water rates would also be a cause of change in operating revenue.
- Operating expenses (treatment, 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 costs, chemicals, and water system maintenance.
- Depreciation expense is impacted by plant additions and retirements during the fiscal year.
- Taxes and tax equivalents are impacted by plant additions/retirements and changes in property tax rates.
- Interest expense is impacted by the level of interest rates and investments.

Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2018 and 2017

- Interest expense on debt is impacted by the level of outstanding debt and the interest rates 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

The Division's Change in Net Position increased \$8.2 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 \$0.6 million. The change resulted in a total increase of \$8.8 million in the Division's net position. Comparatively, net position increased by \$6 million in fiscal year 2017.

Fiscal Year 2017 Compared to Fiscal Year 2016

The Division's net position during the year increased \$6 million, which is consistent with the prior fiscal year

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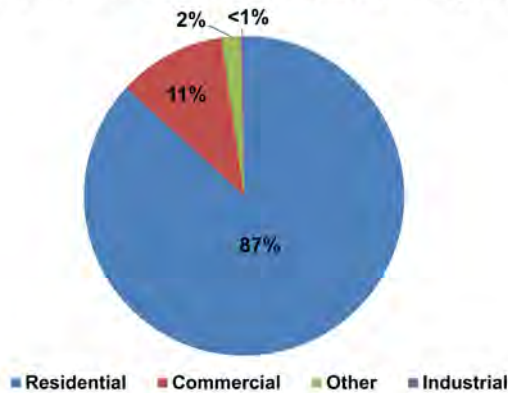
**Knoxville Utilities Board Water Division
Management's Discussion and Analysis
June 30, 2018 and 2017**

Margin from Sales

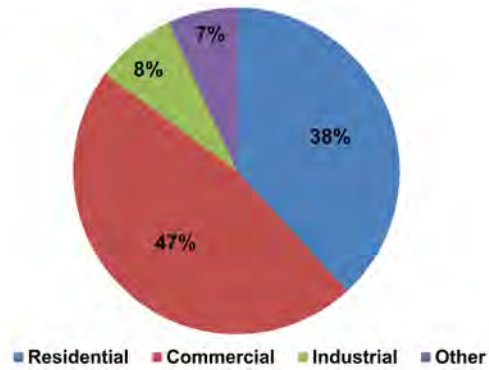
Fiscal Year 2018 Compared to Fiscal Year 2017

Operating revenues increased \$3.6 million or 7.1 percent. This reflects additional revenue from the July 2017 water rate increase offset by a 2.1 percent decline in billed water sales volumes, as residential and industrial sales volumes were lower. Operating expenses rose \$1.3 million and interest expense increased \$0.3 million.

FY 2018 Total Water Customers = 79,923



FY 2018 Water Sales = 8.2 Billion Gallons



Residential customers represented 87 percent of water customers and accounted for 38 percent of water sales volumes for the year. Commercial and industrial customers accounted for the largest portion (55 percent) of total sales volumes during the year.

KUB's ten largest water customers accounted for 21.5 percent of KUB's billed water volumes. Those ten customers represent two industrial and eight commercial customers, including eight governmental customers.

KUB has added 1,370 water customers over the past three years, representing annual growth of less than one percent. Water system growth is up slightly due to increased new housing construction.

Residential water sales volumes decreased 4 percent compared to the prior fiscal year.

Commercial water sales volumes increased 0.2 percent compared to the prior year. Industrial sales volumes decreased 3.6 percent compared to the prior year.

Other water sales volumes were 4.8 percent lower than the prior year.

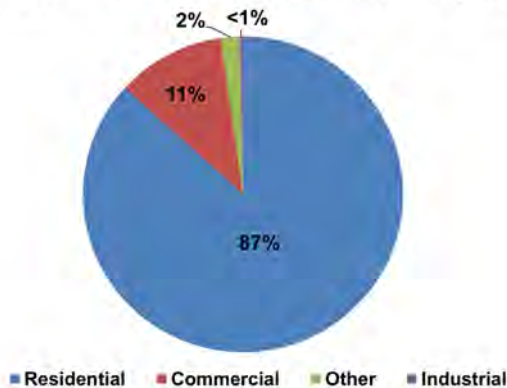
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Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2018 and 2017

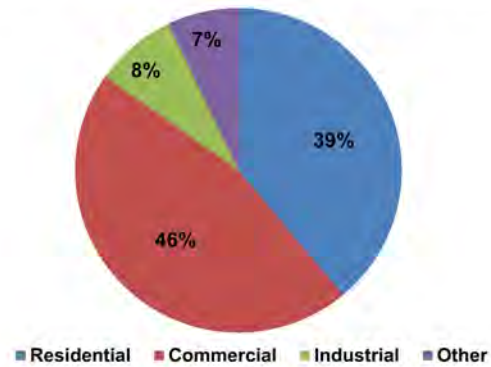
Fiscal Year 2017 Compared to Fiscal Year 2016

Operating revenues increased \$3.3 million or 7 percent, reflecting additional revenue from the July 2016 water rate increase and a 5.2 percent increase in billed water sales volumes. Operating expenses rose \$2.8 million and interest expense increased \$0.4 million.

FY 2017 Total Water Customers = 79,442



FY 2017 Water Sales = 8.4 Billion Gallons



Residential customers represented 87 percent of water customers and accounted for 39 percent of water sales volumes for the year. Commercial and industrial customers accounted for the largest portion (54 percent) of total sales volumes during the year.

KUB's ten largest water customers accounted for 24 percent of KUB's billed water volumes. Those ten customers represent two industrial and eight commercial customers, including seven governmental customers.

KUB has added 1,106 water customers over the past three years, representing annual growth of less than one percent. Water system growth is up slightly due to increased new housing construction.

Fiscal year 2017 water sales volumes were higher than the prior fiscal year, reflecting higher water sales for residential customers and the addition of a wholesale customer.

Residential water sales volumes increased 4.4 percent compared to the prior fiscal year. Residential sales were higher due to drought conditions experienced in the Knoxville area during the fiscal year's summer months.

Commercial water sales volumes increased 0.3 percent compared to the prior year. Industrial sales volumes decreased 1.6 percent compared to the prior year.

Other water sales volumes were 87.6 percent higher than the prior year. This increase is associated with the water system gaining a new wholesale customer.

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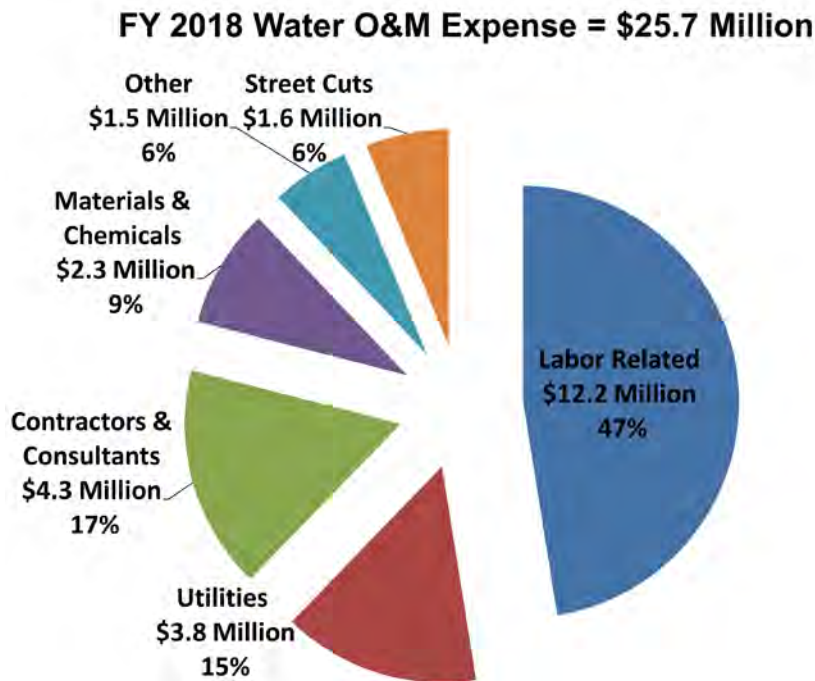
Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2018 and 2017

Operating Expenses

Fiscal Year 2018 Compared to Fiscal Year 2017

Operating expenses increased \$1.3 million or 3.3 percent. Operating expenses include operations and maintenance (O&M) expense, depreciation, and taxes/tax equivalents. O&M expenses can be further classified as treatment, distribution, customer service, and administrative and general.

- Treatment expenses were consistent with the prior fiscal year.
- Distribution expenses were \$1 million or 6.8 percent higher than the prior fiscal year due to an increase in outside contractor costs and labor related expenses.
- Customer service expenses were \$0.1 million lower than the prior fiscal year.
- Administrative and general expenses were \$0.2 million lower than the prior fiscal year, primarily due to labor related expenses.



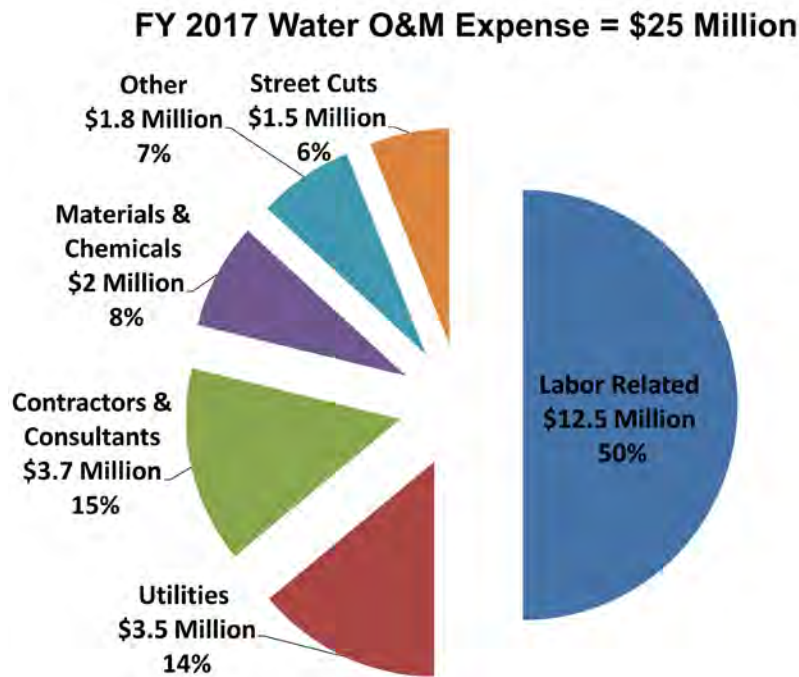
- Depreciation expense was up \$0.6 million, primarily due to Century II initiatives to replace mains, and the accelerated depreciation of existing meters that are to be replaced as part of KUB's system wide deployment of advanced metering equipment. In addition, \$2.6 million of assets were retired during fiscal year 2018.
- Taxes and tax equivalents were consistent with the prior fiscal year.

**Knoxville Utilities Board Water Division
Management’s Discussion and Analysis
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Fiscal Year 2017 Compared to Fiscal Year 2016

Operating expenses increased \$2.8 million or 7.8 percent. Operating expenses include operations and maintenance (O&M) expense, depreciation, and taxes/tax equivalents. O&M expenses can be further classified as treatment, distribution, customer service, and administrative and general.

- Treatment expenses increased \$0.2 million or 4.5 percent compared to the prior fiscal year.
- Distribution expenses were \$1.3 million or 10.6 percent higher than the prior fiscal year due to an increase in outside contractor costs and labor related expenses.
- Customer service expenses were \$0.1 million higher than the prior fiscal year.
- Administrative and general expenses increased \$0.1 million, primarily due to labor related expenses.



- Depreciation expense was up \$0.7 million, primarily due to Century II initiatives to replace mains, upgrades to various information systems, and the accelerated depreciation of existing meters that are to be replaced as part of KUB’s system wide deployment of advanced metering equipment. In addition, \$6.2 million of assets were retired during fiscal year 2017.
- Taxes and tax equivalents increased \$0.4 million from prior fiscal year due to increased plant in service levels.

**Knoxville Utilities Board Water Division
Management's Discussion and Analysis
June 30, 2018 and 2017**



Other Income and Expense

Fiscal Year 2018 Compared to Fiscal Year 2017

Interest income increased \$0.3 million from the prior fiscal year primarily due to higher short-term interest rates.

Interest expense increased \$0.3 million, reflecting the net impact of interest expense from new revenue bonds sold during the fiscal year and savings on refunding of outstanding bonds.

Other income (net) was consistent with the prior fiscal year.

Capital contributions by developers were \$0.1 million lower than the prior fiscal year.

Fiscal Year 2017 Compared to Fiscal Year 2016

Interest income increased \$0.1 million from the prior fiscal year.

Interest expense increased \$0.4 million, reflecting interest expense from new revenue bonds sold during the fiscal year.

Other income (net) was consistent with the prior fiscal year.

Capital contributions by developers were \$0.2 million lower than the prior fiscal year.

Knoxville Utilities Board Water Division
Management's Discussion and Analysis
June 30, 2018 and 2017

Capital Assets

Capital Assets
As of June 30
(Net of Depreciation)

| <i>(in thousands of dollars)</i> | 2018 | 2017 | 2016 |
|--------------------------------------|-------------------|-------------------|-------------------|
| Production Plant | \$ 57 | \$ 58 | \$ 58 |
| Pumping & Treatment Plant | 52,730 | 47,968 | 50,067 |
| Distribution Plant | | | |
| Distribution Mains | \$ 161,290 | 151,095 | 141,200 |
| Transmission Mains | 24,400 | 25,013 | 22,295 |
| Services & Meters | 31,151 | 24,588 | 19,349 |
| Other Accounts | 13,313 | 13,084 | 11,620 |
| Total Distribution Plant | <u>230,154</u> | <u>\$ 213,780</u> | <u>\$ 194,464</u> |
| Total General Plant | \$ 9,722 | 9,720 | 9,172 |
| Total Water Plant | 292,663 | \$ 271,526 | \$ 253,761 |
| Work In Progress | 25,514 | 27,007 | 27,497 |
| Total Net Plant | <u>\$ 318,177</u> | <u>\$ 298,533</u> | <u>\$ 281,258</u> |

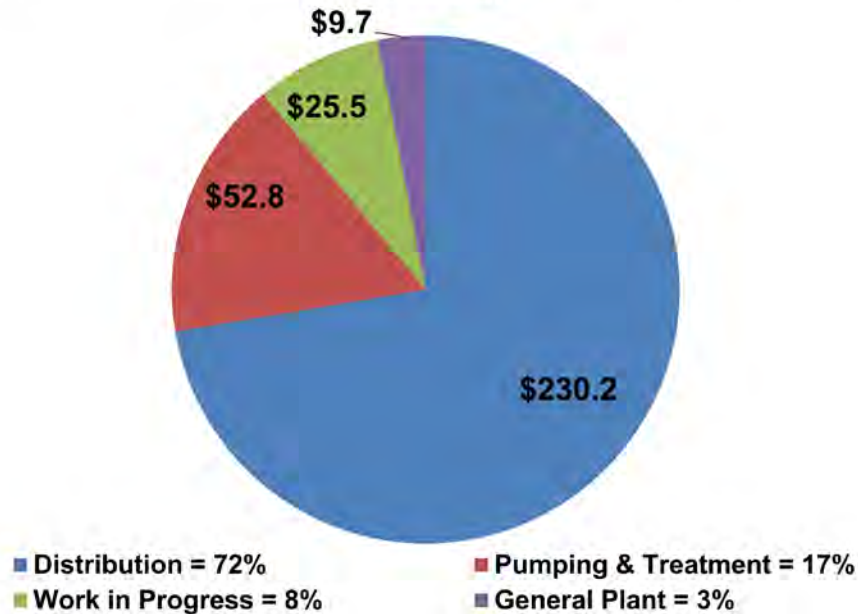
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Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2018 and 2017

Fiscal Year 2018 Compared to Fiscal Year 2017

As of June 30, 2018, the Division had \$318.2 million invested in a variety of capital assets, as reflected in the schedule of capital assets, which represented a net increase (including additions, retirements, and depreciation) of \$19.6 million or 6.6 percent over the end of the last fiscal year.

FY 2018 Water Division Capital Assets = \$318.2 Million
(in Millions)



Major capital asset expenditures during the year were as follows:

- \$12.4 million for major plant and system improvements
- \$4.1 million for replacement and relocation of water system assets to accommodate TDOT highway improvement projects
- \$3.9 million for galvanized and cast iron water main replacement
- \$1.9 million for deployment of advanced metering equipment

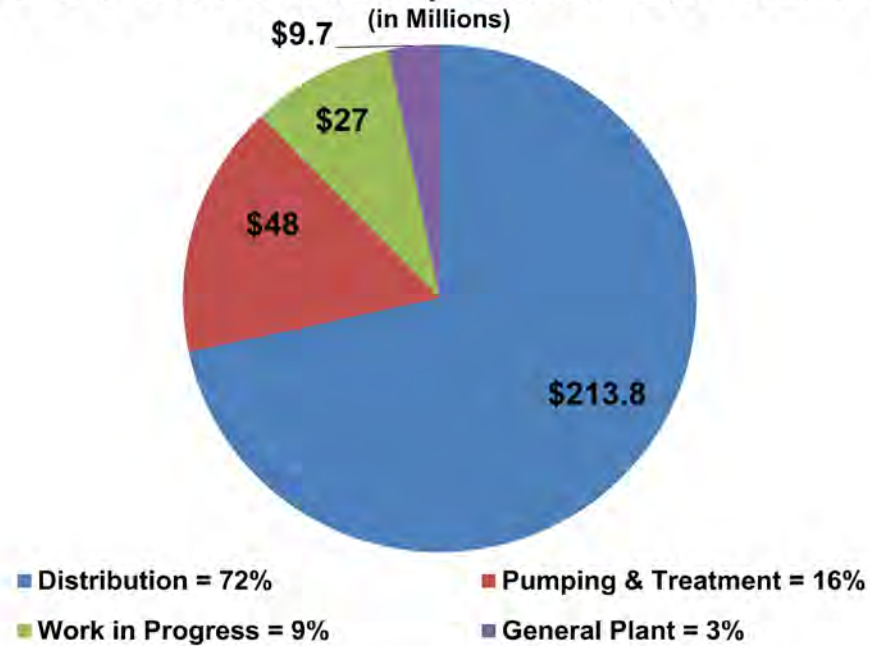
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Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2018 and 2017

Fiscal Year 2017 Compared to Fiscal Year 2016

As of June 30, 2017, the Division had \$298.5 million invested in a variety of capital assets, as reflected in the schedule of capital assets, which represented a net increase (including additions, retirements, and depreciation) of \$17.2 million or 6.1 percent over the end of the last fiscal year.

FY 2017 Water Division Capital Assets = \$298.5 Million



Major capital asset expenditures during the year were as follows:

- \$9.2 million for major plant and system improvements
- \$7.7 million for galvanized and cast iron water main replacement
- \$3.9 million for replacement and relocation of water system assets to accommodate TDOT highway improvement projects
- \$1.5 million for trucks and equipment

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Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2018 and 2017

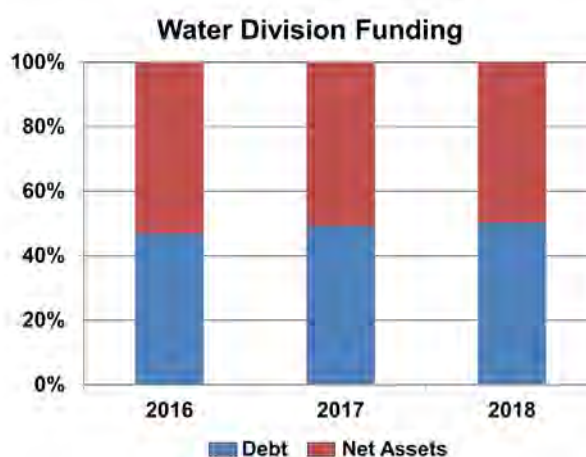
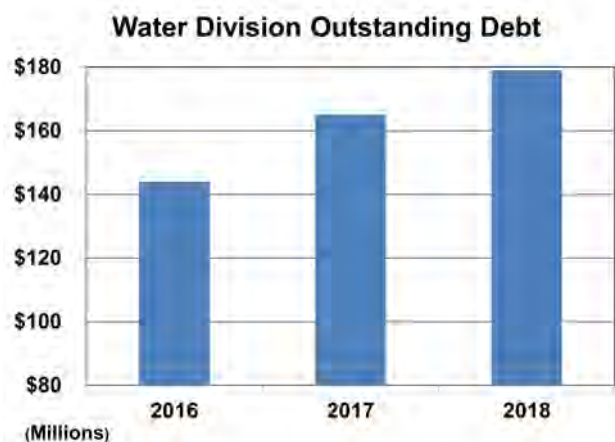
Debt Administration

As of June 30, 2018, the Water Division had \$179.2 million in outstanding water system bonds. The bonds are secured solely by revenues of the Water Division. Debt as a percentage of the Division's capital structure was 50.2 percent in 2018, 49.3 percent in 2017, and 46.9 percent at the end of fiscal year 2016. KUB's Debt Management Policy limits the Division's debt ratio to 60 percent or less.

