

# **Consolidated**

# Financial Statements and Supplemental Information June 30, 2016 and 2015

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#### Report of Independent Auditors

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, 2016 and 2015, 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**

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, 2016 and 2015, 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.



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 26 and the required supplementary information on pages 62 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 KUB's basic financial statements. The schedule of insurance in force 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 presented for purposes of additional analysis as required by Title 2 U.S. *Code of Federal Regulations* (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* and the State of Tennessee Comptroller of the Treasury Office and is also 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 relate 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 schedule of insurance in force has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express and 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 27, 2016, 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 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 internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering KUB's internal control over financial reporting and compliance.

Coulter & Justus, P.C.

Knoxville 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, 2016 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, 2016, KUB served 451,896 customers. KUB added 3,951 new customers in fiscal year 2016, 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 1.82 hours of service interruption for the average customer in fiscal year 2016. The natural gas system's peak demand occurred February 2015 at 136,356 dekatherms.

The second of three annual rate increases for each Division previously adopted by the KUB Board of Commissioners went into effect in fiscal year 2016. These rate increases provide additional revenue to help fund each system's respective Century II infrastructure program.

KUB's electric system was impacted by an ice storm event in February 2015 that resulted in a cost of \$2 million to the system. KUB received \$1.6 million in reimbursements in fiscal year 2016 from the Federal Emergency Management Agency (FEMA) to offset the cost of the 2015 event.

KUB's electric system was awarded the 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 energy sales in fiscal year 2016 were impacted by the second mildest winter in Knoxville over the last forty years. Natural gas sales dropped approximately 10 percent from the prior year and electric sales volumes declined approximately 3 percent.

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 2015 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 was awarded a Platinum award for continued outstanding compliance performance over multiple years. Kuwahee and Loves Creek wastewater treatment plants won Gold Awards for having no permit violations in 2015 and the Fourth Creek wastewater treatment plant was awarded Silver for having only one permit violation in 2015.

KUB continued to maintain certification with the National Biosolids Partnership following a rigorous review process and independent audit that was conducted in December 2015. (Biosolids are nutrient-rich organic matter produced by wastewater treatment that can be recycled as fertilizer).

#### **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 of Commissioners endorsed ten year funding plans for the electric and water systems, which include 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 funding approach for Century II to include the natural gas and wastewater systems. The Board formally endorsed and adopted by resolution, ten year funding plans for the natural gas and wastewater systems, which include 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 proposed three annual rate increases for all KUB Divisions, of which the first and second rate increases have gone into effect. The remaining electric rate increase will generate \$5.2 million in additional annual revenue, while the gas rate increase will generate \$1.8 million in additional annual revenue. The remaining water rate increase will produce \$2 million in additional annual revenue and wastewater will produce \$4.7 million of additional annual sales revenues.

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.

KUB is in the process of implementing a 15-year initiative to ensure KUB will continue to provide high-quality, reliable water service to its 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 \$120 million in various redundant facilities at 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. 2,208 poles and 13.3 miles of underground electric cable were replaced for the electric system. 4.2 miles

of cast iron/ductile iron gas main were replaced for the natural gas system. 14.3 miles of galvanized water main and 7.2 miles of cast iron water main were replaced for the water system. 28 miles of wastewater system main were rehabilitated or replaced.

The natural gas 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 will provide 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.

#### **Consent Decree**

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

The Consent Decree also required KUB to perform an evaluation of the wet weather performance and capacity of its wastewater treatment plants. In July 2007, KUB submitted a Composite Correction Plan (CCP) for its wastewater treatment plants to EPA for review. The development and filing of the CCP was a requirement of the federal order of February 2005. The CCP includes recommended improvements to KUB's Kuwahee and Fourth Creek treatment plants to address wet weather capacity issues noted in prior assessments. The EPA approved the CCP in January 2009 including a recommended schedule of plant improvements that extends beyond the expiration date of the original Consent Decree. An amendment to the Consent Decree incorporating and establishing this schedule was agreed to by all parties and was entered on June 23, 2009. The purpose of the Amendment is to allow KUB to complete a portion of work outlined in the CCP after the Consent Decree deadline of June 30, 2016. The CCP provides for a biologically enhanced high-rate clarification (the BEHRC) secondary treatment system to be installed at the Fourth Creek treatment plant by June 30, 2018 and at the Kuwahee treatment plant by June 30, 2021. The total cost of such improvements is estimated to be approximately \$120 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, 2016, the Wastewater Division had issued \$485 million in bonds to fund system capital improvements since the inception of the Consent Decree. The Board previously 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, and three 6 percent rate increases effective October 2014, October 2015 and October 2016. 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 99.5% of manholes and gravity mains, smoke testing 99.9% of 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 334.9 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 82 percent reduction in SSOs.