Outstanding Debt As of June 30

(in thousands of dollars)

| | 2018 | 2017 | 2016 |
|------------------------|------------|------------|------------|
| Revenue bonds | \$ 179,165 | \$ 164,635 | \$ 143,990 |
| Total outstanding debt | \$ 179,165 | \$ 164,635 | \$ 143,990 |



The Division will pay \$69.9 million in principal payments over the next ten years, representing 39 percent of the outstanding bonds. KUB's Debt Management Policy requires a minimum of 30 percent of water debt principal be repaid over the next ten years.

Fiscal Year 2018 Compared to Fiscal Year 2017

As of June 30, 2018, the Division had \$179.2 million in outstanding debt (including the current portion of revenue bonds), compared to \$164.6 million last year, an increase of \$14.6 million or 8.8 percent. The increase is attributable to new revenue bonds issued during the fiscal year offset by the scheduled repayment of debt. The Division's weighted average cost of debt as of June 30, 2018 was 3.54 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.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2018, the Division's revenue bonds were rated AAA by Standard & Poor's and Aa1 by Moody's Investors Service. The Standard and Poor's water rating represents the highest credit rating available from Standard and Poor's.

Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2018 and 2017

Fiscal Year 2017 Compared to Fiscal Year 2016

As of June 30, 2017, the Division had \$164.6 million in outstanding debt (including the current portion of revenue bonds), compared to \$144 million last year, an increase of \$20.6 million or 14.3 percent. The increase is attributable to the net effect of new revenue and refunding bond issuances. The Division's weighted average cost of debt as of June 30, 2017 was 3.56 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.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2017, the Division's revenue bonds were rated AAA by Standard & Poor's and Aa1 by Moody's Investors Service. The Standard and Poor's water rating represents the highest credit rating available from Standard and Poor's.

As part of the rating process for the \$25 million in revenue bonds and \$20.9 million in revenue refunding bonds, Moody's upgraded its rating on KUB's water system bonds to Aa1 from Aa2. Aa1 is the second 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 adding 300 additional water system customers during fiscal year 2019.

In June 2017, the KUB Board adopted three years of rate increases for all four utility Divisions to help fund the ongoing Century II infrastructure programs for each system. The two remaining approved water rate increases are effective July 2018 and July 2019 and are expected to provide an additional \$3.1 million and \$3.3 million in annual revenue, respectively, to assist with the funding of the Water Division.

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.

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. The Water Division's portion of this contribution is \$410,366. 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

Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2018 and 2017

ending June 30, 2020, based on the Plan's current funding policy. The Water Division's portion of this contribution is \$336,157. 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 Water Division's portion of this contribution is \$40,472. 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 the Division's financial position or results of operations during fiscal year 2018.

Financial Contact

The Division's financial statements are designed to present users (citizens, customers, investors, and creditors) with a general overview of the Division'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 Water Division
Statements of Net Position
June 30, 2018 and 2017

| | 2018 | 2017 |
|---|-----------------------|-----------------------|
| Assets and Deferred Outflows of Resources | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 14,150,014 | \$ 9,395,231 |
| Short-term investments | - | 2,494,820 |
| Short-term contingency fund investments | 3,114,455 | 5,627,026 |
| Other current assets | 774,541 | 1,485,669 |
| Accrued interest receivable | 16,540 | 13,117 |
| Accounts receivable, less allowance of uncollectible accounts of \$54,237 in 2018 and \$51,105 in 2017 | 6,009,621 | 5,438,545 |
| Inventories | 3,238,388 | 3,785,220 |
| Prepaid expenses | <u>42,823</u> | <u>46,506</u> |
| Total current assets | <u>27,346,382</u> | <u>28,286,134</u> |
| Restricted assets: | | |
| Water bond fund | 4,050,177 | 3,659,760 |
| Other funds | <u>2,788</u> | <u>4,087</u> |
| Total restricted assets | <u>4,052,965</u> | <u>3,663,847</u> |
| Water plant in service | 412,200,259 | 382,878,460 |
| Less accumulated depreciation | <u>(119,537,309)</u> | <u>(111,352,647)</u> |
| | 292,662,950 | 271,525,813 |
| Retirement in progress | 68,102 | 164,704 |
| Construction in progress | <u>25,446,188</u> | <u>26,842,085</u> |
| Net plant in service | <u>318,177,240</u> | <u>298,532,602</u> |
| Other assets: | | |
| Net pension asset | 2,571,188 | 16,112 |
| Net OPEB asset | 487,639 | - |
| Long-term contingency fund investments | 13,532,161 | 9,166,236 |
| Other | <u>2,277,538</u> | <u>2,096,704</u> |
| Total other assets | <u>18,868,526</u> | <u>11,279,052</u> |
| Total assets | <u>368,445,113</u> | <u>341,761,635</u> |
| Deferred outflows of resources: | | |
| Pension outflow | 253,222 | 1,181,805 |
| OPEB outflow | 86,110 | - |
| Unamortized bond refunding costs | <u>3,198,305</u> | <u>3,425,713</u> |
| Total deferred outflows of resources | <u>3,537,637</u> | <u>4,607,518</u> |
| Total assets and deferred outflows of resources | <u>\$ 371,982,750</u> | <u>\$ 346,369,153</u> |

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

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

| | 2018 | 2017 |
|--|-----------------------|-----------------------|
| Liabilities, Deferred Inflows, and Net Position | | |
| Current liabilities: | | |
| Current portion of revenue bonds | \$ 5,815,000 | \$ 5,270,000 |
| Sales tax collections payable | 312,321 | 288,887 |
| Accounts payable | 1,794,385 | 1,285,146 |
| Accrued expenses | 688,042 | 661,618 |
| Customer deposits plus accrued interest | 904,591 | 867,791 |
| Accrued interest on revenue bonds | 2,111,744 | 1,931,479 |
| Total current liabilities | <u>11,626,083</u> | <u>10,304,921</u> |
| Other liabilities: | | |
| Accrued compensated absences | 1,515,405 | 1,578,105 |
| Net pension liability - QEBA | 36,444 | 24,060 |
| Other | 16,852 | 20,742 |
| Total other liabilities | <u>1,568,701</u> | <u>1,622,907</u> |
| Long-term debt: | | |
| Water revenue bonds | 173,350,000 | 159,365,000 |
| Unamortized premiums/discounts | 5,743,978 | 5,357,304 |
| Total long-term debt | <u>179,093,978</u> | <u>164,722,304</u> |
| Total liabilities | <u>192,288,762</u> | <u>176,650,132</u> |
| Deferred inflows of resources: | | |
| Pension inflow | 1,811,854 | 684,777 |
| OPEB inflow | 41,813 | - |
| Total deferred inflows of resources | <u>1,853,667</u> | <u>684,777</u> |
| Total liabilities and deferred inflows of resources | <u>194,142,429</u> | <u>177,334,909</u> |
| Net position | | |
| Net investment in capital assets | 138,681,584 | 134,010,490 |
| Restricted for: | | |
| Debt service | 1,938,433 | 1,728,281 |
| Other | 2,788 | 4,087 |
| Unrestricted | 37,217,516 | 33,291,386 |
| Total net position | <u>177,840,321</u> | <u>169,034,244</u> |
| Total liabilities, deferred inflows, and net position | <u>\$ 371,982,750</u> | <u>\$ 346,369,153</u> |

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

Knoxville Utilities Board Water Division
Statements of Revenues, Expenses and Changes in Net Position
Years Ended June 30, 2018 and 2017

| | 2018 | 2017 |
|---|-----------------------|-----------------------|
| Operating revenues | \$ 54,365,215 | \$ 50,769,639 |
| Operating expenses | | |
| Treatment | 4,352,170 | 4,375,320 |
| Distribution | 14,940,310 | 13,986,235 |
| Customer service | 1,611,813 | 1,718,639 |
| Administrative and general | 4,775,460 | 4,956,420 |
| Provision for depreciation | 10,379,928 | 9,792,630 |
| Taxes and tax equivalents | 4,151,052 | 4,086,575 |
| Total operating expenses | <u>40,210,733</u> | <u>38,915,819</u> |
| Operating income | <u>14,154,482</u> | <u>11,853,820</u> |
| Non-operating revenues (expenses) | | |
| Contributions in aid of construction | 926,471 | 701,334 |
| Interest and dividend income | 588,153 | 307,829 |
| Interest expense | (6,340,380) | (6,021,974) |
| Amortization of debt costs | 3,866 | (42,372) |
| Write-down of plant for costs recovered through contributions | (926,471) | (701,334) |
| Other | (237,123) | (180,574) |
| Total non-operating revenues (expenses) | <u>(5,985,484)</u> | <u>(5,937,091)</u> |
| Change in net position before capital contributions | 8,168,998 | 5,916,729 |
| Capital contributions | 49,129 | 123,840 |
| Change in net position | 8,218,127 | 6,040,569 |
| Net position, beginning of year, as previously reported | 169,034,244 | 162,993,675 |
| Change in method of accounting for OPEB | 587,950 | - |
| Net position, beginning of year, as restated | <u>169,622,194</u> | <u>162,993,675</u> |
| Net position, end of year | <u>\$ 177,840,321</u> | <u>\$ 169,034,244</u> |

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

Knoxville Utilities Board Water Division

Statements of Cash Flows

Years Ended June 30, 2018 and 2017

| | 2018 | 2017 |
|---|----------------------|----------------------|
| Cash flows from operating activities: | | |
| Cash receipts from customers | \$ 52,942,978 | \$ 50,102,809 |
| Cash receipts from other operations | 2,333,576 | 24,129 |
| Cash payments to suppliers of goods or services | (15,133,988) | (19,103,944) |
| Cash payments to employees for services | (11,089,536) | (11,024,085) |
| Payment in lieu of taxes | <u>(3,304,740)</u> | <u>(3,294,652)</u> |
| Net cash provided by operating activities | <u>25,748,290</u> | <u>16,704,257</u> |
| Cash flows from capital and related financing activities: | | |
| Net proceeds from bond issuance | 20,447,411 | 51,831,480 |
| Principal paid on revenue bonds and notes payable | (5,470,000) | (30,540,000) |
| Interest paid on revenue bonds and notes payable | (6,160,115) | (5,924,521) |
| Acquisition and construction of water plant | (31,388,107) | (27,989,054) |
| Changes in water bond fund, restricted | (390,417) | (305,634) |
| Proceeds received on disposal of plant | 52,177 | 13,469 |
| Cash received from developers and individuals for capital purposes | <u>926,471</u> | <u>701,334</u> |
| Net cash used in capital and related financing activities | <u>(21,982,580)</u> | <u>(12,212,926)</u> |
| Cash flows from investing activities: | | |
| Purchase of investment securities | (7,624,674) | (8,970,097) |
| Maturities of investment securities | 8,131,396 | 4,278,641 |
| Interest received | 555,026 | 292,845 |
| Other property and investments | <u>(72,675)</u> | <u>(90,306)</u> |
| Net cash provided by (used in) investing activities | <u>989,073</u> | <u>(4,488,917)</u> |
| Net increase (decrease) in cash and cash equivalents | 4,754,783 | 2,414 |
| Cash and cash equivalents, beginning of year | <u>9,395,231</u> | <u>9,392,817</u> |
| Cash and cash equivalents, end of year | <u>\$ 14,150,014</u> | <u>\$ 9,395,231</u> |
| Reconciliation of operating income to net cash provided by operating activities | | |
| Operating income | \$ 14,154,482 | \$ 11,853,820 |
| Adjustments to reconcile operating income to net cash provided by operating activities: | | |
| Depreciation expense | 10,813,949 | 10,123,113 |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | (571,076) | (78,456) |
| Inventories | 546,832 | (2,564,095) |
| Prepaid expenses | 3,683 | 3,974 |
| Other assets | 702,131 | (1,294,216) |
| Sales tax collections payable | 23,434 | 4,667 |
| Accounts payable and accrued expenses | 41,945 | (1,389,253) |
| Customer deposits plus accrued interest | 36,800 | 62,997 |
| Other liabilities | <u>(3,890)</u> | <u>(18,294)</u> |
| Net cash provided by operating activities | <u>\$ 25,748,290</u> | <u>\$ 16,704,257</u> |
| Noncash capital activities: | | |
| Acquisition of plant assets through developer contributions | \$ 49,129 | \$ 123,840 |

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

Knoxville Utilities Board Water Division

Notes to Financial Statements

June 30, 2018 and 2017

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. The Water Division (Division) provides services to certain customers in Knox County and in two surrounding counties in East Tennessee. The Division's accounts are maintained in conformity with the Uniform System of Accounts of the National Association of Regulatory Utility Commissioners (NARUC) and the Governmental Accounting Standards Board (GASB), as applicable. The financial statements present only the Water Division and do not purport to, and do not, present fairly the consolidated financial position of Knoxville Utilities Board at June 30, 2018 and 2017, and the changes in its financial position for the years then ended in conformity with accounting principles generally accepted in the United States of America.

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 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 to the Division is determined by measurement focus. The transactions of the Division 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.

Knoxville Utilities Board Water Division

Notes to Financial Statements

June 30, 2018 and 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.

Water Plant

Water plant and other property are stated on the basis of original cost. The cost of current repairs and minor replacements is charged to operating expense. The cost of renewals and improvements is 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 water plant 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 NARUC, the caption "Provision for depreciation" in the Statements of Revenues, Expenses and Changes in Net Position does not include depreciation for transportation equipment of \$434,021 in fiscal year 2018 and \$330,483 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 the KUB Water Division. 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 \$170,192 in fiscal year 2018 and \$117,252 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 net assets available, it is KUB's policy to apply those expenses to restricted net assets to the extent such are available and then to unrestricted net 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

Knoxville Utilities Board Water Division

Notes to Financial Statements

June 30, 2018 and 2017

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 (Division's share \$587,950) to increase the net OPEB asset by \$4,522,695 (Division's share \$587,950) 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.

Knoxville Utilities Board Water Division

Notes to Financial Statements

June 30, 2018 and 2017

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 (Division's share \$2,571,188) as of June 30, 2018 and \$123,941 (Division's share \$16,112) 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 (Division's share \$36,444) as of June 30, 2018 and \$185,077 (Division's share \$24,060) 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.

Knoxville Utilities Board Water Division

Notes to Financial Statements

June 30, 2018 and 2017

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. 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.

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 \$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.

Reclassifications

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

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

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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.

Knoxville Utilities Board Water Division
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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 | \$ 14,150,014 | \$ 9,395,231 |
| Short-term investments | - | 2,494,820 |
| Short-term contingency fund investments | 3,114,455 | 5,627,026 |
| Other assets | | |
| Long-term contingency fund investments | 13,459,479 | 9,123,258 |
| Restricted assets | | |
| Water bond fund | 4,050,177 | 3,659,760 |
| Other funds | 2,788 | 4,087 |
| | <u>\$ 34,776,913</u> | <u>\$ 30,304,182</u> |

The above amounts do not include accrued interest of \$72,682 in fiscal year 2018 and \$42,978 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 | \$ 12,226,769 | \$ 12,226,769 | \$ - |
| State Treasurer's Investment Pool | 2,596,327 | 2,596,327 | - |
| Agency Bonds | 19,046,084 | 3,114,455 | 15,931,629 |
| Certificates of Deposits | 1,453,750 | 1,453,750 | |
| | <u>\$ 35,322,930</u> | <u>\$ 19,391,301</u> | <u>\$ 15,931,629</u> |

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.

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

- U.S. Agency bonds of \$15,931,629, 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 | \$ 3,811,495 | \$ 3,519,224 |
| Unbilled services | 2,025,426 | 1,766,433 |
| Other | 226,937 | 203,993 |
| Allowance for uncollectible accounts | <u>(54,237)</u> | <u>(51,105)</u> |
| | <u>\$ 6,009,621</u> | <u>\$ 5,438,545</u> |

5. Accounts Payable and Accruals

Accounts payable and accruals were composed of the following:

| | 2018 | 2017 |
|----------------------------|---------------------|---------------------|
| Trade accounts | \$ 1,794,385 | \$ 1,285,146 |
| Salaries and wages | 451,093 | 415,685 |
| Self-insurance liabilities | <u>236,949</u> | <u>245,933</u> |
| | <u>\$ 2,482,427</u> | <u>\$ 1,946,764</u> |

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Knoxville Utilities Board Water Division
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6. Long-Term Obligations

Long-term debt consists of the following:

| | Balance | | | | | Balance | Amounts |
|-----------------------------|-----------------------|----------------------|---------------------|-----------------|-------------|-----------------------|---------------------|
| | June 30, | Additions | Payments | Defeased | | June 30, | Due |
| | 2017 | | | | | 2018 | Within |
| | | | | | | | One Year |
| 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 |

| | Balance | | | | | Balance | Amounts |
|-----------------------------|-----------------------|----------------------|---------------------|----------------------|-----------------------|---------------------|---------------------|
| | June 30, | Additions | Payments | Defeased | | June 30, | Due |
| | 2016 | | | | | 2017 | Within |
| | | | | | | | One Year |
| 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 | 925,000 |
| W-2011 - 2.0 - 4.0% | 22,800,000 | - | 550,000 | - | 22,250,000 | 550,000 | 550,000 |
| X-2012 - 3.0 - 5.0% | 8,665,000 | - | 515,000 | - | 8,150,000 | 535,000 | 535,000 |
| Y-2013 - 3.0 - 4.0% | 8,970,000 | - | 280,000 | - | 8,690,000 | 300,000 | 300,000 |
| Z-2013 - 2.0 - 5.0% | 23,675,000 | - | 500,000 | - | 23,175,000 | 500,000 | 500,000 |
| AA-2014 - 2.0 - 4.0% | 7,725,000 | - | 150,000 | - | 7,575,000 | 150,000 | 150,000 |
| BB-2015 - 2.0 - 5.0% | 22,835,000 | - | 100,000 | - | 22,735,000 | 865,000 | 865,000 |
| CC-2015 - 2.0 - 4.0% | 19,650,000 | - | 375,000 | - | 19,275,000 | 400,000 | 400,000 |
| DD-2016 - 3.0-5.0% | - | 25,000,000 | 275,000 | - | 24,725,000 | 475,000 | 475,000 |
| EE-2016 - 2.0-5.0% | - | 20,875,000 | - | - | 20,875,000 | 100,000 | 100,000 |
| FF-2017 - 3.0-5.0% | - | 5,310,000 | - | - | 5,310,000 | 470,000 | 470,000 |
| Total bonds | \$ 143,990,000 | \$ 51,185,000 | \$ 4,835,000 | \$ 25,705,000 | \$ 164,635,000 | \$ 5,270,000 | \$ 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 | \$ 5,270,000 |

Knoxville Utilities Board Water Division
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Debt service over remaining term of the debt is as follows:

| Fiscal Year | Total | | Grand Total |
|----------------|-----------------------|----------------------|-----------------------|
| | Principal | Interest | |
| 2019 | \$ 5,815,000 | \$ 6,335,230 | \$ 12,150,230 |
| 2020 | 6,065,000 | 6,088,230 | 12,153,230 |
| 2021 | 6,300,000 | 5,857,881 | 12,157,881 |
| 2022 | 6,600,000 | 5,615,581 | 12,215,581 |
| 2023 | 6,850,000 | 5,340,781 | 12,190,781 |
| 2024 - 2028 | 38,245,000 | 22,854,533 | 61,099,533 |
| 2029 - 2033 | 42,420,000 | 16,507,394 | 58,927,394 |
| 2034 - 2038 | 28,945,000 | 10,382,426 | 39,327,426 |
| 2039 - 2043 | 26,385,000 | 4,884,180 | 31,269,180 |
| 2044 - 2047 | <u>11,540,000</u> | <u>756,215</u> | <u>12,296,215</u> |
| Total | \$ <u>179,165,000</u> | \$ <u>84,622,451</u> | \$ <u>263,787,451</u> |

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

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 Series 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.

Knoxville Utilities Board Water Division
Notes to Financial Statements
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Other liabilities consist of the following:

| | Balance June 30, 2017 | Increase | Decrease | Balance June 30, 2018 |
|---------------------------------|--------------------------------------|---------------------|-----------------------|--------------------------------------|
| Accrued compensated absences | \$ 1,578,105 | \$ 2,514,430 | \$ (2,577,130) | \$ 1,515,405 |
| Other | <u>20,742</u> | <u>99,828</u> | <u>(103,718)</u> | <u>16,852</u> |
| | <u>\$ 1,598,847</u> | <u>\$ 2,614,258</u> | <u>\$ (2,680,848)</u> | <u>\$ 1,532,257</u> |

| | Balance June 30, 2016 | Increase | Decrease | Balance June 30, 2017 |
|---------------------------------|--------------------------------------|---------------------|-----------------------|--------------------------------------|
| Accrued compensated absences | \$ 1,601,156 | \$ 2,230,616 | \$ (2,253,667) | \$ 1,578,105 |
| Other | <u>39,036</u> | <u>33,280</u> | <u>(51,574)</u> | <u>20,742</u> |
| | <u>\$ 1,640,192</u> | <u>\$ 2,263,896</u> | <u>\$ (2,305,241)</u> | <u>\$ 1,598,847</u> |

7. Lease Commitments

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

| | |
|--|-------------------|
| 2019 | \$ 62,849 |
| 2020 | <u>45,134</u> |
| Total operating minimum lease payments | <u>\$ 107,983</u> |

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Knoxville Utilities Board Water Division
Notes to Financial Statements
June 30, 2018 and 2017

8. Capital Assets

Capital asset activity was as follows:

| | Balance | | Increase | | Decrease | | Balance |
|--------------------------------------|-----------------------|----|---------------------|----|---------------------|----|----------------------|
| | June 30, 2017 | | | | | | June 30, 2018 |
| Production Plant | \$ 727,863 | \$ | - | \$ | - | \$ | 727,863 |
| Pumping & Treatment Plant | 78,172,996 | | 7,210,142 | | (678,860) | | 84,704,278 |
| Distribution Plant | | | | | | | |
| Distribution Mains | 184,305,419 | | 13,030,323 | | (748,368) | | 196,587,374 |
| Transmission Mains | 33,391,821 | | 19,277 | | (109,130) | | 33,301,968 |
| Services & Meters | 33,798,659 | | 9,140,708 | | (259,254) | | 42,680,113 |
| Other Accounts | 25,163,649 | | 894,061 | | (76,486) | | 25,981,224 |
| Total Distribution Plant | <u>\$ 276,659,548</u> | \$ | <u>23,084,369</u> | \$ | <u>(1,193,238)</u> | \$ | <u>298,550,679</u> |
| Total General Plant | <u>27,318,053</u> | | <u>1,660,232</u> | | <u>(760,846)</u> | | <u>28,217,439</u> |
| Total Water Plant | <u>\$ 382,878,460</u> | \$ | <u>31,954,743</u> | \$ | <u>(2,632,944)</u> | \$ | <u>412,200,259</u> |
| Less Accumulated Depreciation | <u>(111,352,647)</u> | | <u>(10,821,995)</u> | | <u>2,637,333</u> | | <u>(119,537,309)</u> |
| Net Plant Assets | <u>\$ 271,525,813</u> | \$ | <u>21,132,748</u> | \$ | <u>4,389</u> | \$ | <u>292,662,950</u> |
| Work In Progress | <u>27,006,789</u> | | <u>31,105,542</u> | | <u>(32,598,041)</u> | | <u>25,514,290</u> |
| Total Net Plant | <u>\$ 298,532,602</u> | \$ | <u>52,238,290</u> | \$ | <u>(32,593,652)</u> | \$ | <u>318,177,240</u> |

| | Balance | | Increase | | Decrease | | Balance |
|--------------------------------------|-----------------------|----|---------------------|----|---------------------|----|----------------------|
| | June 30, 2016 | | | | | | June 30, 2017 |
| Production Plant | \$ 727,863 | \$ | - | \$ | - | \$ | 727,863 |
| Pumping & Treatment Plant | 78,207,281 | | 284,448 | | (318,733) | | 78,172,996 |
| Distribution Plant | | | | | | | |
| Distribution Mains | 172,759,533 | | 12,476,547 | | (930,661) | | 184,305,419 |
| Transmission Mains | 30,447,826 | | 3,238,070 | | (294,075) | | 33,391,821 |
| Services & Meters | 29,944,881 | | 7,414,299 | | (3,560,521) | | 33,798,659 |
| Other Accounts | 23,171,392 | | 2,130,215 | | (137,958) | | 25,163,649 |
| Total Distribution Plant | <u>\$ 256,323,632</u> | \$ | <u>25,259,131</u> | \$ | <u>(4,923,215)</u> | \$ | <u>276,659,548</u> |
| Total General Plant | <u>26,084,584</u> | | <u>2,225,014</u> | | <u>(991,545)</u> | | <u>27,318,053</u> |
| Total Water Plant | <u>\$ 361,343,360</u> | \$ | <u>27,768,593</u> | \$ | <u>(6,233,493)</u> | \$ | <u>382,878,460</u> |
| Less Accumulated Depreciation | <u>(107,582,378)</u> | | <u>(10,131,159)</u> | | <u>6,360,890</u> | | <u>(111,352,647)</u> |
| Net Plant Assets | <u>\$ 253,760,982</u> | \$ | <u>17,637,434</u> | \$ | <u>127,397</u> | \$ | <u>271,525,813</u> |
| Work In Progress | <u>27,496,642</u> | | <u>27,559,634</u> | | <u>(28,049,487)</u> | | <u>27,006,789</u> |
| Total Net Plant | <u>\$ 281,257,624</u> | \$ | <u>45,197,068</u> | \$ | <u>(27,922,090)</u> | \$ | <u>298,532,602</u> |

Knoxville Utilities Board Water Division

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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 \$236,949 and \$245,933, respectively, resulting from the following changes:

| | 2018 | 2017 |
|--|--------------------|--------------------|
| Balance, beginning of year | \$ 245,933 | \$ 228,605 |
| Current year claims and changes in estimates | 2,025,925 | 2,081,003 |
| Claims payments | <u>(2,034,909)</u> | <u>(2,063,675)</u> |
| Balance, end of year | <u>\$ 236,949</u> | <u>\$ 245,933</u> |

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. For purposes of this disclosure, presentation is on a consolidated basis unless division's share is specified.

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.

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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 | <u>629</u> | <u>662</u> |
| Total | <u>1,265</u> | <u>1,310</u> |

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 percent of the first \$4,800 of annual earnings and 5 percent 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.

Knoxville Utilities Board Water Division

Notes to Financial Statements

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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. Of these amounts, \$488,317 and \$626,199 are attributable to the Water Division. 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. The Division's share of the net pension asset at June 30, 2018 is \$2,571,188 and at June 30, 2017 is \$16,112.

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 | <u>\$ (19,778,372)</u> | <u>\$ (123,941)</u> |

| | | |
|--|---------|---------|
| Plan fiduciary net position as a percentage of the total pension liability | 109.50% | 100.06% |
|--|---------|---------|

Knoxville Utilities Board Water Division
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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.

Knoxville Utilities Board Water Division
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| Asset Class | Long Term Expected Real Rate of Return | |
|--------------------|---|-------------|
| | 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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Notes to Financial Statements
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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) (Division's share (\$2,036)).

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 (Division's share \$113,064). 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 (Division's share \$272,531).

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 (Division's share \$37,194). 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 (Division's share \$228,765).

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) (Division's share (\$1,160,300)). 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 (Division's share \$244,159) 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 | <u>\$ 1,878,146</u> | <u>\$ 13,937,342</u> |
| Division's share | <u>\$ 244,159</u> | <u>\$ 1,811,854</u> |

\$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 (Division's share \$607,691).

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 (Division's share \$232,311). 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 (Division's share \$147,446).

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 (Division's share \$305,020).

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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 (Division's share \$868,705). 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 (Division's share \$313,100) 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 |
| Division's share | \$ 1,181,805 | \$ 684,777 |

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.

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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. The Division's share of the total pension liability at June 30, 2018 is \$36,444 and at June 30, 2017 is \$24,060.

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 | <u>\$210,625</u> | <u>\$185,077</u> |
| | | |
| 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:

| | <u>Increase (Decrease)</u> |
|--|----------------------------|
| | 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 | <u>95,264</u> |
| Balances at December 31, 2017 | <u>\$ 280,341</u> |

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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 |

Knoxville Utilities Board Water Division
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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 \$29,527 for the QEBA (Division's share \$3,838). 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 (Division's share \$1,423).

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 (Division's share \$7,640).

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 | \$ - |
| Division's share | \$ 9,063 | \$ - |

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 (Division's share \$24,060). 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.

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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 (Division's share \$282,713) and \$1,963,541 (Division's share \$255,260), 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 (the 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. For purposes of this disclosure, presentation is on a consolidated basis unless division's share is specified.

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

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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:

| | <u>2018</u> | <u>2017</u> |
|---------------------------|--------------|--------------|
| Retirees | 562 | 567 |
| Dependents of retirees | 561 | 580 |
| Eligible active employees | <u>309</u> | <u>334</u> |
| Total | <u>1,432</u> | <u>1,481</u> |

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

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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:

| <u>Asset Class</u> | <u>Target Allocation</u> |
|-----------------------|--------------------------|
| Domestic Equity: | |
| Large Cap | 30% |
| Small Cap | 8% |
| International Equity: | |
| Developed | 16% |
| Emerging | 8% |
| Real Estate Equity | 8% |
| Debt Securities | 30% |
| Total | <u>100%</u> |

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. Of these amounts, zero and \$80,602 were attributable to the Water Division.

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 Division's share of the total net OPEB asset at June 30, 2018 is \$487,639 and at June 30, 2017 is \$587,950.

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

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

Knoxville Utilities Board Water Division
Notes to Financial Statements
June 30, 2018 and 2017

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.

Knoxville Utilities Board Water Division
Notes to Financial Statements
June 30, 2018 and 2017

| Asset Class | Long Term Expected Real Rate of Return | |
|----------------------|---|-------------|
| | 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 (Division's share \$56,014).

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

Knoxville Utilities Board Water Division
Notes to Financial Statements
June 30, 2018 and 2017

recognized in the next year, resulting in a deferred outflow of resources of \$662,384 (Division's share \$86,110).

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 (Division's share \$25,817).

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 \$153,809. \$30,762 of that was recognized in the current year and \$123,047 (Division's share \$15,996) 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 |
| Division's share | \$ 86,110 | \$ 41,813 |

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 | - |

(Space left intentionally blank)

Knoxville Utilities Board Water Division
Notes to Financial Statements
June 30, 2018 and 2017

14. Related Party Transactions

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

| | 2018 | 2017 |
|---|--------------|--------------|
| City of Knoxville | | |
| Amounts billed by the Division for utilities and related services | \$ 4,454,036 | \$ 4,192,452 |
| Payments by the Division in lieu of property tax | 3,304,740 | 3,294,652 |
| Payments by the Division for services provided | 235,324 | 621,164 |
| Other divisions of KUB | | |
| Amounts billed to other divisions for utilities and related services provided | 386,195 | 392,769 |
| Interdivisional rental expense | 214,141 | 214,270 |
| Interdivisional rental income | 142,866 | 142,866 |
| Amounts billed to the Division by other divisions for utilities services provided | 3,337,521 | 3,294,969 |

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 | \$ 379,699 | \$ 348,381 |

15. 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.

Knoxville Utilities Board Water Division
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 Water Division
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 Water Division

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 | <u>1,126,693</u> |
| Total OPEB liability - beginning | <u>44,477,738</u> |
| Total OPEB liability - ending (a) | <u><u>\$ 45,604,431</u></u> |
| 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 | <u>355,066</u> |
| Plan fiduciary net position - beginning | <u>49,000,433</u> |
| Plan fiduciary net position - ending (b) | <u><u>\$ 49,355,499</u></u> |
| Net OPEB liability - ending (a) - (b) | <u><u>\$ (3,751,068)</u></u> |
| 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 Water Division
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) | <u>\$ -</u> |
| 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 Water Division
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 | <u>95,264</u> | <u>185,077</u> |
| Total pension liability - beginning | <u>185,077</u> | <u>-</u> |
| Total pension liability - ending | <u>\$ 280,341</u> | <u>\$ 185,077</u> |
| 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.

Knoxville Utilities Board Water Division
Supplemental Information - Schedule of Insurance in Force
June 30, 2018
(Unaudited)

Schedule 1

Insurance coverage is for KUB as a consolidated entity.

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.

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Water Division
Supplemental Information - Schedule of Debt Maturities by Fiscal Year
June 30, 2018
(Unaudited)

Schedule 2
Continued on Next Page

| FY | U-2009 | | W-2011 | | X-2012 | | Y-2013 | | Z-2013 | | AA-2014 | | BB-2015 | |
|-------|-------------------|------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|---------------------|---------------------|----------------------|---------------------|
| | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest |
| 18-19 | 950,000 | 38,000 | 550,000 | 827,750 | 565,000 | 293,250 | 320,000 | 261,800 | 525,000 | 979,625 | 150,000 | 252,750 | 885,000 | 743,450 |
| 19-20 | | | 550,000 | 805,750 | 590,000 | 265,000 | 340,000 | 249,000 | 550,000 | 963,875 | 175,000 | 246,750 | 950,000 | 699,200 |
| 20-21 | | | 550,000 | 789,250 | 625,000 | 235,500 | 350,000 | 235,400 | 575,000 | 947,375 | 175,000 | 243,250 | 960,000 | 680,200 |
| 21-22 | | | 550,000 | 772,750 | 655,000 | 204,250 | 375,000 | 221,400 | 600,000 | 930,125 | 175,000 | 238,000 | 1,000,000 | 661,000 |
| 22-23 | | | 500,000 | 756,250 | 670,000 | 184,600 | 400,000 | 210,150 | 625,000 | 912,125 | 200,000 | 231,000 | 1,050,000 | 611,000 |
| 23-24 | | | 500,000 | 741,250 | 690,000 | 164,500 | 415,000 | 198,150 | 625,000 | 893,375 | 200,000 | 223,000 | 1,110,000 | 558,500 |
| 24-25 | | | 500,000 | 726,250 | 710,000 | 143,800 | 435,000 | 185,700 | 650,000 | 874,625 | 200,000 | 215,000 | 1,170,000 | 503,000 |
| 25-26 | | | 500,000 | 710,625 | 735,000 | 120,725 | 450,000 | 172,650 | 675,000 | 852,688 | 225,000 | 209,000 | 1,210,000 | 467,900 |
| 26-27 | | | 500,000 | 693,125 | 765,000 | 95,000 | 470,000 | 159,150 | 700,000 | 828,219 | 225,000 | 202,250 | 1,245,000 | 428,575 |
| 27-28 | | | 500,000 | 673,125 | 790,000 | 64,400 | 1,250,000 | 145,050 | 750,000 | 800,219 | 225,000 | 195,500 | 1,260,000 | 385,000 |
| 28-29 | | | 500,000 | 655,625 | 820,000 | 32,800 | 1,300,000 | 107,550 | 775,000 | 770,219 | 250,000 | 188,750 | 1,275,000 | 340,900 |
| 29-30 | | | 500,000 | 635,625 | | | 2,285,000 | 68,550 | 800,000 | 738,250 | 250,000 | 181,250 | 1,315,000 | 296,275 |
| 30-31 | | | 500,000 | 617,500 | | | | | 825,000 | 704,250 | 275,000 | 173,438 | 2,740,000 | 256,825 |
| 31-32 | | | 500,000 | 598,750 | | | | | 850,000 | 669,188 | 275,000 | 164,844 | 2,800,000 | 174,625 |
| 32-33 | | | 500,000 | 580,000 | | | | | 900,000 | 632,000 | 300,000 | 155,906 | 2,900,000 | 90,625 |
| 33-34 | | | 2,000,000 | 560,000 | | | | | 925,000 | 591,500 | 300,000 | 146,156 | | |
| 34-35 | | | 2,000,000 | 480,000 | | | | | 950,000 | 549,875 | 325,000 | 136,032 | | |
| 35-36 | | | 2,000,000 | 400,000 | | | | | 1,000,000 | 507,125 | 325,000 | 124,656 | | |
| 36-37 | | | 2,000,000 | 320,000 | | | | | 1,025,000 | 460,875 | 350,000 | 113,282 | | |
| 37-38 | | | 2,000,000 | 240,000 | | | | | 1,075,000 | 413,469 | 350,000 | 101,031 | | |
| 38-39 | | | 2,000,000 | 160,000 | | | | | 1,100,000 | 363,750 | 375,000 | 88,781 | | |
| 39-40 | | | 2,000,000 | 80,000 | | | | | 1,150,000 | 308,750 | 375,000 | 75,656 | | |
| 40-41 | | | | | | | | | 1,200,000 | 251,250 | 400,000 | 62,531 | | |
| 41-42 | | | | | | | | | 1,225,000 | 191,250 | 425,000 | 48,031 | | |
| 42-43 | | | | | | | | | 1,275,000 | 130,000 | 450,000 | 32,625 | | |
| 43-44 | | | | | | | | | 1,325,000 | 66,250 | 450,000 | 16,313 | | |
| 44-45 | | | | | | | | | | | | | | |
| 45-46 | | | | | | | | | | | | | | |
| 46-47 | | | | | | | | | | | | | | |
| | <u>\$ 950,000</u> | <u>\$ 38,000</u> | <u>\$ 21,700,000</u> | <u>\$ 12,823,625</u> | <u>\$ 7,615,000</u> | <u>\$ 1,803,825</u> | <u>\$ 8,390,000</u> | <u>\$ 2,214,550</u> | <u>\$ 22,675,000</u> | <u>\$ 16,330,252</u> | <u>\$ 7,425,000</u> | <u>\$ 4,065,782</u> | <u>\$ 21,870,000</u> | <u>\$ 6,897,075</u> |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Water Division
Supplemental Information - Schedule of Debt Maturities by Fiscal Year
June 30, 2018
(Unaudited)

Schedule 2

Continued from Previous Page

| FY | CC-2015 | | DD-2016 | | EE-2016 | | FF-2017 | | GG-2017 | | TOTAL | | Grand |
|-------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|----------------------|----------------------|-----------------------|----------------------|-----------------------|
| | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | Total |
| 18-19 | 425,000 | 684,406 | 500,000 | 796,000 | 100,000 | 580,143 | 465,000 | 190,500 | 380,000 | 687,556 | 5,815,000 | 6,335,230 | 12,150,230 |
| 19-20 | 425,000 | 667,406 | 525,000 | 771,000 | 1,090,000 | 575,143 | 475,000 | 176,550 | 395,000 | 668,556 | 6,065,000 | 6,088,230 | 12,153,230 |
| 20-21 | 450,000 | 650,406 | 550,000 | 744,750 | 1,155,000 | 520,644 | 495,000 | 162,300 | 415,000 | 648,806 | 6,300,000 | 5,857,881 | 12,157,881 |
| 21-22 | 475,000 | 632,406 | 575,000 | 717,250 | 1,245,000 | 462,894 | 510,000 | 147,450 | 440,000 | 628,056 | 6,600,000 | 5,615,581 | 12,215,581 |
| 22-23 | 475,000 | 613,406 | 625,000 | 688,500 | 1,315,000 | 400,644 | 530,000 | 127,050 | 460,000 | 606,056 | 6,850,000 | 5,340,781 | 12,190,781 |
| 23-24 | 500,000 | 599,156 | 650,000 | 657,250 | 1,380,000 | 334,894 | 550,000 | 105,850 | 485,000 | 583,056 | 7,105,000 | 5,058,981 | 12,163,981 |
| 24-25 | 525,000 | 587,906 | 675,000 | 624,750 | 1,435,000 | 307,294 | 575,000 | 78,350 | 505,000 | 558,806 | 7,380,000 | 4,805,481 | 12,185,481 |
| 25-26 | 550,000 | 574,782 | 700,000 | 604,500 | 1,460,000 | 278,594 | 605,000 | 49,600 | 530,000 | 533,556 | 7,640,000 | 4,574,620 | 12,214,620 |
| 26-27 | 550,000 | 560,344 | 725,000 | 583,500 | 1,515,000 | 249,394 | 635,000 | 25,400 | 555,000 | 512,356 | 7,885,000 | 4,337,313 | 12,222,313 |
| 27-28 | 575,000 | 543,844 | 750,000 | 561,750 | 1,560,000 | 219,094 | | | 575,000 | 490,156 | 8,235,000 | 4,078,138 | 12,313,138 |
| 28-29 | 600,000 | 526,594 | 775,000 | 539,250 | 1,605,000 | 187,894 | | | 590,000 | 477,938 | 8,490,000 | 3,827,520 | 12,317,520 |
| 29-30 | 625,000 | 508,594 | 800,000 | 516,000 | 1,645,000 | 155,794 | | | 600,000 | 464,662 | 8,820,000 | 3,565,000 | 12,385,000 |
| 30-31 | 650,000 | 489,060 | 825,000 | 492,000 | 1,710,000 | 120,838 | | | 625,000 | 440,662 | 8,150,000 | 3,294,574 | 11,444,574 |
| 31-32 | 675,000 | 467,938 | 825,000 | 467,250 | 1,750,000 | 82,362 | | | 650,000 | 415,662 | 8,325,000 | 3,040,619 | 11,365,619 |
| 32-33 | 700,000 | 446,000 | 850,000 | 442,500 | 1,810,000 | 42,988 | | | 675,000 | 389,662 | 8,635,000 | 2,779,681 | 11,414,681 |
| 33-34 | 725,000 | 418,000 | 900,000 | 417,000 | | | | | 695,000 | 369,413 | 5,545,000 | 2,502,069 | 8,047,069 |
| 34-35 | 750,000 | 389,000 | 925,000 | 390,000 | | | | | 715,000 | 348,563 | 5,665,000 | 2,293,470 | 7,958,470 |
| 35-36 | 775,000 | 359,000 | 950,000 | 362,250 | | | | | 740,000 | 327,112 | 5,790,000 | 2,080,143 | 7,870,143 |
| 36-37 | 800,000 | 330,906 | 975,000 | 333,750 | | | | | 760,000 | 304,913 | 5,910,000 | 1,863,726 | 7,773,726 |
| 37-38 | 825,000 | 301,906 | 1,000,000 | 304,500 | | | | | 785,000 | 282,112 | 6,035,000 | 1,643,018 | 7,678,018 |
| 38-39 | 875,000 | 272,000 | 1,025,000 | 274,500 | | | | | 805,000 | 258,562 | 6,180,000 | 1,417,593 | 7,597,593 |
| 39-40 | 900,000 | 237,000 | 1,050,000 | 243,750 | | | | | 830,000 | 234,413 | 6,305,000 | 1,179,569 | 7,484,569 |
| 40-41 | 925,000 | 201,000 | 1,100,000 | 212,250 | | | | | 855,000 | 208,475 | 4,480,000 | 935,506 | 5,415,506 |
| 41-42 | 975,000 | 164,000 | 1,125,000 | 179,250 | | | | | 885,000 | 181,756 | 4,635,000 | 764,287 | 5,399,287 |
| 42-43 | 1,000,000 | 125,000 | 1,150,000 | 145,500 | | | | | 910,000 | 154,100 | 4,785,000 | 587,225 | 5,372,225 |
| 43-44 | 1,050,000 | 85,000 | 1,200,000 | 111,000 | | | | | 940,000 | 125,662 | 4,965,000 | 404,225 | 5,369,225 |
| 44-45 | 1,075,000 | 43,000 | 1,225,000 | 75,000 | | | | | 970,000 | 96,288 | 3,270,000 | 214,288 | 3,484,288 |
| 45-46 | | | 1,275,000 | 38,250 | | | | | 1,000,000 | 65,976 | 2,275,000 | 104,226 | 2,379,226 |
| 46-47 | | | | | | | | | 1,030,000 | 33,476 | 1,030,000 | 33,476 | 1,063,476 |
| | <u>\$ 18,875,000</u> | <u>\$ 11,478,060</u> | <u>\$ 24,250,000</u> | <u>\$ 12,293,250</u> | <u>\$ 20,775,000</u> | <u>\$ 4,518,614</u> | <u>\$ 4,840,000</u> | <u>\$ 1,063,050</u> | <u>\$ 19,800,000</u> | <u>\$ 11,096,368</u> | <u>\$ 179,165,000</u> | <u>\$ 84,622,451</u> | <u>\$ 263,787,451</u> |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Water Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 3