As of June 30, 2016, the Wastewater Division had completed its twelfth full year under the Consent Decree, spending \$529.5 million on capital investments to meet Consent Decree requirements. During fiscal year 2016, the Wastewater Division incurred \$37.3 million in total expenditures related to Consent Decree requirements, including \$3.3 million for operating costs and \$34 million in capital improvements which included the rehabilitation or replacement of 28 miles of wastewater main. During the fiscal year, \$26.5 million was spent on sewer mini-basin rehabilitation and replacement. Trunk line rehabilitation and replacement accounted for \$2 million of capital expenditures, while pump station improvements accounted for \$4.6 million.

### **Financial Highlights**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

KUB's consolidated net position increased \$34 million. This increase was \$2 million less than the prior year's change in net position. A restatement to the fiscal year 2014's net position based on a change in method of accounting for the pension reduced the total net position by \$0.8 million during fiscal year 2015. This change resulted in a net increase of \$35.2 million or 3.9 percent in KUB's consolidated net position in fiscal year 2015.

Operating revenue decreased \$30.3 million or 4 percent, the result of lower electric and natural gas sales volumes offset in part by additional revenues from system rate increases and a modest increase in billed water sales and wastewater volumes. Purchased energy expense (power and natural gas) decreased \$39.9 million or 8.3 percent, the combined effect of \$17.4 million decrease in purchased power and a decrease of \$22.5 million in purchased gas. Margin from sales (operating revenue less purchased energy expense) was up \$9.5 million or 3.3 percent compared with the prior fiscal year.

Operating expenses (excluding purchased power and purchased gas expense) increased \$9.6 million, or 4.5 percent. Operating and maintenance (O&M) expenses were \$1.2 million or one percent higher than the previous year. Depreciation expense increased \$6.7 million or 10.8 percent. Taxes and tax equivalents increased \$1.8 million or 6 percent, reflecting higher plant in service levels.

Interest income was \$0.5 million more than the prior fiscal year. Interest expense increased \$1.2 million or 3.1 percent, reflecting interest costs on revenue bonds issued during fiscal year 2015 to fund system capital improvements.

Capital contributions increased \$0.6 million, the result of more contributed assets from developers.

Total plant assets (net) increased \$92 million or 5.6 percent over the last fiscal year.

Long-term debt represented 50.4 percent of KUB's consolidated capital structure, compared to 52 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 2015 Compared to Fiscal Year 2014

KUB's consolidated net position increased \$36 million. This increase was \$6.2 million greater than the prior year's change in net position. A restatement to the prior fiscal year's net position based on a change in method of accounting for the pension reduced the total net position by \$0.8 million during fiscal year 2015. This change resulted in a net increase of \$35.2 million or 3.9 percent in KUB's consolidated net position.

Operating revenue increased \$12 million or 1.6 percent, the result of additional revenue from electric, gas, water, and wastewater rate increases and modest increases in natural gas, water, and wastewater

sales volumes. Purchased energy expense (power and natural gas) decreased \$4.9 million or 1 percent, the net effect of \$0.7 million increase in purchased power and a decrease of \$5.6 million in purchased gas. Margin from sales (operating revenue less purchased energy expense) was up \$16.9 million or 6.3 percent compared with the prior fiscal year.

Operating expenses (excluding purchased power and purchased gas expense) increased \$12 million, or 5.9 percent. Operating and maintenance (O&M) expenses were \$3.6 million or 3 percent higher than the previous year. Depreciation expense increased \$5.8 million or 10.4 percent. Taxes and tax equivalents increased \$2.6 million or 9.4 percent, reflecting higher plant in service levels and a property tax increase by the City of Knoxville.

Interest income was consistent with the prior fiscal year. Interest expense increased \$0.9 million or 2.5 percent, reflecting interest costs on \$163 million in revenue bonds issued during the fiscal year to fund system capital improvements.