| Rate Class | Base Charge | Number of Customers |
|---|---|---------------------|
| Residential Inside City rate | For water furnished to premises entirely within the corporate limits of the City of Knoxville: | 55,972 |
| Commodity Charge | | |
| | First 2 100 Cubic Feet Per Month at \$0.50 Per 100 Cubic Feet | |
| | Over 2 100 Cubic Feet Per Month at \$2.65 Per 100 Cubic Feet | |
| Additional Monthly Customer Charge | | |
| | For 5/8" meter \$ 16.00 | |
| | For 1" meter 30.10 | |
| | For 1 1/2" meter 42.00 | |
| | For 2" meter 58.00 | |
| Residential Outside City rate | For water furnished to premises upon which any water faucet or other outlet is outside the corporate limits of the City of Knoxville: | 13,413 |
| Commodity Charge | | |
| | First 2 100 Cubic Feet Per Month at \$0.55 Per 100 Cubic Feet | |
| | Over 2 100 Cubic Feet Per Month at \$3.20 Per 100 Cubic Feet | |
| Additional Monthly Customer Charge | | |
| | For 5/8" meter \$ 17.40 | |
| | For 1" meter 34.40 | |
| | For 1 1/2" meter 48.40 | |
| | For 2" meter 67.40 | |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Water Division
Supplemental Information - Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 3

| Rate Class | Base Charge | Number of Customers |
|--|---|---------------------|
| Non-Residential Inside City rate/ Industrial Park rate | For water furnished to premises entirely within the corporate limits of the City of Knoxville or within the boundaries of an area recognized as an industrial park by the Tennessee Department of Economic and Community Development: | 9,868 |

Commodity Charge

| | | |
|-------|-------|---|
| First | 2 | 100 Cubic Feet Per Month at \$1.80 Per 100 Cubic Feet |
| Next | 8 | 100 Cubic Feet Per Month at \$3.90 Per 100 Cubic Feet |
| Next | 90 | 100 Cubic Feet Per Month at \$4.85 Per 100 Cubic Feet |
| Next | 300 | 100 Cubic Feet Per Month at \$3.55 Per 100 Cubic Feet |
| Next | 4,600 | 100 Cubic Feet Per Month at \$2.25 Per 100 Cubic Feet |
| Next | 5,000 | 100 Cubic Feet Per Month at \$1.00 Per 100 Cubic Feet |

Additional Monthly Customer Charge

| | | |
|-----|--------------|----------|
| For | 5/8" meter | \$ 16.00 |
| For | 1" meter | 30.10 |
| For | 1 1/2" meter | 42.00 |
| For | 2" meter | 58.00 |
| For | 3" meter | 142.00 |
| For | 4" meter | 235.00 |
| For | 6" meter | 514.00 |
| For | 8" meter | 904.00 |
| For | 10" meter | 1,378.00 |
| For | 12" meter | 2,038.00 |

| | | |
|--------------------------------------|---|-----|
| Non-Residential Outside City rate | For water furnished to premises upon which any water faucet or other outlet is outside the corporate limits of the City of Knoxville, excluding premises within the boundaries of an area recognized as an industrial park by the Tennessee Department of Economic and Community Development: | 670 |
|--------------------------------------|---|-----|

Commodity Charge

| | | |
|-------|-------|---|
| First | 2 | 100 Cubic Feet Per Month at \$2.15 Per 100 Cubic Feet |
| Next | 8 | 100 Cubic Feet Per Month at \$4.55 Per 100 Cubic Feet |
| Next | 90 | 100 Cubic Feet Per Month at \$5.85 Per 100 Cubic Feet |
| Next | 300 | 100 Cubic Feet Per Month at \$4.15 Per 100 Cubic Feet |
| Next | 4,600 | 100 Cubic Feet Per Month at \$2.70 Per 100 Cubic Feet |
| Next | 5,000 | 100 Cubic Feet Per Month at \$1.20 Per 100 Cubic Feet |

Additional Monthly Customer Charge

| | | |
|-----|--------------|----------|
| For | 5/8" meter | \$ 17.40 |
| For | 1" meter | 34.40 |
| For | 1 1/2" meter | 48.40 |
| For | 2" meter | 67.40 |
| For | 3" meter | 169.00 |
| For | 4" meter | 283.00 |
| For | 6" meter | 618.00 |
| For | 8" meter | 1,085.00 |
| For | 10" meter | 1,652.00 |
| For | 12" meter | 2,447.00 |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Water Division
Supplemental Information - Schedule of Unaccounted for Water
June 30, 2018
(Unaudited)

Schedule 4

The following unaudited Schedule of Unaccounted for Water is attached as required by the Tennessee Code Annotated. For reports submitted January 1, 2013 and later, the American Water Works Association (AWWA) water loss reporting model must be used. For fiscal years 2018 and 2017, water utilities are required to have a Validity Score greater than 75 and maintain non-revenue water as a percent by cost of operating system of less than 20%. For fiscal year 2018, KUB reported a Validity Score of 82 and non-revenue water as a percent by cost of operating system of 9.9%. For fiscal year 2017, KUB reported a Validity Score of 94 and non-revenue water as a percent by cost of operating system of 5.5%. See Supplemental Information Schedule 4 for the AWWA Reporting Worksheet.

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Water Division

Supplemental Information - Schedule of Unaccounted for Water

June 30, 2018
(Unaudited)

Schedule 4

AWWA Free Water Audit Software: Reporting Worksheet

WAS v5.0
American Water Works Association
Copyright © 2014. All Rights Reserved.

Water Audit Report for: **Knoxville Utilities Board**
Reporting Year: **2018** 7/2017 - 6/2018

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

Master Meter and Supply Error Adjustments

WATER SUPPLIED

----- Enter grading in column 'E' and 'J' ----->

| | | | | | | |
|--------------------------|---------|------------|-------|-----------------------|----------------------------------|---------|
| Volume from own sources: | + ? 8 | 12,442.653 | MG/Yr | Pcnt: | Value: | |
| Water imported: | + ? n/a | 0.000 | MG/Yr | <input type="radio"/> | <input checked="" type="radio"/> | 162.874 |
| Water exported: | + ? n/a | 0.000 | MG/Yr | <input type="radio"/> | <input checked="" type="radio"/> | |

WATER SUPPLIED: **12,279.779** MG/Yr

Enter negative % or value for under-registration
Enter positive % or value for over-registration

AUTHORIZED CONSUMPTION

| | | | | | | |
|---------------------|--------|-----------|-------|-----------------------|----------------------------------|--|
| Billed metered: | + ? 9 | 8,198.380 | MG/Yr | Pcnt: | Value: | |
| Billed unmetered: | + ? 10 | 45.230 | MG/Yr | <input type="radio"/> | <input checked="" type="radio"/> | |
| Unbilled metered: | + ? 10 | 348.601 | MG/Yr | <input type="radio"/> | <input checked="" type="radio"/> | |
| Unbilled unmetered: | + ? | 153.497 | MG/Yr | <input type="radio"/> | <input checked="" type="radio"/> | |

Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed

AUTHORIZED CONSUMPTION: **8,745.708** MG/Yr

Click here: ? for help using option buttons below

Use buttons to select percentage of water supplied OR value

Pcnt: 1.25% Value: MG/Yr

WATER LOSSES (Water Supplied - Authorized Consumption) **3,534.071** MG/Yr

Apparent Losses

| | | | | | | |
|----------------------------------|-------|---------|-------|-----------------------|----------------------------------|--|
| Unauthorized consumption: | + ? | 30.699 | MG/Yr | Pcnt: | Value: | |
| Customer metering inaccuracies: | + ? 7 | 173.538 | MG/Yr | <input type="radio"/> | <input checked="" type="radio"/> | |
| Systematic data handling errors: | + ? | 20.496 | MG/Yr | <input type="radio"/> | <input checked="" type="radio"/> | |

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: **224.734** MG/Yr

Pcnt: 0.25% Value: MG/Yr

Pcnt: 1.99% Value: MG/Yr

Pcnt: 0.25% Value: MG/Yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: **3,309.337** MG/Yr

WATER LOSSES: **3,534.071** MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: **4,036.169** MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

| | | | |
|--|-------|---------|-----------------|
| Length of mains: | + ? 9 | 1,437.0 | miles |
| Number of active AND inactive service connections: | + ? 9 | 91,785 | |
| Service connection density: | ? | 64 | conn./mile main |

Are customer meters typically located at the curbstop or property line? Yes (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line: 0 (Average length of customer service line has been set to zero and a data grading score of 10 has been applied)

Average operating pressure: 7 99.5 psi

COST DATA

| | | | |
|---|--------|--------------|--|
| Total annual cost of operating water system: | + ? 10 | \$37,307,698 | \$/Year |
| Customer retail unit cost (applied to Apparent Losses): | + ? 9 | \$7.17 | \$/100 cubic feet (ccf) |
| Variable production cost (applied to Real Losses): | + ? 7 | \$401.59 | \$/Million gallons <input type="checkbox"/> Use Customer Retail Unit Cost to value real losses |

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 82 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

- 1: Volume from own sources
- 2: Unauthorized consumption
- 3: Systematic data handling errors

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Water Division
Supplemental Information - Schedule of Unaccounted for Water
June 30, 2018
(Unaudited)

Schedule 4

| AWWA Free Water Audit Software: System Attributes and Performance Indicators | | WAS v5.0 American Water Works Association. Copyright © 2014. All Rights Reserved. |
|---|--|---|
| Water Audit Report for: Knoxville Utilities Board | | |
| Reporting Year: 2018 7/2017 - 6/2018 | | |
| *** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 82 out of 100 *** | | |
| System Attributes: | | |
| | Apparent Losses: | 224.734 MG/Yr |
| | + Real Losses: | 3,309.337 MG/Yr |
| | = Water Losses: | 3,534.071 MG/Yr |
| ? | Unavoidable Annual Real Losses (UARL): | 782.35 MG/Yr |
| | Annual cost of Apparent Losses: | \$2,154,049 |
| | Annual cost of Real Losses: | \$1,328,997 Valued at Variable Production Cost Return to Reporting Worksheet to change this assumption |
| Performance Indicators: | | |
| Financial: | Non-revenue water as percent by volume of Water Supplied: | 32.9% |
| | Non-revenue water as percent by cost of operating system: | 9.9% Real Losses valued at Variable Production Cost |
| Operational Efficiency: | Apparent Losses per service connection per day: | 6.71 gallons/connection/day |
| | Real Losses per service connection per day: | 98.78 gallons/connection/day |
| | Real Losses per length of main per day*: | N/A |
| | Real Losses per service connection per day per psi pressure: | 0.99 gallons/connection/day/psi |
| | From Above, Real Losses = Current Annual Real Losses (CARL): | 3,309.34 million gallons/year |
| ? | Infrastructure Leakage Index (ILI) [CARL/UARL]: | 4.23 |
| * This performance indicator applies for systems with a low service connection density of less than 32 service connections/mile of pipeline | | |

See accompanying Report of Independent Auditors on Supplemental Information.



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
Water Division of the 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 Water Division (the Division) of the Knoxville Utilities Board, 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 the Division'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 the Division'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 the Division's internal control. Accordingly, we do not express an opinion on the effectiveness of the Division'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 the Division'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
Water Division of the Knoxville Utilities Board
Knoxville, Tennessee

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Division'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 the Division's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Division's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Coulter & Justus, P.C.

Knoxville, Tennessee
October 25, 2018



Wastewater Division

**Financial Statements and Supplemental Information
June 30, 2018 and 2017**

KUB Board of Commissioners

Celeste Herbert - Chair
Dr. Jerry W. Askew - Vice Chair
John Worden
Kathy Hamilton
Sara Hedstrom Pinnell
Tyvi Small
Adrienne Simpson-Brown

Management

Mintha Roach
President and
Chief Executive Officer

Mark Walker
Senior Vice President and
Chief Financial Officer

Susan Edwards
Senior Vice President and
Chief Administrative Officer

Gabe Bolas
Senior Vice President and
Chief Engineer

Eddie Black
Senior Vice President

Derwin Hagood
Senior Vice President of Operations

Mike Bolin
Vice President

Julie Childers
Vice President

John Gresham
Vice President

Dawn Mosteit
Vice President

Paul Randolph
Vice President

Knoxville Utilities Board Wastewater Division

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June 30, 2018 and 2017

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Independent Auditors' Report

Board of Commissioners
Wastewater Division of the Knoxville Utilities Board
Knoxville, Tennessee

We have audited the accompanying financial statements of the Wastewater Division (the Division) of the Knoxville Utilities Board, 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 the Division's basic financial statements as listed in the index.

Management's Responsibility for the Financial Statements

The Division'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 the Division'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 the Division'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 the Wastewater Division of the Knoxville Utilities Board 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, the Division 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
Wastewater Division of the 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 26 and the required supplementary information on pages 62 through 66 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 the Division's basic financial statements. The supplemental information is presented for purposes of additional analysis and is not a required part of the basic financial statements. The supplemental information 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.

Emphasis of Matter

As discussed in Note 1, the financial statements present only the Wastewater Division and do not purport to, and do not, present fairly the financial position of the Knoxville Utilities Board, as of June 30, 2018 and 2017, and the changes in its financial position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

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 the Division'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 the Division's internal control over financial reporting and compliance.

Coulter & Justus, P. C.

Knoxville, Tennessee
October 25, 2018

Knoxville Utilities Board Wastewater Division Management's Discussion and Analysis June 30, 2018 and 2017

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. The Wastewater Division (Division) provides services to certain customers in Knox County and in two surrounding counties in East Tennessee. The Division's accounts are maintained in conformity with the Uniform System of Accounts of the National Association of Regulatory Utility Commissioners (NARUC) and the Governmental Accounting Standards Board (GASB), as applicable. The financial statements present only the Wastewater Division and do not purport to, and do not, present fairly the consolidated financial position of Knoxville Utilities Board at June 30, 2018 and 2017, and the changes in its financial position for the years then ended in conformity with accounting principles generally accepted in the United States of America.

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

The Division's 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 the Division's financial statements.

Wastewater Division Highlights

System Highlights

The wastewater service area covers 243 square miles and includes 71,242 wastewater customers. KUB maintains 1,312 miles of services mains, 75 pump stations, and 4 treatment plants to treat 13.7 billion gallons of wastewater on an annual basis. The average daily flow is 37.5 million gallons.

KUB has added approximately 1,395 wastewater system customers over the past three years, representing annual growth of less than one percent. In fiscal year 2018, 491 customers were added.

The typical residential wastewater customer's average monthly wastewater bill was \$59.50 as of June 30, 2018, representing an increase of \$3 compared to June 30, 2017. The increase in the monthly bill reflects a rate increase effective July 2017.

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).

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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 the 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.

In 2013, the Board extended the funding approach for Century II to include the wastewater system, although the Wastewater Division had maintained a ten-year funding plan since the inception of the federal Consent Decree (see below). The Board formally endorsed and adopted by resolution, a ten-year funding plan for the Wastewater Division, which included a combination of rate increases and debt issues to fully fund the wastewater system's Century II program.

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 the Wastewater Division. The three rate increases went into effect in October 2014, October 2015, and October 2016. Each rate increase provided an additional \$4.7 million of annual sales revenue.

In May 2017, a new Century II funding resolution was adopted by the KUB Board to express the continued commitment to funding Century II programs for the next ten years. The funding will be achieved through a combination of rate increases and debt issues supplemented by cost savings and new revenue from net customer additions.

In June 2017, the Board approved the next phase of wastewater rate increases to support the Century II program. 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 2018, KUB rehabilitated or replaced 16 miles of wastewater system main while staying within the Division's total capital budget.

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

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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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Financial Highlights

Fiscal Year 2018 Compared to Fiscal Year 2017

The Division's net position during the year increased \$19.8 million compared to a \$13.3 million increase last fiscal year. 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 \$1 million during the fiscal year 2018. The change resulted in a total increase of \$20.8 million in the Division's net position.

Operating revenue increased \$6.2 million or 7 percent, the result of additional revenue generated during the fiscal year from the rate increase effective July 2017 offset by a 0.2 percent decrease in customer billable flows.

Operating expenses decreased \$0.1 million. Operating and maintenance (O&M) expenditures decreased \$1 million. Depreciation expense rose \$0.6 million or 3.4 percent. Taxes and tax equivalents increased \$0.2 million or 5.1 percent.

Interest income was \$0.6 million higher than the prior fiscal year. Interest expense was \$0.3 million higher than the prior fiscal year. Other income (net) was \$0.1 million higher.

Capital contributions decreased \$0.2 million, the result of a decrease in donated assets from developers compared to the previous fiscal year.

Total plant assets (net) increased \$13.2 million or 1.9 percent since the end of last fiscal year.

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.

Long-term debt represented 62.7 percent of the Division's capital structure as of June 30, 2018, as compared to 63.7 percent last year. The decrease is the net result of the issuance of new revenue bonds and the scheduled repayment of debt during the fiscal year. Capital structure equals long-term debt (which includes the current and long-term portion of revenue bonds and notes) plus net position.

The Division's bond covenants require a debt service coverage ratio of at least 1.2 times the maximum principal and interest payments over the life of the Division's outstanding bonds. Current year debt coverage for the fiscal year was 1.98. Maximum debt service coverage was 1.95.

Fiscal Year 2017 Compared to Fiscal Year 2016

The Division's net position during the year increased \$13.3 million compared to a \$9.5 million increase last fiscal year.

Operating revenue increased \$4.9 million or 5.8 percent, the result of additional revenue generated during the fiscal year from the rate increase effective October 2016 offset by a 0.3 percent decrease in customer billable flows.

Operating expenses increased \$0.9 million or 1.6 percent. Operating and maintenance (O&M) expenditures increased \$0.4 million or 1.3 percent. Depreciation expense rose \$0.2 million or 0.9 percent. Taxes and tax equivalents increased \$0.3 million or 5.7 percent.

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Interest income was \$0.2 million higher than the prior fiscal year. Interest expense was \$0.1 million higher than the prior fiscal year. Other income (net) was \$0.2 million lower.

Capital contributions decreased \$0.2 million, the result of a decrease in donated assets from developers compared to the previous fiscal year.

Total plant assets (net) increased \$19.7 million or 2.9 percent since the end of last fiscal year.

During fiscal year 2017, KUB sold \$20 million in wastewater system revenue bonds for the purpose of funding wastewater system capital improvements and also sold \$12 million in wastewater system revenue refunding bonds to refinance existing wastewater system bonds at lower interest rates. The refunding produced total debt service savings of \$1.4 million over the life of the bonds (\$1.3 million on a net present value basis).

Long-term debt represented 63.7 percent of the Division's capital structure as of June 30, 2017, as compared to 64.5 percent last year. The decrease is the net result of the issuance of new revenue bonds and the scheduled repayment of debt during the fiscal year. Capital structure equals long-term debt (which includes the current and long-term portion of revenue bonds and notes) plus net position.

The Division's bond covenants require a debt service coverage ratio of at least 1.2 times the maximum principal and interest payments over the life of the Division's outstanding bonds. Current year debt coverage for the fiscal year was 1.79. Maximum debt service coverage was 1.78.

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Knoxville Utilities Board Wastewater Division Management's Discussion and Analysis June 30, 2018 and 2017

Knoxville Utilities Board Wastewater Division - Financial Statements

The Division's financial performance is reported under three basic 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

The Division 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, wastewater 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 the Division 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 are assets that have been limited to specific uses by the Division'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 is either invested in capital or restricted is reported there.

Statement of Revenues, Expenses and Changes in Net Position

The Division 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

The Division 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 Division's sources and uses of cash during the reporting period.

The statement indicates the Division's 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.

**Knoxville Utilities Board Wastewater Division
Management's Discussion and Analysis
June 30, 2018 and 2017**

Condensed Financial Statements

Statement of Net Position

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

**Statements of Net Position
As of June 30**

| <i>(in thousands of dollars)</i> | 2018 | 2017 | 2016 |
|---|-------------------|-------------------|-------------------|
| Current, restricted and other assets | \$ 106,805 | \$ 82,060 | \$ 80,075 |
| Capital assets, net | 719,979 | 706,752 | 687,056 |
| Deferred outflows of resources | 16,112 | 18,332 | 19,413 |
| Total assets and deferred outflows of resources | <u>842,896</u> | <u>807,144</u> | <u>786,544</u> |
| Current and other liabilities | 22,404 | 21,388 | 22,630 |
| Long-term debt outstanding | 512,135 | 500,207 | 492,466 |
| Deferred inflows of resources | 3,137 | 1,159 | 333 |
| Total liabilities and deferred inflows of resources | <u>537,676</u> | <u>522,754</u> | <u>515,429</u> |
| Net position | | | |
| Net investment in capital assets | 216,037 | 216,334 | 205,784 |
| Restricted | 3,159 | 3,010 | 2,737 |
| Unrestricted | 86,024 | 65,046 | 62,594 |
| Total net position | <u>\$ 305,220</u> | <u>\$ 284,390</u> | <u>\$ 271,115</u> |

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.

Knoxville Utilities Board Wastewater Division Management's Discussion and Analysis June 30, 2018 and 2017

Impacts and Analysis

Current, Restricted and Other Assets

Fiscal Year 2018 Compared to Fiscal Year 2017

Current, restricted and other assets increased \$24.7 million or 30.2 percent, primarily due to a \$18.3 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 \$4.3 million, an increase in the actuarially determined OPEB asset of \$0.8 million and a \$0.6 million increase in accounts receivable.

Fiscal Year 2017 Compared to Fiscal Year 2016

Current, restricted and other assets increased \$2 million or 2.4 percent, primarily due to a \$0.8 million increase in accounts receivable, a \$0.7 million increase in other current assets, and a \$0.2 million increase in general fund cash (including cash and cash equivalents, short-term investments, and long-term investments) during the fiscal year.

Capital Assets

Fiscal Year 2018 Compared to Fiscal Year 2017

Capital assets increased \$13.2 million or 1.9 percent, the result of capital expenditures, net of depreciation. Major capital expenditures during the year included \$26.7 million for major system improvements related to Century II.

Fiscal Year 2017 Compared to Fiscal Year 2016

Capital assets increased \$19.7 million or 2.9 percent, the result of capital expenditures, net of depreciation. Major capital expenditures during the year included \$30.9 million for major system improvements related to Century II.

Deferred Outflows of Resources

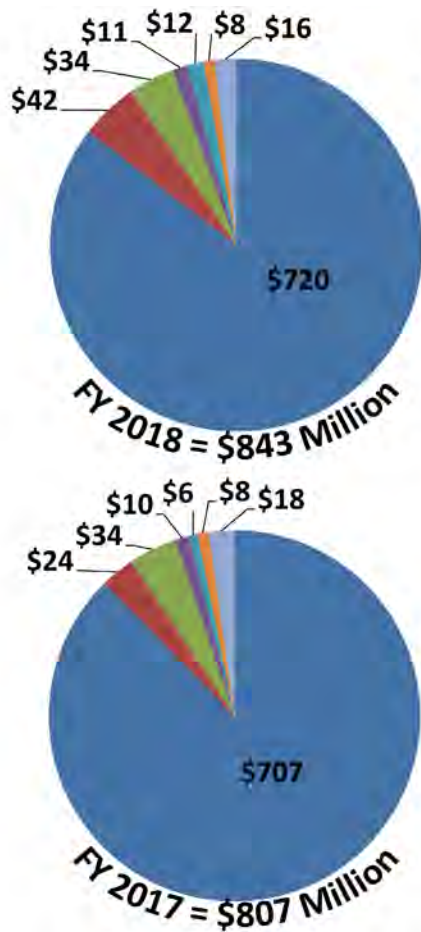
Fiscal Year 2018 Compared to Fiscal Year 2017

Deferred outflows decreased \$2.2 million compared to the prior year, reflecting a \$1.6 million decrease in pension outflow and a \$0.8 million decrease in unamortized bond refunding costs.

Fiscal Year 2017 Compared to Fiscal Year 2016

Deferred outflows decreased \$1.1 million compared to the prior year, reflecting a \$0.8 million decrease in unamortized bond refunding costs and a \$0.3 million decrease in pension outflow.

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Wastewater Division Total Assets and Deferred Outflows of Resources (in Millions)

| | <u>FY18</u> | <u>FY17</u> |
|--------------------------------|-------------|-------------|
| Plant | 86% | 88% |
| General Fund | 5% | 3% |
| Contingency Fund | 4% | 4% |
| Accounts Receivable | 1% | 1% |
| Other Assets | 1% | 1% |
| Restricted Assets | 1% | 1% |
| Deferred Outflows of Resources | 2% | 2% |

Current and Other Liabilities

Fiscal Year 2018 Compared to Fiscal Year 2017

Current and other liabilities were \$1 million higher than the prior fiscal year, primarily due to a \$0.9 million increase in the current portion of revenue bonds.

Fiscal Year 2017 Compared to Fiscal Year 2016

Current and other liabilities were \$1.2 million less than the prior fiscal year. This decrease was the net result of an increase of \$0.8 million in the current portion of revenue bonds offset by a \$1.1 million decrease in the actuarially determined net pension obligation and a \$0.8 million decrease in accounts payable.

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Long-Term Debt

Fiscal Year 2018 Compared to Fiscal Year 2017

The Division's outstanding long-term debt increased \$11.9 million or 2.4 percent. Wastewater system revenue bonds of \$25 million, sold in August 2017, were partially offset by the scheduled repayment of debt.

Fiscal Year 2017 Compared to Fiscal Year 2016

The Division's outstanding long-term debt increased \$7.7 million or 1.6 percent. Wastewater system revenue bonds of \$20 million, sold in July 2016, added to KUB's outstanding debt. In March 2017, revenue refunding bonds of \$12 million were issued to refinance bonds sold in 2005. The additional issuances offset by the defeased bonds and scheduled debt repayments accounted for the change in long-term debt.

Deferred Inflows of Resources

Fiscal Year 2018 Compared to Fiscal Year 2017

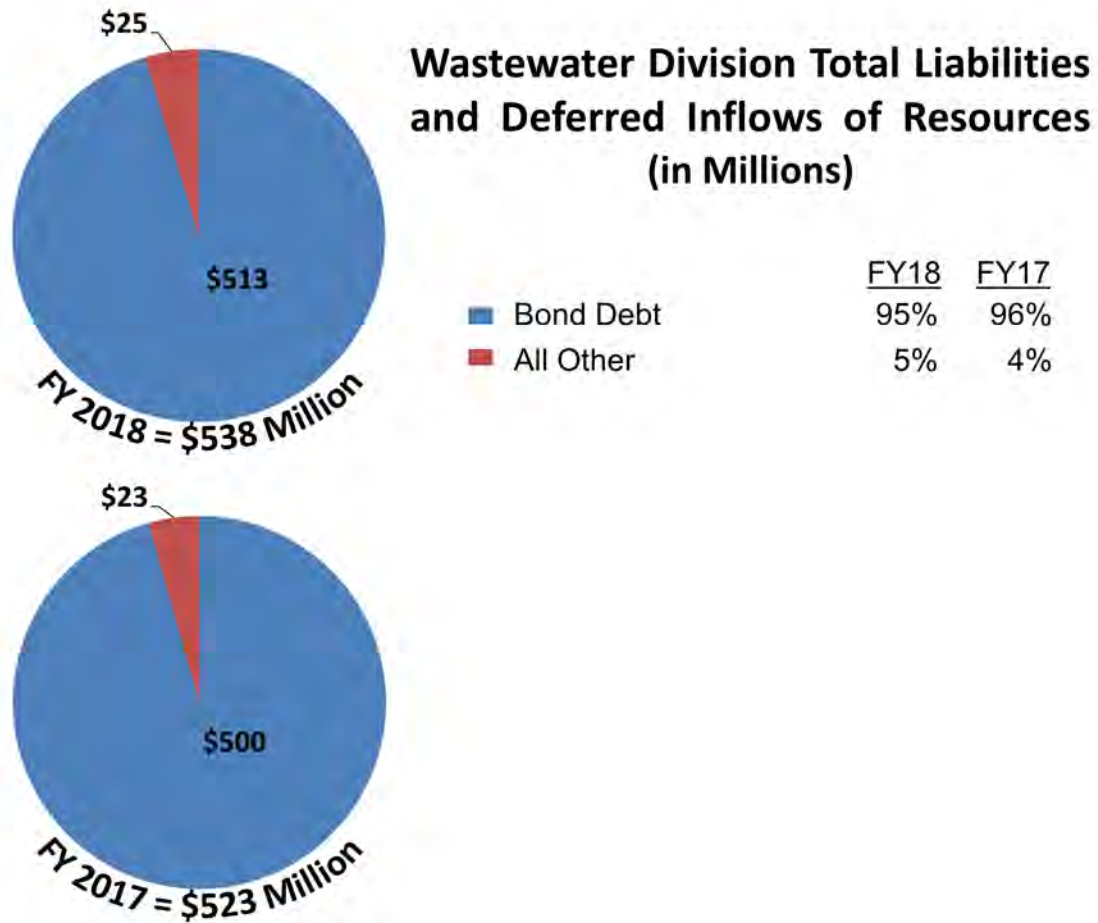
Deferred inflows of resources were \$2 million higher than the prior fiscal year due to differences in pension inflows.

Fiscal Year 2017 Compared to Fiscal Year 2016

Deferred inflows of resources were \$0.8 million higher than the prior fiscal year due to differences in pension inflows.

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Net Position

Fiscal Year 2018 Compared to Fiscal Year 2017

Unrestricted assets increased \$21 million, primarily due to the \$24.5 million increase in current and other assets compared to the prior year, which includes an increase of \$18.3 million in general fund cash. Net investment in capital assets decreased \$0.3 million. The decrease was the result of \$13.2 million in net plant additions offset by an increase in current portion of revenue bonds and total long-term debt of \$13 million. Restricted net position was \$0.1 million higher than the previous fiscal year, primarily due to increases in bond fund reserves.

Fiscal Year 2017 Compared to Fiscal Year 2016

Net investment in capital assets increased \$10.6 million or 5.1 percent. The increase was the result of \$19.7 million in net plant additions offset by an increase in current portion of revenue bonds and total long-term debt of \$8.5 million. Unrestricted assets increased \$2.5 million, primarily due to the \$1.7 million increase in current and other assets compared to the prior year. Restricted net position was \$0.3 million higher than the previous fiscal year, primarily due to increases in bond fund reserves.

**Knoxville Utilities Board Wastewater Division
Management's Discussion and Analysis
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Statement of Revenues, Expenses and Changes in Net Position

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

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

| <i>(in thousands of dollars)</i> | 2018 | 2017 | 2016 |
|---|------------------|------------------|-----------------|
| Operating revenues | \$ 94,716 | \$ 88,517 | \$ 83,646 |
| Operating expenses | | | |
| Treatment | 11,675 | 11,914 | 12,516 |
| Collection | 7,411 | 7,686 | 7,462 |
| Customer service | 3,106 | 3,073 | 2,962 |
| Administrative and general | 8,747 | 9,257 | 8,572 |
| Depreciation | 19,138 | 18,517 | 18,343 |
| Taxes and tax equivalents | 5,039 | 4,796 | 4,537 |
| Total operating expenses | <u>55,116</u> | <u>55,243</u> | <u>54,392</u> |
| Operating income | <u>39,600</u> | <u>33,274</u> | <u>29,254</u> |
| Interest income | 1,205 | 642 | 462 |
| Interest expense | (20,508) | (20,233) | (20,169) |
| Other income/(expense) | <u>(740)</u> | <u>(872)</u> | <u>(717)</u> |
| Change in net position before capital contributions | <u>19,557</u> | <u>12,811</u> | <u>8,830</u> |
| Capital contributions | 278 | 464 | 690 |
| Change in net position | <u>\$ 19,835</u> | <u>\$ 13,275</u> | <u>\$ 9,520</u> |

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 primarily determined by the amount of water usage billed during the fiscal year. KUB has certain commercial and industrial customers whose wastewater usage is metered separately from their water usage. Any change (increase/decrease) in wastewater rates would also cause a change in operating revenue.
- Operating expenses (treatment, collection system expense, 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 health insurance costs, chemicals, and wastewater system maintenance.
- Depreciation expense is impacted by plant additions and retirements during the fiscal year.
- Taxes and tax equivalents are impacted by plant additions/retirements and changes in property tax rates.
- Interest income is impacted by the level of interest rates and investments.

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- Interest expense is impacted by the level of outstanding debt and interest rates on the outstanding debt.
- Other income/(expense) 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

The Division's Change in Net Position increased \$19.8 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 \$1 million. The change resulted in a total increase of \$20.8 million in the Division's net position. Comparatively, net position increased by \$13.3 million in fiscal year 2017.

Fiscal Year 2017 Compared to Fiscal Year 2016

The Division's net position during the year increased \$13.3 million compared to a \$9.5 million increase last fiscal year.

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Margin from Sales

Fiscal Year 2018 Compared to Fiscal Year 2017

Operating revenue increased \$6.2 million or 7 percent for the fiscal year ending June 30, 2018, the result of additional revenue generated during the fiscal year from the July 2017 rate increase, offset by a 0.2 percent decrease in billable customer flows. Rebates on bond interest payments from the federal government for federally taxable Build America Bonds (BABs) are reported as revenue in accordance with GASB. KUB recognized \$1.8 million in revenue for BABs rebates in fiscal year 2018.

FY 2018 Total Wastewater Customers = 71,242 FY 2018 Wastewater Sales = 6.5 Billion Gallons



Residential customers accounted for 89 percent of wastewater customers and 41 percent of total billed sales volumes for the year. Commercial customers accounted for the largest portion of total sales volumes for the year with 51 percent.

KUB's ten largest wastewater customers accounted for 19 percent of KUB's billed wastewater volumes. Those ten customers represent five industrial and five commercial customers, including four governmental customers.

KUB has added 1,395 wastewater customers over the past three years, representing annual growth of less than one percent.

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Fiscal Year 2017 Compared to Fiscal Year 2016

Operating revenue increased \$4.9 million or 5.8 percent for the fiscal year ending June 30, 2017, the result of additional revenue generated during the fiscal year from the October 2016 rate increase offset by a 0.3 percent decrease in customer billable flows. Rebates on bond interest payments from the federal government for federally taxable Build America Bonds (BABs) are reported as revenue in accordance with GASB. KUB recognized \$1.8 million in revenue for BABs rebates in fiscal year 2017.

FY 2017 Total Wastewater Customers = 70,751 FY 2017 Wastewater Sales = 6.5 Billion Gallons



Residential customers accounted for 89 percent of wastewater customers and 42 percent of total billed sales volumes for the year. Commercial customers accounted for the largest portion of total sales volumes for the year with 50 percent.

KUB's ten largest wastewater customers accounted for 18 percent of KUB's billed wastewater volumes. Those ten customers represent four industrial and six commercial customers, including four governmental customers.

KUB has added 1,138 wastewater customers over the past three years, representing annual growth of less than one percent.

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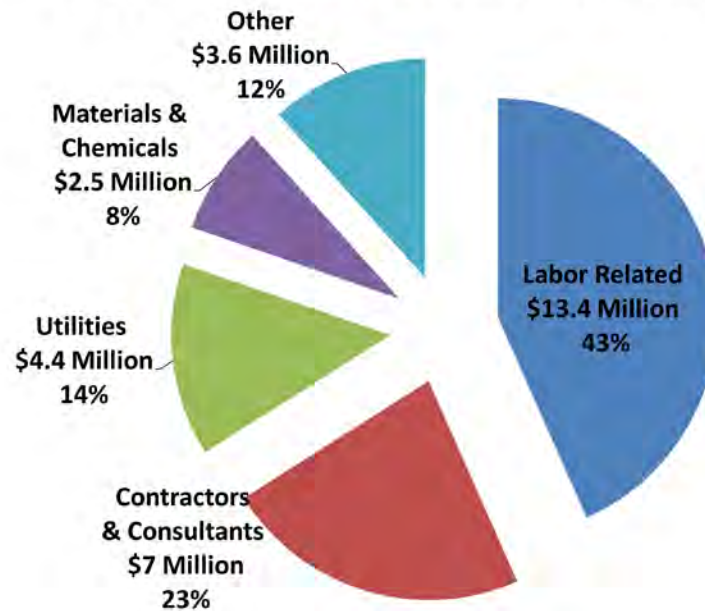
Operating Expenses

Fiscal Year 2018 Compared to Fiscal Year 2017

Operating expenses decreased \$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, collection, customer service, and administrative and general.

- Treatment expenses decreased \$0.2 million, primarily due to lower outside consultant and contractor expenses.
- Collection system expenses decreased \$0.3 million, reflecting lower outside contractor expenses for Century II initiatives.
- Customer service expenses were consistent with the prior fiscal year.
- Administrative and general expenses decreased \$0.5 million, primarily due to a decrease in labor related expenses.

FY 2018 Wastewater O&M Expense = \$30.9 Million



- Depreciation expense increased \$0.6 million or 3.4 percent, the result of a full year of depreciation on \$51.7 million of wastewater system assets placed in service during fiscal year 2017 and a partial year of depreciation of \$29.5 million of wastewater system assets placed in service during fiscal year 2018. Wastewater system assets of \$5.6 million were retired during the fiscal year.
- Taxes and tax equivalents increased \$0.2 million compared to the prior fiscal year due to increased plant in service levels.

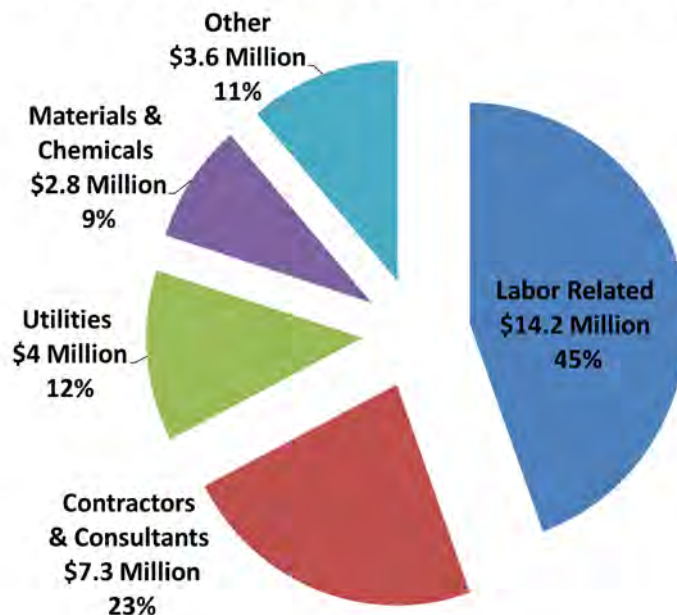
Knoxville Utilities Board Wastewater Division Management's Discussion and Analysis June 30, 2018 and 2017

Fiscal Year 2017 Compared to Fiscal Year 2016

Operating expenses increased \$0.9 million or 1.6 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, collection, customer service, and administrative and general.

- Treatment expenses decreased \$0.6 million, primarily due to lower outside consultant and contractor expenses.
- Collection system expenses increased \$0.2 million, reflecting higher outside contractor expenses for Century II initiatives.
- Customer service expenses increased \$0.1 million.
- Administrative and general expenses increased \$0.7 million, primarily due to an increase in labor related expenses.

FY 2017 Wastewater O&M Expense = \$31.9 Million



- Depreciation expense increased \$0.2 million or 0.9 percent, the result of a full year of depreciation on \$53.6 million of wastewater system assets placed in service during fiscal year 2016 and a partial year of depreciation of \$51.7 million of wastewater system assets placed in service during fiscal year 2017. \$11 million of wastewater system assets were retired during the fiscal year.
- Taxes and tax equivalents increased \$0.3 million compared to the prior fiscal year due to increased plant in service levels.

**Knoxville Utilities Board Wastewater Division
Management's Discussion and Analysis
June 30, 2018 and 2017**



Other Income and Expense

Fiscal Year 2018 Compared to Fiscal Year 2017

Interest income was \$0.6 million higher than the prior fiscal year primarily due to higher short-term interest rates.

Interest expense was \$0.3 million higher than the prior fiscal year, 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) was \$0.1 million higher than the prior fiscal year.

Capital contributions decreased \$0.2 million compared to last fiscal year as a result of a decrease in assets received from developers and other governmental entities.

Fiscal Year 2017 Compared to Fiscal Year 2016

Interest income was \$0.2 million higher than the prior fiscal year.

Interest expense was \$0.1 million higher than the prior fiscal year.

Other income (net) was \$0.2 million lower, primarily due to an increase in miscellaneous income deductions.

Capital contributions decreased \$0.2 million compared to last fiscal year as a result of a decrease in assets received from developers and other governmental entities.

**Knoxville Utilities Board Wastewater Division
Management's Discussion and Analysis
June 30, 2018 and 2017**

Capital Assets

**Capital Assets
As of June 30
(Net of Depreciation)**

| <i>(in thousands of dollars)</i> | 2018 | 2017 | 2016 |
|--------------------------------------|-------------------|-------------------|-------------------|
| Pumping & Treatment Plant | \$ 152,026 | \$ 148,916 | \$ 144,383 |
| Collection Plant | | | |
| Mains and Metering | 454,420 | 445,740 | 416,102 |
| Other Accounts | 67,355 | 68,745 | 70,145 |
| Total Collection Plant | <u>521,775</u> | <u>514,485</u> | <u>486,247</u> |
| Total General Plant | <u>8,217</u> | <u>8,660</u> | <u>8,480</u> |
| Total Wastewater Plant | \$ 682,018 | \$ 672,061 | \$ 639,110 |
| Work In Progress | 37,961 | 34,691 | 47,946 |
| Total Net Plant | <u>\$ 719,979</u> | <u>\$ 706,752</u> | <u>\$ 687,056</u> |

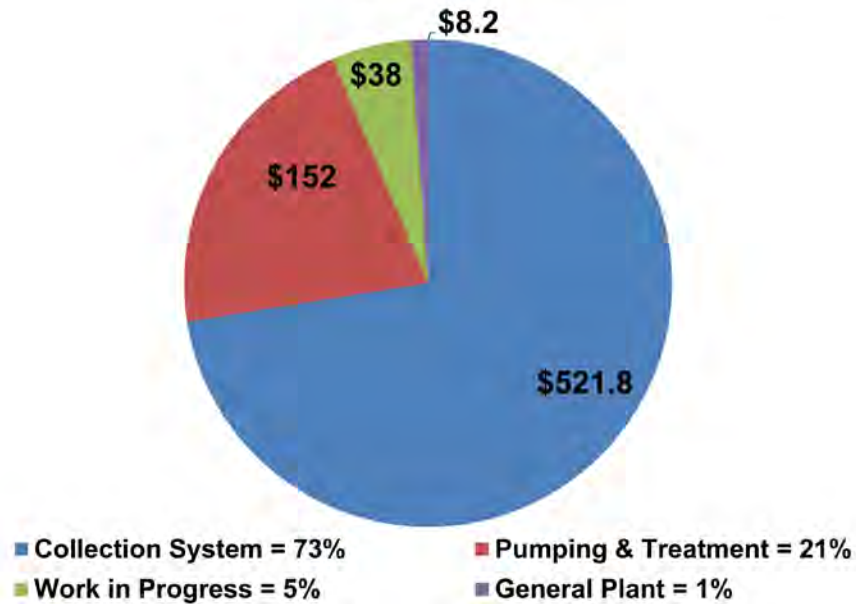
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Knoxville Utilities Board Wastewater Division Management's Discussion and Analysis June 30, 2018 and 2017

Fiscal Year 2018 Compared to Fiscal Year 2017

As of June 30, 2018, the Division had \$720 million invested in a variety of capital assets, as reflected in the schedule of capital assets, which represents a net increase (including additions, retirements, and depreciation) of \$13.2 million or 1.9 percent over the end of the last fiscal year.

FY 2018 Wastewater Division Capital Assets = \$720 Million
(in Millions)



Major capital asset expenditures during the year were as follows:

- \$26.7 million related to 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

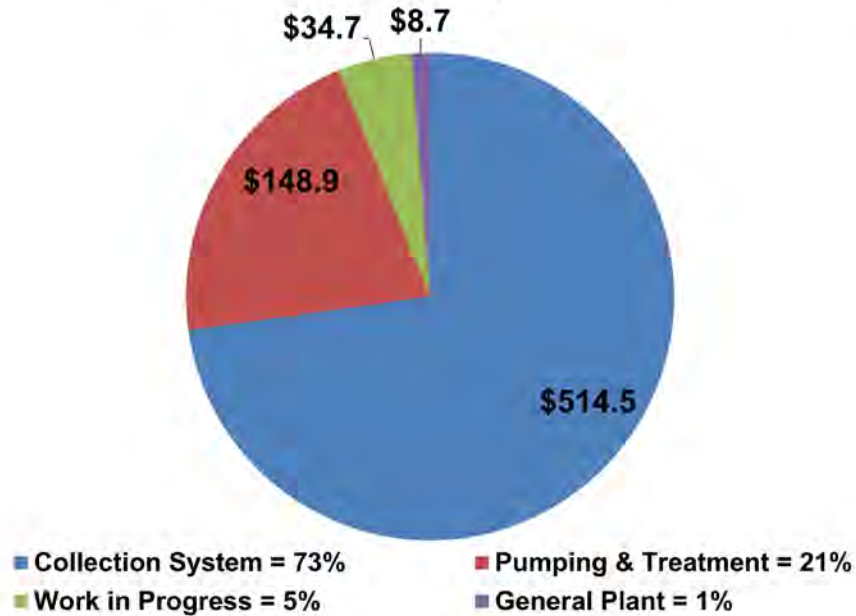
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Knoxville Utilities Board Wastewater Division Management's Discussion and Analysis June 30, 2018 and 2017

Fiscal Year 2017 Compared to Fiscal Year 2016

As of June 30, 2017, the Division had \$706.8 million invested in a variety of capital assets, as reflected in the schedule of capital assets, which represents a net increase (including additions, retirements, and depreciation) of \$19.7 million or 2.9 percent over the end of the last fiscal year.

FY 2017 Wastewater Division Capital Assets = \$706.8 Million
(in Millions)



Major capital asset expenditures during the year were as follows:

- \$30.9 million related to 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

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Knoxville Utilities Board Wastewater Division Management's Discussion and Analysis June 30, 2018 and 2017

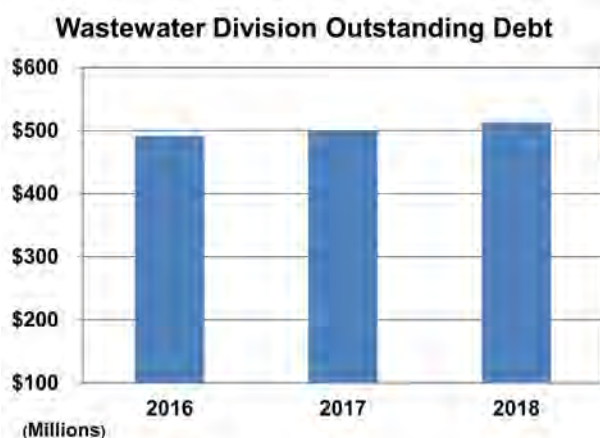
Debt Administration

As of June 30, 2018, the Wastewater Division had \$512.9 million in outstanding wastewater system bonds. The Division's outstanding debt has remained at a steady level over the past three years, reflecting new bond issues and scheduled repayment of revenue bonds. Bond proceeds from new revenue bond sales are used to fund capital improvements for the wastewater system. The bonds are secured solely by revenues of the Wastewater Division. Debt as a percentage of the Division's capital structure was 62.7 percent in 2018, 63.7 percent in 2017, and 64.5 percent at the end of fiscal year 2016. KUB's Debt Management Policy limits the Division's debt ratio to 70 percent or less.

Outstanding Debt As of June 30

(in thousands of dollars)

| | 2018 | 2017 | 2016 |
|------------------------|------------|------------|------------|
| Revenue bonds | \$ 512,890 | \$ 499,850 | \$ 492,330 |
| Total outstanding debt | \$ 512,890 | \$ 499,850 | \$ 492,330 |



The Division will pay \$146.7 million in principal payments over the next ten years, representing 28.6 percent of the outstanding bonds. KUB's Debt Management Policy requires a minimum of 20 percent of wastewater debt principal be repaid over the next ten years.

Fiscal Year 2018 Compared to Fiscal Year 2017

As of June 30, 2018, the Division had \$512.9 million in outstanding debt (including the current portion of revenue bonds), representing an increase of \$13 million or 2.6 percent. The increase is attributable to new revenue bonds issued during the fiscal year offset by the scheduled repayment of debt. The Division's weighted average cost of debt as of June 30, 2018 was 3.96 percent (3.61 percent including the impact of Build America Bonds rebates).

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.

Knoxville Utilities Board Wastewater Division Management's Discussion and Analysis June 30, 2018 and 2017

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2018, the Division's revenue bonds were rated AA+ by Standard & Poor's and Aa2 by Moody's Investors Service.

Fiscal Year 2017 Compared to Fiscal Year 2016

As of June 30, 2017, the Division had \$499.9 million in outstanding debt (including the current portion of revenue bonds), representing an increase of \$7.5 million or 1.5 percent. The increase is attributable to the net effect of new revenue and refunding bond issues. The Division's weighted average cost of debt as of June 30, 2017 was 3.99 percent (3.64 percent including the impact of Build America Bonds rebates).

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.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2017, the Division's revenue bonds were rated AA+ by Standard & Poor's and Aa2 by Moody's Investors Service.

Impacts on Future Financial Position

KUB anticipates adding 350 wastewater customers in fiscal year 2019.

In June 2017, the KUB Board adopted three years of rate increases for all four utility Divisions to help fund the ongoing Century II infrastructure programs for each system. The two remaining approved wastewater rate increases are effective July 2018 and July 2019 and are expected to provide an additional \$4.2 million and \$4.5 million, respectively, in annual revenue to assist with the funding of the Wastewater Division.

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.

KUB long-term debt includes \$91.6 million of Wastewater Division 2010 Build America Bonds (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. The Wastewater Division's portion of this contribution is \$694,465. 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. The Wastewater Division's portion of this contribution is \$568,881. For the Plan year ending December 31, 2018, the Plan's actuarial funded ratio was 107.84 percent.

Knoxville Utilities Board Wastewater Division Management's Discussion and Analysis June 30, 2018 and 2017

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 Wastewater Division's portion of this contribution is \$68,491. 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 the Division's financial position or results of operations during fiscal year 2018.

Financial Contact

The Division's financial statements are designed to present users (citizens, customers, investors, and creditors) with a general overview of the Division'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 Wastewater Division
Statements of Net Position
June 30, 2018 and 2017

| | 2018 | 2017 |
|---|-----------------------|-----------------------|
| Assets and Deferred Outflows of Resources | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 42,297,513 | \$ 18,973,860 |
| Short-term investments | - | 4,982,900 |
| Short-term contingency fund investments | 11,101,917 | 14,559,854 |
| Other current assets | 524,169 | 699,213 |
| Accrued interest receivable | 34,729 | 20,406 |
| Accounts receivable, less allowance of uncollectible accounts of \$86,556 in 2018 and \$82,667 in 2017 | 10,576,375 | 9,933,764 |
| Inventories | 523,984 | 336,145 |
| Prepaid expenses | 72,469 | 78,703 |
| Total current assets | <u>65,131,156</u> | <u>49,584,845</u> |
| Restricted assets: | | |
| Wastewater bond fund | 8,232,210 | 7,909,840 |
| Other funds | 4,718 | 6,915 |
| TVA contract proceeds | - | 74,619 |
| Total restricted assets | <u>8,236,928</u> | <u>7,991,374</u> |
| Wastewater plant in service | 877,008,227 | 853,154,323 |
| Less accumulated depreciation | <u>(194,989,639)</u> | <u>(181,093,401)</u> |
| | 682,018,588 | 672,060,922 |
| Retirement in progress | 426,420 | 185,548 |
| Construction in progress | 37,534,482 | 34,505,477 |
| Net plant in service | <u>719,979,490</u> | <u>706,751,947</u> |
| Other assets: | | |
| Net pension asset | 4,351,242 | 27,267 |
| Net OPEB asset | 825,235 | - |
| Long-term contingency fund investments | 22,914,748 | 19,229,072 |
| Other | 5,346,014 | 5,227,545 |
| Total other assets | <u>33,437,239</u> | <u>24,483,884</u> |
| Total assets | <u>826,784,813</u> | <u>788,812,050</u> |
| Deferred outflows of resources: | | |
| Pension outflow | 428,530 | 1,999,978 |
| OPEB outflow | 145,724 | - |
| Unamortized bond refunding costs | 15,537,275 | 16,331,740 |
| Total deferred outflows of resources | <u>16,111,529</u> | <u>18,331,718</u> |
| Total assets and deferred outflows of resources | <u>\$ 842,896,342</u> | <u>\$ 807,143,768</u> |

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

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

| | 2018 | 2017 |
|--|-----------------------|-----------------------|
| Liabilities, Deferred Inflows, and Net Position | | |
| Current liabilities: | | |
| Current portion of revenue bonds | \$ 12,615,000 | \$ 11,710,000 |
| Accounts payable | 1,566,588 | 1,522,921 |
| Accrued expenses | 813,958 | 764,678 |
| Customer deposits plus accrued interest | 849,208 | 819,927 |
| Accrued interest on revenue bonds | 5,078,360 | 4,982,240 |
| Total current liabilities | <u>20,923,114</u> | <u>19,799,766</u> |
| Other liabilities: | | |
| Accrued compensated absences | 1,348,345 | 1,507,005 |
| Customer advances for construction | 4,600 | - |
| Net pension liability - QEBA | 61,675 | 40,717 |
| Other | 66,723 | 40,081 |
| Total other liabilities | <u>1,481,343</u> | <u>1,587,803</u> |
| Long-term debt: | | |
| Wastewater revenue bonds | 500,275,000 | 488,140,000 |
| Unamortized premiums/discounts | 11,860,393 | 12,067,331 |
| Total long-term debt | <u>512,135,393</u> | <u>500,207,331</u> |
| Total liabilities | <u>534,539,850</u> | <u>521,594,900</u> |
| Deferred inflows of resources: | | |
| Pension inflow | 3,066,215 | 1,158,854 |
| OPEB inflow | 70,760 | - |
| Total deferred inflows of resources | <u>3,136,975</u> | <u>1,158,854</u> |
| Total liabilities and deferred inflows of resources | <u>537,676,825</u> | <u>522,753,754</u> |
| Net position | | |
| Net investment in capital assets | 216,036,743 | 216,334,381 |
| Restricted for: | | |
| Debt service | 3,153,850 | 2,927,600 |
| Other | 4,718 | 81,534 |
| Unrestricted | 86,024,206 | 65,046,499 |
| Total net position | <u>305,219,517</u> | <u>284,390,014</u> |
| Total liabilities, deferred inflows, and net position | <u>\$ 842,896,342</u> | <u>\$ 807,143,768</u> |

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

Knoxville Utilities Board Wastewater Division
Statements of Revenues, Expenses and Changes in Net Position
Years Ended June 30, 2018 and 2017

| | 2018 | 2017 |
|---|-----------------------|-----------------------|
| Operating revenues | \$ 94,715,764 | \$ 88,517,210 |
| Operating expenses | | |
| Treatment | 11,674,833 | 11,914,383 |
| Collection | 7,410,791 | 7,686,373 |
| Customer service | 3,106,304 | 3,072,606 |
| Administrative and general | 8,747,272 | 9,257,078 |
| Provision for depreciation | 19,137,860 | 18,517,403 |
| Taxes and tax equivalents | 5,038,630 | 4,795,532 |
| Total operating expenses | <u>55,115,690</u> | <u>55,243,375</u> |
| Operating income | <u>39,600,074</u> | <u>33,273,835</u> |
| Non-operating revenues (expenses) | | |
| Contributions in aid of construction | 2,237,910 | 723,825 |
| Interest and dividend income | 1,205,290 | 641,747 |
| Interest expense | (20,508,567) | (20,232,835) |
| Amortization of debt costs | (368,685) | (443,847) |
| Write-down of plant for costs recovered through contributions | (2,237,910) | (723,825) |
| Other | (371,824) | (428,234) |
| Total non-operating revenues (expenses) | <u>(20,043,786)</u> | <u>(20,463,169)</u> |
| Change in net position before capital contributions | 19,556,288 | 12,810,666 |
| Capital contributions | 278,222 | 463,784 |
| Change in net position | 19,834,510 | 13,274,450 |
| Net position, beginning of year, as previously reported | 284,390,014 | 271,115,564 |
| Change in method of accounting for OPEB | 994,993 | - |
| Net position, beginning of year, as restated | <u>285,385,007</u> | <u>271,115,564</u> |
| Net position, end of year | <u>\$ 305,219,517</u> | <u>\$ 284,390,014</u> |

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

Knoxville Utilities Board Wastewater Division
Statements of Cash Flows
Years Ended June 30, 2018 and 2017

| | 2018 | 2017 |
|---|----------------------|----------------------|
| Cash flows from operating activities: | | |
| Cash receipts from customers | \$ 92,107,107 | \$ 85,189,254 |
| Cash (payments to) receipts from other operations | 1,757,517 | 1,434,648 |
| Cash payments to suppliers of goods or services | (20,810,035) | (21,876,100) |
| Cash payments to employees for services | (11,119,039) | (11,144,919) |
| Payment in lieu of taxes | (4,218,257) | (4,017,388) |
| Net cash provided by operating activities | <u>57,717,293</u> | <u>49,585,495</u> |
| Cash flows from capital and related financing activities: | | |
| Net proceeds from bond issuance | 25,111,895 | 33,146,531 |
| Principal paid on revenue bonds and notes payable | (11,960,000) | (24,445,000) |
| Interest paid on revenue bonds and notes payable | (20,412,447) | (20,214,379) |
| Acquisition and construction of wastewater plant | (34,629,295) | (38,745,442) |
| Changes in wastewater bond fund, restricted | (322,370) | (213,456) |
| Customer advances for construction | 4,600 | - |
| Proceeds received on disposal of plant | 1,762 | 12,004 |
| Cash received from developers and individuals for capital purposes | 2,237,910 | 723,825 |
| Net cash used in capital and related financing activities | <u>(39,967,945)</u> | <u>(49,735,917)</u> |
| Cash flows from investing activities: | | |
| Purchase of investment securities | (15,048,777) | (15,807,997) |
| Maturities of investment securities | 19,572,141 | 10,832,597 |
| Interest received | 1,171,280 | 595,577 |
| Other property and investments | (120,339) | (221,540) |
| Net cash provided by (used in) investing activities | <u>5,574,305</u> | <u>(4,601,363)</u> |
| Net increase (decrease) in cash and cash equivalents | 23,323,653 | (4,751,785) |
| Cash and cash equivalents, beginning of year | <u>18,973,860</u> | <u>23,725,645</u> |
| Cash and cash equivalents, end of year | <u>\$ 42,297,513</u> | <u>\$ 18,973,860</u> |
| Reconciliation of operating income to net cash provided by operating activities | | |
| Operating income | \$ 39,600,074 | \$ 33,273,835 |
| Adjustments to reconcile operating income to net cash provided by operating activities: | | |
| Depreciation expense | 19,440,304 | 18,777,420 |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | (642,611) | (757,319) |
| Inventories | (187,839) | (22,111) |
| Prepaid expenses | 6,234 | 6,694 |
| Other assets | 240,335 | (730,075) |
| Accounts payable and accrued expenses | (795,127) | (837,342) |
| Customer deposits plus accrued interest | 29,281 | (97,807) |
| Other liabilities | 26,642 | (27,800) |
| Net cash provided by operating activities | <u>\$ 57,717,293</u> | <u>\$ 49,585,495</u> |
| Noncash capital activities: | | |
| Acquisition of plant assets through developer contributions | \$ 278,222 | \$ 463,784 |

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

Knoxville Utilities Board Wastewater Division

Notes to Financial Statements

June 30, 2018 and 2017

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. The Wastewater Division (Division) provides services to certain customers in Knox County and in two surrounding counties in East Tennessee. The Division's accounts are maintained in conformity with the Uniform System of Accounts of the National Association of Regulatory Utility Commissioners (NARUC) and the Governmental Accounting Standards Board (GASB), as applicable. The financial statements present only the Wastewater Division and do not purport to, and do not, present fairly the consolidated financial position of Knoxville Utilities Board at June 30, 2018 and 2017, and the changes in its financial position for the years then ended in conformity with accounting principles generally accepted in the United States of America.

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 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 to the Division is determined by measurement focus. The transactions of the Division 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.

Knoxville Utilities Board Wastewater Division

Notes to Financial Statements

June 30, 2018 and 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.

Wastewater Plant

Wastewater plant and other property are stated on the basis of original cost. The cost of current repairs and minor replacements is charged to operating expense. The cost of renewals and improvements is 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 wastewater plant in service is based on the estimated useful lives of the assets, which range from three to fifty years, and is computed using the straight-line method. Pursuant to NARUC, the caption "Provision for depreciation" in the Statements of Revenue, Expenses and Change in Net Position does not include depreciation for transportation equipment of \$302,444 in fiscal year 2018 and \$260,017 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 the KUB Wastewater Division. 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 \$297,270 in fiscal year 2018 and \$183,561 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 net assets available, it is KUB's policy to apply those expenses to restricted net assets to the extent such are available and then to unrestricted net 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

Knoxville Utilities Board Wastewater Division

Notes to Financial Statements

June 30, 2018 and 2017

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 (Division's share \$994,993) to increase the net OPEB asset by \$4,522,695 (Division's share \$994,993) 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

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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 (Division's share \$4,351,242) as of June 30, 2018 and \$123,941 (Division's share \$27,267) 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 (Division's share \$61,675) and \$185,077 (Division's share \$40,717) 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.

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Restricted and Designated Assets

Certain assets are restricted by bond resolutions for utility plant construction 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. 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.

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 \$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.

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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.

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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 | \$ 42,297,513 | \$ 18,973,860 |
| Short-term investments | - | 4,982,900 |
| Short-term contingency fund investments | 11,101,917 | 14,559,854 |
| Other assets | | |
| Long-term contingency fund investments | 22,756,018 | 19,090,029 |
| Restricted assets | | |
| Wastewater bond fund | 8,232,210 | 7,909,840 |
| Other funds | 4,718 | 6,915 |
| | <u>\$ 84,392,376</u> | <u>\$ 65,523,398</u> |

The above amounts do not include accrued interest of \$158,730 in fiscal year 2018 and \$139,043 in fiscal year 2017. Interest income is recorded on an accrual basis.

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Knoxville Utilities Board Wastewater Division
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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 | Less | |
| | Value | Than 1 | 1-5 |
| Supersweep NOW and Other Deposits | \$ 36,505,314 | \$ 36,505,314 | \$ - |
| State Treasurer's Investment Pool | 4,436,823 | 4,436,823 | - |
| Agency Bonds | 41,259,686 | 11,101,917 | 30,157,769 |
| Certificates of Deposits | 3,795,286 | 3,795,286 | - |
| | <u>\$ 85,997,109</u> | <u>\$ 55,839,340</u> | <u>\$ 30,157,769</u> |

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 \$30,157,769, 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.

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Notes to Financial Statements
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4. Accounts Receivable

Accounts receivable consists of the following:

| | 2018 | 2017 |
|--------------------------------------|----------------------|---------------------|
| Wholesale and retail customers | | |
| Billed services | \$ 5,637,649 | \$ 5,733,191 |
| Unbilled services | 4,013,123 | 3,595,200 |
| Other | 1,012,159 | 688,040 |
| Allowance for uncollectible accounts | <u>(86,556)</u> | <u>(82,667)</u> |
| | <u>\$ 10,576,375</u> | <u>\$ 9,933,764</u> |

5. Accounts Payable and Accruals

Accounts payable and accruals were composed of the following:

| | 2018 | 2017 |
|----------------------------|---------------------|---------------------|
| Trade accounts | \$ 1,566,588 | \$ 1,522,921 |
| Salaries and wages | 412,966 | 348,485 |
| Self-insurance liabilities | <u>400,992</u> | <u>416,193</u> |
| | <u>\$ 2,380,546</u> | <u>\$ 2,287,599</u> |

6. Long-Term Obligations

Long-term debt consists of the following:

| | Balance June 30, 2017 | Additions | Payments | Defeased | Balance June 30, 2018 | Amounts Due Within One Year |
|----------------------|--------------------------------------|----------------------|----------------------|-----------------|--------------------------------------|--|
| 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 | <u>\$ 499,850,000</u> | <u>\$ 25,000,000</u> | <u>\$ 11,960,000</u> | <u>\$ -</u> | <u>\$ 512,890,000</u> | <u>\$ 12,615,000</u> |
| Unamortized Premium | <u>12,067,331</u> | <u>473,638</u> | <u>680,576</u> | <u>-</u> | <u>11,860,393</u> | <u>-</u> |
| Total long term debt | <u>\$ 511,917,331</u> | <u>\$ 25,473,638</u> | <u>\$ 12,640,576</u> | <u>\$ -</u> | <u>\$ 524,750,393</u> | <u>\$ 12,615,000</u> |

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| | Balance June 30, 2016 | Additions | Payments | Defeased | Balance June 30, 2017 | Amounts Due Within One Year |
|-----------------------------|--------------------------------------|----------------------|----------------------|----------------------|--------------------------------------|--|
| 2005B - 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 |

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

| Fiscal Year | Principal | Total Interest | Grand Total |
|------------------------|-----------------------|---------------------------|------------------------|
| 2019 | \$ 12,615,000 | \$ 20,313,437 | \$ 32,928,437 |
| 2020 | 13,180,000 | 19,776,753 | 32,956,753 |
| 2021 | 13,725,000 | 19,220,382 | 32,945,382 |
| 2022 | 14,345,000 | 18,576,278 | 32,921,278 |
| 2023 | 14,990,000 | 17,901,135 | 32,891,135 |
| 2024-2028 | 77,795,000 | 80,476,018 | 158,271,018 |
| 2029-2033 | 89,285,000 | 65,889,294 | 155,174,294 |
| 2034-2038 | 106,480,000 | 48,343,995 | 154,823,995 |
| 2039-2043 | 110,370,000 | 26,516,295 | 136,886,295 |
| 2044-2048 | 55,330,000 | 6,097,513 | 61,427,513 |
| 2049-2050 | 4,775,000 | 248,975 | 5,023,975 |
| Total | \$ 512,890,000 | \$ 323,360,075 | \$ 836,250,075 |

The Division has pledged sufficient revenue, after deduction of all current operating expenses (exclusive of tax equivalents), to meet bond principal and interest payments when due. The bond covenants relating to the Wastewater Revenue Bonds require the establishment of a Wastewater Bond Fund for the payment of principal and interest requirements. As of June 30, 2018, those bond covenants had been satisfied.

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

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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 wastewater system 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 |
|---------------------------------------|--------------------------------------|---------------------|-----------------------|--------------------------------------|
| Accrued compensated absences | \$ 1,507,005 | \$ 3,147,407 | \$ (3,306,067) | \$ 1,348,345 |
| Customer advances for construction | - | 4,600 | - | 4,600 |
| Other | 40,081 | 99,005 | (72,363) | 66,723 |
| | <u>\$ 1,547,086</u> | <u>\$ 3,251,012</u> | <u>\$ (3,378,430)</u> | <u>\$ 1,419,668</u> |

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| | Balance June 30, 2016 | Increase | Decrease | Balance June 30, 2017 |
|---------------------------------|-----------------------------|---------------------|-----------------------|-----------------------------|
| Accrued compensated absences | \$ 1,584,302 | \$ 2,802,419 | \$ (2,879,716) | \$ 1,507,005 |
| Other | <u>67,881</u> | <u>75,785</u> | <u>(103,585)</u> | <u>40,081</u> |
| | <u>\$ 1,652,183</u> | <u>\$ 2,878,204</u> | <u>\$ (2,983,301)</u> | <u>\$ 1,547,086</u> |

7. Lease Commitments

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

| | |
|--|------------------|
| 2019 | \$ 45,512 |
| 2020 | <u>30,742</u> |
| Total operating minimum lease payments | <u>\$ 76,254</u> |

8. Capital Assets

Capital asset activity was as follows:

| | Balance June 30, 2017 | Increase | Decrease | Balance June 30, 2018 |
|--------------------------------------|--------------------------|----------------------|------------------------|--------------------------|
| Pumping & Treatment Plant | \$ 227,029,539 | \$ 8,782,379 | \$ (1,941,717) | \$ 233,870,201 |
| Collection Plant | | | | |
| Mains and Metering | 516,446,174 | 19,007,807 | (2,309,760) | 533,144,221 |
| Mains and Metering - Meters | - | 154,826 | - | 154,826 |
| Other Accounts | <u>80,354,716</u> | <u>-</u> | <u>(1,000)</u> | <u>80,353,716</u> |
| Total Collection Plant | \$ 596,800,890 | \$ 19,162,633 | \$ (2,310,760) | \$ 613,652,763 |
| Total General Plant | <u>29,323,894</u> | <u>1,517,108</u> | <u>(1,355,739)</u> | <u>29,485,263</u> |
| Total Wastewater Plant | \$ 853,154,323 | \$ 29,462,120 | \$ (5,608,216) | \$ 877,008,227 |
| Less accumulated depreciation | <u>(181,093,401)</u> | <u>(19,447,763)</u> | <u>5,551,525</u> | <u>(194,989,639)</u> |
| Net Plant Assets | \$ 672,060,922 | \$ 10,014,357 | \$ (56,691) | \$ 682,018,588 |
| Work In Progress | <u>34,691,025</u> | <u>32,540,508</u> | <u>(29,270,631)</u> | <u>37,960,902</u> |
| Total Net Plant | <u>\$ 706,751,947</u> | <u>\$ 42,554,865</u> | <u>\$ (29,327,322)</u> | <u>\$ 719,979,490</u> |

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| | Balance June 30, 2016 | Increase | Decrease | Balance June 30, 2017 |
|--------------------------------------|------------------------------|-----------------------------|-------------------------------|------------------------------|
| Pumping & Treatment Plant | \$ 219,766,603 | \$ 9,868,174 | \$ (2,605,238) | \$ 227,029,539 |
| Collection Plant | | | | |
| Mains and Metering | 483,684,427 | 39,595,263 | (6,833,516) | 516,446,174 |
| Other Accounts | 80,385,881 | 31,266 | (62,431) | 80,354,716 |
| Total Collection Plant | <u>\$ 564,070,308</u> | <u>\$ 39,626,529</u> | <u>\$ (6,895,947)</u> | <u>\$ 596,800,890</u> |
| Total General Plant | <u>28,589,760</u> | <u>2,244,371</u> | <u>(1,510,237)</u> | <u>29,323,894</u> |
| Total Wastewater Plant | <u>\$ 812,426,671</u> | <u>\$ 51,739,074</u> | <u>\$ (11,011,422)</u> | <u>\$ 853,154,323</u> |
| Less accumulated depreciation | <u>(173,316,844)</u> | <u>(18,784,879)</u> | <u>11,008,322</u> | <u>(181,093,401)</u> |
| Net Plant Assets | <u>\$ 639,109,827</u> | <u>\$ 32,954,195</u> | <u>\$ (3,100)</u> | <u>\$ 672,060,922</u> |
| Work In Progress | <u>47,946,144</u> | <u>38,244,076</u> | <u>(51,499,195)</u> | <u>34,691,025</u> |
| Total Net Plant | <u><u>\$ 687,055,971</u></u> | <u><u>\$ 71,198,271</u></u> | <u><u>\$ (51,502,295)</u></u> | <u><u>\$ 706,751,947</u></u> |

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 \$400,992 and \$416,193, respectively, resulting from the following changes:

| | 2018 | 2017 |
|--|--------------------------|--------------------------|
| Balance, beginning of year | \$ 416,193 | \$ 385,656 |
| Current year claims and changes in estimates | 3,428,491 | 3,522,910 |
| Claims payments | <u>(3,443,692)</u> | <u>(3,492,373)</u> |
| Balance, end of year | <u><u>\$ 400,992</u></u> | <u><u>\$ 416,193</u></u> |

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

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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. For purposes of this disclosure, presentation is on a consolidated basis unless division's share is specified.

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 | <u>629</u> | <u>662</u> |
| Total | <u>1,265</u> | <u>1,310</u> |

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 percent of the first \$4,800 of annual earnings and 5 percent of annual earnings in excess of \$4,800. KUB contributions are determined

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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. Of these amounts, \$826,382 and \$1,059,721 are attributable to the Wastewater Division. 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,

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respectively. The Division's share of the net pension asset at June 30, 2018 is \$4,351,242 and at June 30, 2017 is \$27,267.

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 | <u>(227,377,105)</u> | <u>(204,514,679)</u> |
| Plan's net pension (asset) liability | <u>\$ (19,778,372)</u> | <u>\$ (123,941)</u> |

| | | |
|--|---------|---------|
| 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 | <u>3,207,995</u> | <u>22,862,426</u> | <u>(19,654,431)</u> |
| Balances at December 31, 2017 | <u>\$ 207,598,733</u> | <u>\$ 227,377,105</u> | <u>\$ (19,778,372)</u> |

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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.

| Asset Class | Long Term Expected Real Rate of Return | |
|--------------------|---|-------------|
| | 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.

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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) |

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) (Division's share (\$3,445)).

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 (Division's share \$191,340). 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 (Division's share \$461,206).

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 (Division's share \$62,944). 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 (Division's share \$387,141).

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) (Division's share (\$1,963,584)). 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 (Division's share \$413,192) 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 | <u>\$ 1,878,146</u> | <u>\$ 13,937,342</u> |
| Division's share | <u>\$ 413,192</u> | <u>\$ 3,066,215</u> |

\$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 (Division's share \$1,028,399).

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 (Division's share \$393,142). 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 (Division's share \$249,524).

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 (Division's share \$516,188).

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 deferred outflow of resources as of December 31, 2016 of \$6,682,351 (Division's share \$1,470,117). The following table summarizes the current balances of deferred outflows and deferred inflows of resources along with the net

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recognition over future years. In addition, KUB recorded a deferred outflow of resources of \$2,408,459 (Division's share \$529,861) 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 |
| Division's share | \$ 1,999,978 | \$ 1,158,854 |

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

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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. The Division's share of the total pension liability at June 30, 2018 is \$61,675 and at June 30, 2017 is \$40,717.

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 | <u>\$210,625</u> | <u>\$185,077</u> |
| | | |
| 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:

| | <u>Increase (Decrease)</u> |
|--|--------------------------------|
| | <u>Total Pension Liability</u> |
| 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 | <u>95,264</u> |
| Balances at December 31, 2017 | <u>\$ 280,341</u> |

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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 (Division's share \$6,496). 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 (Division's share \$2,409).

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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 (Division's share \$12,929).

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 | \$ - |
| Division's share | \$ 15,338 | \$ - |

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 (Division's share \$40,717). 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

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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 (Division's share \$478,436) and \$1,963,541 (Division's share \$431,979), 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. For purposes of this disclosure, presentation is on a consolidated basis unless division's share is specified.

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 OPEB 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 |

Knoxville Utilities Board Wastewater Division

Notes to Financial Statements

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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:

Knoxville Utilities Board Wastewater Division
Notes to Financial Statements
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| <u>Asset Class</u> | <u>Target Allocation</u> |
|-----------------------|--------------------------|
| Domestic Equity: | |
| Large Cap | 30% |
| Small Cap | 8% |
| International Equity: | |
| Developed | 16% |
| Emerging | 8% |
| Real Estate Equity | 8% |
| Debt Securities | 30% |
| Total | <u>100%</u> |

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. Of these amounts, zero and \$136,403 were attributable to the Wastewater Division.

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 Division's share of the total net OPEB asset at June 30, 2018 is \$825,235 and at June 30, 2017 is \$994,993.

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

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

Knoxville Utilities Board Wastewater Division
Notes to Financial Statements
June 30, 2018 and 2017

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

Knoxville Utilities Board Wastewater Division
Notes to Financial Statements
June 30, 2018 and 2017

asset allocation (see the discussion of the Trust's Investment Policy) are summarized in the chart below.

| Asset Class | Long Term Expected Real Rate of Return | |
|----------------------|---|-------------|
| | 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 |

Knoxville Utilities Board Wastewater Division

Notes to Financial Statements

June 30, 2018 and 2017

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 (Division's share \$94,794).

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 (Division's share \$145,724).

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 (Division's share \$43,690).

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 \$153,809. \$30,762 of that was recognized in the current year and \$123,047 (Division's share \$27,070) 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 | <u>\$ 662,384</u> | <u>\$ 321,637</u> |
| Division's share | <u>\$ 145,724</u> | <u>\$ 70,760</u> |

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 | - |

Knoxville Utilities Board Wastewater Division
Notes to Financial Statements
June 30, 2018 and 2017

14. Related Party Transactions

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

| | 2018 | 2017 |
|---|--------------|-------------|
| City of Knoxville | | |
| Amounts billed by the Division for utilities and related services | \$ 1,067,941 | \$ 965,919 |
| Payments by the Division in lieu of property tax | 4,218,257 | 4,017,388 |
| Payments by the Division for services provided | 682,763 | 1,700,079 |
| Other divisions of KUB | | |
| Amounts billed to other divisions for utilities and related services provided | 346,746 | 312,380 |
| Interdivisional rental expense | 313,388 | 313,517 |
| Interdivisional rental income | 122,211 | 122,211 |
| Amounts billed to the Division by other divisions for utilities services provided | 3,251,471 | 3,148,117 |

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 | \$ 75,833 | \$ 49,812 |

15. 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

Knoxville Utilities Board Wastewater Division

Notes to Financial Statements

June 30, 2018 and 2017

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.

Knoxville Utilities Board Wastewater Division
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.

See accompanying Report of Independent Auditors on Supplemental Information.

**Knoxville Utilities Board Wastewater Division
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.

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Wastewater Division
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 | <u>(3,298,739)</u> |
| Net change in total OPEB liability | 1,126,693 |
| Total OPEB liability - beginning | 44,477,738 |
| Total OPEB liability - ending (a) | <u>\$ 45,604,431</u> |
| Plan fiduciary net position | |
| Contributions - employer | \$ - |
| Net investment income | 3,705,473 |
| Benefit payments | (3,298,739) |
| Administrative expense | <u>(51,668)</u> |
| Net change in plan fiduciary net position | 355,066 |
| Plan fiduciary net position - beginning | 49,000,433 |
| Plan fiduciary net position - ending (b) | <u>\$ 49,355,499</u> |
| Net OPEB liability - ending (a) - (b) | <u>\$ (3,751,068)</u> |
| 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.

See accompanying Report of Independent Auditors on Supplemental Information.

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

| | *Year ended June 30 |
|---|----------------------------|
| | 2018 |
| | <hr/> |
| Actuarially determined contribution | \$ - |
| Contribution in relation to the annual required contribution | <hr/> - |
| Contribution deficiency/(excess) | <hr/> \$ - <hr/> |
| | |
| 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 Wastewater Division
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 | <u>95,264</u> | <u>185,077</u> |
| Total pension liability - beginning | <u>185,077</u> | <u>-</u> |
| Total pension liability - ending | <u>\$ 280,341</u> | <u>\$ 185,077</u> |
| 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.

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Wastewater Division
Supplemental Information - Schedule of Insurance in Force
June 30, 2018
(Unaudited)

Schedule 1

Insurance coverage is for KUB as a consolidated entity.

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.

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Wastewater Division
Supplemental Information – Schedule of Debt Maturities by Fiscal Year
June 30, 2018
(Unaudited)

Schedule 2
Continued on Next Page

| FY | 2010 | | | 2010C | | | 2012A | | 2012B | | 2013A | | 2014A | | | | | | | | | | | | | | | |
|-------|------------|-------------------|---------|-------------------|-----------|-------------------|-----------|-------------------|-----------|-------------------|------------|-------------------|-----------|-------------------|----|------------------|----|-------------------|----|-------------------|----|--------------------|----|-------------------|----|-------------------|----|-------------------|
| | Principal | Interest | Rebate* | Principal | Interest | Rebate* | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | | | | | | | | | | | | | | |
| 18-19 | | 1,910,000 | 668,500 | 1,550,000 | 3,525,625 | 1,233,968 | 970,000 | 498,775 | 1,050,000 | 1,891,875 | 660,000 | 3,513,300 | 475,000 | 1,058,119 | | | | | | | | | | | | | | |
| 19-20 | | 1,910,000 | 668,500 | 1,600,000 | 3,460,990 | 1,211,346 | 950,000 | 467,250 | 1,100,000 | 1,878,750 | 685,000 | 3,486,900 | 500,000 | 1,039,119 | | | | | | | | | | | | | | |
| 20-21 | | 1,910,000 | 668,500 | 1,650,000 | 3,394,270 | 1,187,994 | 1,085,000 | 434,000 | 1,150,000 | 1,862,250 | 710,000 | 3,459,500 | 525,000 | 1,019,119 | | | | | | | | | | | | | | |
| 21-22 | | 1,910,000 | 668,500 | 1,700,000 | 3,325,465 | 1,163,912 | 1,175,000 | 390,600 | 1,200,000 | 1,804,750 | 740,000 | 3,431,100 | 550,000 | 998,119 | | | | | | | | | | | | | | |
| 22-23 | | 1,910,000 | 668,500 | 1,750,000 | 3,246,925 | 1,136,424 | 1,165,000 | 343,600 | 1,250,000 | 1,744,750 | 770,000 | 3,401,500 | 575,000 | 981,619 | | | | | | | | | | | | | | |
| 23-24 | | 1,910,000 | 668,500 | 1,850,000 | 3,162,575 | 1,106,902 | 1,250,000 | 297,000 | 1,300,000 | 1,694,750 | 4,600,000 | 3,370,700 | 600,000 | 964,369 | | | | | | | | | | | | | | |
| 24-25 | | 1,910,000 | 668,500 | 1,950,000 | 3,065,450 | 1,072,908 | 1,140,000 | 247,000 | 1,375,000 | 1,642,750 | 4,900,000 | 3,232,700 | 625,000 | 946,369 | | | | | | | | | | | | | | |
| 25-26 | | 1,910,000 | 668,500 | 2,375,000 | 2,961,125 | 1,036,394 | 1,190,000 | 201,400 | 1,425,000 | 1,587,750 | 5,040,000 | 3,085,700 | 650,000 | 927,619 | | | | | | | | | | | | | | |
| 26-27 | | 1,910,000 | 668,500 | 2,500,000 | 2,830,738 | 990,758 | 1,235,000 | 153,800 | 1,500,000 | 1,530,750 | 5,200,000 | 2,934,500 | 700,000 | 908,119 | | | | | | | | | | | | | | |
| 27-28 | | 1,910,000 | 668,500 | 2,600,000 | 2,688,488 | 940,970 | 1,280,000 | 104,400 | 1,575,000 | 1,470,750 | 6,305,000 | 2,778,500 | 725,000 | 880,119 | | | | | | | | | | | | | | |
| 28-29 | | 1,910,000 | 668,500 | 2,725,000 | 2,536,388 | 887,736 | 1,330,000 | 53,200 | 1,625,000 | 1,423,500 | 6,535,000 | 2,573,588 | 750,000 | 851,119 | | | | | | | | | | | | | | |
| 29-30 | | 1,910,000 | 668,500 | 2,850,000 | 2,376,975 | 831,942 | | | 1,700,000 | 1,374,750 | 8,315,000 | 2,377,538 | 775,000 | 821,119 | | | | | | | | | | | | | | |
| 30-31 | | 1,910,000 | 668,500 | 2,975,000 | 2,210,250 | 773,588 | | | 1,775,000 | 1,323,750 | 8,550,000 | 2,128,088 | 825,000 | 790,119 | | | | | | | | | | | | | | |
| 31-32 | | 1,910,000 | 668,500 | 3,100,000 | 2,031,750 | 711,112 | | | 1,875,000 | 1,270,500 | 8,840,000 | 1,871,588 | 850,000 | 757,119 | | | | | | | | | | | | | | |
| 32-33 | | 1,910,000 | 668,500 | 3,250,000 | 1,845,750 | 646,012 | | | 1,950,000 | 1,214,250 | 9,120,000 | 1,606,388 | 900,000 | 723,119 | | | | | | | | | | | | | | |
| 33-34 | | 1,910,000 | 668,500 | 3,375,000 | 1,650,750 | 577,762 | | | 2,025,000 | 1,155,750 | 9,390,000 | 1,332,788 | 925,000 | 687,119 | | | | | | | | | | | | | | |
| 34-35 | | 1,910,000 | 668,500 | 3,550,000 | 1,448,250 | 506,882 | | | 2,125,000 | 1,095,000 | 9,705,000 | 1,015,875 | 975,000 | 650,119 | | | | | | | | | | | | | | |
| 35-36 | | 1,910,000 | 668,500 | 3,700,000 | 1,235,250 | 432,338 | | | 2,225,000 | 1,031,250 | 10,025,000 | 688,331 | 1,025,000 | 611,119 | | | | | | | | | | | | | | |
| 36-37 | | 1,910,000 | 668,500 | 3,875,000 | 1,009,550 | 353,342 | | | 2,325,000 | 964,500 | 10,370,000 | 349,988 | 1,075,000 | 570,119 | | | | | | | | | | | | | | |
| 37-38 | | 1,910,000 | 668,500 | 4,050,000 | 773,175 | 270,612 | | | 2,425,000 | 894,750 | | | 500,000 | 527,119 | | | | | | | | | | | | | | |
| 38-39 | | 1,910,000 | 668,500 | 4,225,000 | 526,125 | 184,144 | | | 2,550,000 | 822,000 | | | 500,000 | 507,119 | | | | | | | | | | | | | | |
| 39-40 | | 1,910,000 | 668,500 | 4,400,000 | 268,400 | 93,940 | | | 2,650,000 | 745,500 | | | 500,000 | 488,994 | | | | | | | | | | | | | | |
| 40-41 | | 1,910,000 | 668,500 | | | | | | 2,775,000 | 666,000 | | | 1,175,000 | 470,869 | | | | | | | | | | | | | | |
| 41-42 | | 1,910,000 | 668,500 | | | | | | 2,900,000 | 582,750 | | | 1,225,000 | 428,275 | | | | | | | | | | | | | | |
| 42-43 | 10,000,000 | 1,910,000 | 668,500 | | | | | | 3,025,000 | 495,750 | | | 1,300,000 | 382,950 | | | | | | | | | | | | | | |
| 43-44 | 10,000,000 | 1,260,000 | 441,000 | | | | | | 3,150,000 | 405,000 | | | 1,350,000 | 334,850 | | | | | | | | | | | | | | |
| 44-45 | 10,000,000 | 630,000 | 220,500 | | | | | | 3,300,000 | 310,500 | | | 1,400,000 | 284,900 | | | | | | | | | | | | | | |
| 45-46 | | | | | | | | | 3,450,000 | 211,500 | | | 1,475,000 | 233,100 | | | | | | | | | | | | | | |
| 46-47 | | | | | | | | | 3,600,000 | 108,000 | | | 1,550,000 | 178,525 | | | | | | | | | | | | | | |
| 47-48 | | | | | | | | | | | | | 1,600,000 | 121,175 | | | | | | | | | | | | | | |
| 48-49 | | | | | | | | | | | | | 1,675,000 | 61,975 | | | | | | | | | | | | | | |
| 49-50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | \$ | <u>30,000,000</u> | \$ | <u>49,640,000</u> | \$ | <u>17,374,000</u> | \$ | <u>61,600,000</u> | \$ | <u>49,574,264</u> | \$ | <u>17,350,986</u> | \$ | <u>12,770,000</u> | \$ | <u>3,191,025</u> | \$ | <u>60,375,000</u> | \$ | <u>33,204,125</u> | \$ | <u>110,460,000</u> | \$ | <u>46,638,572</u> | \$ | <u>28,275,000</u> | \$ | <u>20,203,612</u> |

*Series 2010 and 2010c bonds were issued as federally taxable Build America Bonds. KUB will receive a 35 percent interest rebate payment from the United States Government for each interest payment. Effective October 1, 2017 these bonds became subject to a 6.6% 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.

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Wastewater Division
Supplemental Information – Schedule of Debt Maturities by Fiscal Year
June 30, 2018
(Unaudited)

Schedule 2
Continued from Previous Page

| FY | 2015A | | 2015B | | 2016 | | 2017A | | 2017B | | TOTALS | | Grand Total (P + I) | Grand Total (Less Rebates) |
|-------|----------------|---------------|---------------|---------------|---------------|--------------|---------------|--------------|---------------|---------------|----------------|----------------|------------------------|-------------------------------|
| | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | Principal | Interest | | |
| 18-19 | 5,010,000 | 4,967,762 | 500,000 | 1,104,688 | 450,000 | 531,031 | 1,460,000 | 490,800 | 490,000 | 821,462 | 12,615,000 | 20,313,437 | 32,928,437 | 31,025,969 |
| 19-20 | 5,305,000 | 4,717,262 | 525,000 | 1,079,688 | 475,000 | 522,031 | 1,525,000 | 417,800 | 515,000 | 796,963 | 13,180,000 | 19,776,753 | 32,956,753 | 31,076,907 |
| 20-21 | 5,460,000 | 4,452,012 | 525,000 | 1,063,938 | 475,000 | 512,531 | 1,605,000 | 341,550 | 540,000 | 771,212 | 13,725,000 | 19,220,382 | 32,945,382 | 31,088,888 |
| 21-22 | 5,675,000 | 4,179,012 | 550,000 | 1,042,938 | 500,000 | 488,781 | 1,685,000 | 261,300 | 570,000 | 744,213 | 14,345,000 | 18,576,278 | 32,921,278 | 31,088,866 |
| 22-23 | 6,005,000 | 3,895,262 | 575,000 | 1,020,936 | 525,000 | 463,781 | 1,775,000 | 177,050 | 600,000 | 715,712 | 14,990,000 | 17,901,135 | 32,891,135 | 31,086,211 |
| 23-24 | 3,720,000 | 3,595,012 | 600,000 | 997,938 | 550,000 | 437,531 | 595,000 | 88,300 | 630,000 | 685,713 | 15,695,000 | 17,203,888 | 32,898,888 | 31,123,486 |
| 24-25 | 3,785,000 | 3,483,412 | 625,000 | 973,938 | 575,000 | 421,031 | 615,000 | 70,450 | 660,000 | 654,212 | 16,250,000 | 16,647,312 | 32,897,312 | 31,155,904 |
| 25-26 | 1,425,000 | 3,369,864 | 650,000 | 955,188 | 575,000 | 409,531 | 640,000 | 52,000 | 690,000 | 621,213 | 14,660,000 | 16,081,390 | 30,741,390 | 29,036,496 |
| 26-27 | 1,490,000 | 3,323,550 | 675,000 | 935,688 | 600,000 | 398,031 | 660,000 | 26,400 | 715,000 | 600,512 | 15,275,000 | 15,552,088 | 30,827,088 | 29,167,830 |
| 27-28 | 1,405,000 | 3,271,400 | 700,000 | 915,438 | 600,000 | 386,032 | | | 725,000 | 586,213 | 15,915,000 | 14,991,340 | 30,906,340 | 29,296,870 |
| 28-29 | 1,450,000 | 3,222,226 | 725,000 | 887,438 | 625,000 | 374,032 | | | 745,000 | 570,806 | 16,510,000 | 14,402,297 | 30,912,297 | 29,356,061 |
| 29-30 | 1,455,000 | 3,178,726 | 775,000 | 858,438 | 625,000 | 361,532 | | | 760,000 | 553,112 | 17,255,000 | 13,812,190 | 31,067,190 | 29,566,748 |
| 30-31 | 1,515,000 | 3,135,076 | 800,000 | 827,436 | 650,000 | 348,250 | | | 785,000 | 530,313 | 17,875,000 | 13,203,282 | 31,078,282 | 29,636,194 |
| 31-32 | 1,520,000 | 3,089,626 | 825,000 | 795,436 | 675,000 | 333,625 | | | 805,000 | 506,762 | 18,490,000 | 12,566,406 | 31,056,406 | 29,676,794 |
| 32-33 | 1,580,000 | 3,042,125 | 850,000 | 762,436 | 675,000 | 318,438 | | | 830,000 | 482,613 | 19,155,000 | 11,905,119 | 31,060,119 | 29,745,607 |
| 33-34 | 1,635,000 | 2,992,750 | 900,000 | 733,750 | 700,000 | 302,406 | | | 855,000 | 457,712 | 19,805,000 | 11,223,025 | 31,028,025 | 29,781,763 |
| 34-35 | 1,690,000 | 2,939,612 | 925,000 | 703,375 | 700,000 | 284,906 | | | 880,000 | 432,063 | 20,550,000 | 10,479,200 | 31,029,200 | 29,853,818 |
| 35-36 | 1,750,000 | 2,884,688 | 975,000 | 671,000 | 725,000 | 267,406 | | | 910,000 | 405,662 | 21,335,000 | 9,704,706 | 31,039,706 | 29,938,868 |
| 36-37 | 1,825,000 | 2,827,812 | 1,000,000 | 632,000 | 750,000 | 249,282 | | | 935,000 | 378,363 | 22,155,000 | 8,891,614 | 31,046,614 | 30,024,772 |
| 37-38 | 13,420,000 | 2,768,500 | 500,000 | 592,000 | 775,000 | 229,594 | | | 965,000 | 350,312 | 22,635,000 | 8,045,450 | 30,680,450 | 29,741,338 |
| 38-39 | 13,895,000 | 2,298,800 | 500,000 | 572,000 | 775,000 | 209,250 | | | 995,000 | 320,156 | 23,440,000 | 7,165,450 | 30,605,450 | 29,752,806 |
| 39-40 | 14,480,000 | 1,743,000 | 500,000 | 552,000 | 800,000 | 186,000 | | | 1,025,000 | 289,063 | 24,355,000 | 6,182,957 | 30,537,957 | 29,775,517 |
| 40-41 | 15,130,000 | 1,236,200 | 1,100,000 | 532,000 | 825,000 | 162,000 | | | 1,055,000 | 257,032 | 22,060,000 | 5,234,101 | 27,294,101 | 26,625,601 |
| 41-42 | 15,775,000 | 631,000 | 1,150,000 | 488,000 | 850,000 | 137,250 | | | 1,090,000 | 224,062 | 22,990,000 | 4,401,337 | 27,391,337 | 26,722,837 |
| 42-43 | | | 1,200,000 | 442,000 | 875,000 | 111,750 | | | 1,125,000 | 190,000 | 17,525,000 | 3,532,450 | 21,057,450 | 20,388,950 |
| 43-44 | | | 1,250,000 | 394,000 | 900,000 | 85,500 | | | 1,160,000 | 154,844 | 17,810,000 | 2,634,194 | 20,444,194 | 20,003,194 |
| 44-45 | | | 1,300,000 | 344,000 | 950,000 | 58,500 | | | 1,195,000 | 118,594 | 18,145,000 | 1,746,494 | 19,891,494 | 19,670,994 |
| 45-46 | | | 1,350,000 | 292,000 | 1,000,000 | 30,000 | | | 1,230,000 | 81,250 | 8,505,000 | 847,850 | 9,352,850 | 9,352,850 |
| 46-47 | | | 1,400,000 | 238,000 | | | | | 1,270,000 | 41,275 | 7,820,000 | 565,800 | 8,385,800 | 8,385,800 |
| 47-48 | | | 1,450,000 | 182,000 | | | | | | | 3,050,000 | 303,175 | 3,353,175 | 3,353,175 |
| 48-49 | | | 1,525,000 | 124,000 | | | | | | | 3,200,000 | 185,975 | 3,385,975 | 3,385,975 |
| 49-50 | | | 1,575,000 | 63,000 | | | | | | | 1,575,000 | 63,000 | 1,638,000 | 1,638,000 |
| Total | \$ 126,400,000 | \$ 75,244,689 | \$ 28,500,000 | \$ 21,776,687 | \$ 19,200,000 | \$ 8,620,032 | \$ 10,560,000 | \$ 1,925,650 | \$ 24,750,000 | \$ 13,341,419 | \$ 512,890,000 | \$ 323,360,075 | \$ 836,250,075 | \$ 801,525,089 |

*Series 2010 and 2010c bonds were issued as federally taxable Build America Bonds. KUB will receive a 35 percent interest rebate payment from the United States Government for each interest payment. Effective October 1, 2017 these bonds became subject to a 6.6% 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.

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Wastewater Division
Supplemental Information – Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 3

| Rate Class | Base Charge | Number of Customers |
|-------------------------------------|---|---------------------|
| Residential Inside City rate | For wastewater service furnished to premises entirely within the corporate limits of the City of Knoxville: | 55,368 |
| | Commodity Charge | |
| | First 2 100 Cubic Feet Per Month at \$1.05 Per 100 Cubic Feet | |
| | Over 2 100 Cubic Feet Per Month at \$8.70 Per 100 Cubic Feet | |
| | Additional Monthly Customer Charge | |
| | 5/8" meter \$ 31.30 | |
| | 1" meter 46.30 | |
| | 1 1/2" meter 58.30 | |
| | 2" meter 78.30 | |
| Non-Residential Inside City rate | For wastewater service furnished to premises entirely within the corporate limits of the City of Knoxville: | 7,543 |
| | Commodity Charge | |
| | First 2 100 Cubic Feet Per Month at \$0.90 Per 100 Cubic Feet | |
| | Next 8 100 Cubic Feet Per Month at \$11.65 Per 100 Cubic Feet | |
| | Next 90 100 Cubic Feet Per Month at \$10.40 Per 100 Cubic Feet | |
| | Next 300 100 Cubic Feet Per Month at \$8.95 Per 100 Cubic Feet | |
| | Next 4,600 100 Cubic Feet Per Month at \$7.25 Per 100 Cubic Feet | |
| | Next 5,000 100 Cubic Feet Per Month at \$4.30 Per 100 Cubic Feet | |
| | Additional Monthly Customer Charge | |
| | 5/8" meter \$ 31.30 | |
| | 1" meter 46.30 | |
| | 1 1/2" meter 58.30 | |
| | 2" meter 78.30 | |
| | 3" meter 145.00 | |
| | 4" meter 237.00 | |
| | 6" meter 505.00 | |
| | 8" meter 878.00 | |
| | 10" meter 1,331.00 | |
| | 12" meter 1,960.00 | |

See accompanying Report of Independent Auditors on Supplemental Information.

Knoxville Utilities Board Wastewater Division
Supplemental Information – Schedule of Current Rates in Force
June 30, 2018
(Unaudited)

Schedule 3

| Rate Class | Base Charge | Number of Customers |
|--------------------------------------|--|---------------------|
| Residential Outside City rate | For wastewater service furnished to premises entirely or partly outside the corporate limits of the City of Knoxville: Commodity Charge First 2 100 Cubic Feet Per Month at \$1.20 Per 100 Cubic Feet Over 2 100 Cubic Feet Per Month at \$9.30 Per 100 Cubic Feet Additional Monthly Customer Charge 5/8" meter \$ 35.30 1" meter 49.30 1 1/2" meter 66.30 2" meter 86.30 | 8,032 |
| Non-Residential Outside City rate | For wastewater service furnished to premises entirely or partly outside the corporate limits of the City of Knoxville: Commodity Charge First 2 100 Cubic Feet Per Month at \$1.05 Per 100 Cubic Feet Next 8 100 Cubic Feet Per Month at \$12.85 Per 100 Cubic Feet Next 90 100 Cubic Feet Per Month at \$11.40 Per 100 Cubic Feet Next 300 100 Cubic Feet Per Month at \$9.75 Per 100 Cubic Feet Next 4,600 100 Cubic Feet Per Month at \$8.15 Per 100 Cubic Feet Next 5,000 100 Cubic Feet Per Month at \$4.80 Per 100 Cubic Feet Additional Monthly Customer Charge 5/8" meter \$ 35.30 1" meter 49.30 1 1/2" meter 66.30 2" meter 86.30 3" meter 164.00 4" meter 262.00 6" meter 555.00 8" meter 966.00 10" meter 1,459.00 12" meter 2,153.00 | 299 |

See accompanying Report of Independent Auditors on Supplemental Information.



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
Wastewater Division of the 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 Wastewater Division (the Division) of the Knoxville Utilities Board, 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 the Division'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 the Division'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 the Division's internal control. Accordingly, we do not express an opinion on the effectiveness of the Division'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 the Division'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
Wastewater Division of the Knoxville Utilities Board
Knoxville, Tennessee

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Division'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 the Division's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Division's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Coulter & Justus, P.C.

Knoxville, Tennessee
October 25, 2018