Capital contributions decreased \$0.1 million, the result of less contributed assets from developers.

Total plant assets (net) increased \$102.3 million or 6.6 percent over the last fiscal year.

KUB sold six series of revenue bonds during fiscal year 2015 for the purpose of funding capital improvements totaling \$163 million. The \$85 million bond issue in April 2015 was accelerated to take advantage of the low interest rate environment which impacted the debt ratio and debt service coverage levels for fiscal year 2015. Long-term debt represented 52 percent of KUB's capital structure, compared to 49.2 percent last year. Capital structure equals long-term debt (including the current and long-term portion of revenue bonds and notes), plus net position.

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#### **Knoxville Utilities Board Consolidated Financial Statements**

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

#### **Statement of Net Position**

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

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

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

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

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

### Statement of Revenues, Expenses and Changes in Net Position

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

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

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

#### Statement of Cash Flows

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

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

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

#### **Condensed Financial Statements**

#### **Statement of Net Position**

The following table reflects the condensed consolidated Statement of Net Position for KUB compared to the prior year and the year preceding the prior year.

# Statements of Net Position As of June 30

(in thousands of dollars)		2016		2015	2014
Current, restricted and other assets Capital assets, net Deferred outflows of resources Total assets and deferred outflows of resources	\$	318,650 1,743,105 34,235 2,095,990	\$	413,061 1,651,147 28,388 2,092,596	\$ 347,698 1,548,874 12,252 1,908,824
Current and other liabilities Long-term debt outstanding Deferred inflows of resources Total liabilities and deferred inflows of resources	·	159,519 972,366 1,512 1,133,397	-	152,535 1,005,062 6,378 1,163,975	161,523 853,887 - 1,015,410
Net position Net investment in capital assets Restricted Unrestricted Total net position	\$	772,012 16,201 174,380 962,593	\$	650,464 14,892 263,265 928,621	\$ 688,374 13,163 191,877 893,414

#### **Normal Impacts on Statement of Net Position**

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

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

#### **Impacts and Analysis**

#### **Current, Restricted and Other Assets**

## Fiscal Year 2016 Compared to Fiscal Year 2015

Current, restricted and other assets decreased \$94.4 million or 22.9 percent. The decrease was primarily attributable to the utilization of \$46.1 million in bond proceeds to fund system capital projects. General fund cash (including cash and cash equivalents, short-term investments, and long-term investments) decreased \$45.9 million. The net pension asset decreased \$6 million due to the recognition of a net pension liability of \$5 million during fiscal year 2016. Accounts receivable decreased \$4.9 million. Gas storage decreased \$1.4 million, reflecting lower commodity prices for natural gas for slightly higher storage volumes compared to the prior fiscal year.

These decreases were offset by an increase in inventories of \$2.1 million and an increase of \$4.6 million in operating contingency reserves. KUB under recovered its wholesale gas costs by \$2.2 million in fiscal year 2016 compared to a \$1.1 million over recovery in fiscal year 2015. The under recovery of costs will be collected from customers next fiscal year through adjustments to rates via the Purchased Gas Adjustment. Another offset to the decrease 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 \$0.5 million over recovery in fiscal year 2015. This under recovery of costs will be collected from customers next fiscal year through adjustments to rates via the Purchased Power Adjustment.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Current, restricted and other assets increased \$65.4 million or 18.8 percent. The increase was primarily attributable to a \$45 million increase in unused bond proceeds. General fund cash (including cash and cash equivalents, short-term investments, and long-term investments) increased \$11.8 million. Operating contingency reserves increased \$7.8 million. Due to the adoption of a new accounting standard, GASB 68 (See Notes to the Financial Statements), the net pension asset increased \$6 million. These increases were partially offset by a \$3.5 million decline in other assets, \$1.1 million decrease in prepaid expenses, a \$0.8 million decrease in gas in storage, and a decrease in inventories of \$0.7 million.

#### **Capital Assets**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Capital assets (net) increased \$92 million or 5.6 percent. Major capital expenditures (reflected in both plant additions and work in progress) in fiscal year 2016 included \$32.6 million related to wastewater Century II projects, \$25.1 million for various electric distribution system improvements, \$15.1 million for installation of new gas main and service extensions, \$13.5 million for main replacement for the water system, \$8.4 million for upgrades to various information systems, \$8.4 million for utility asset replacements and relocations to accommodate Tennessee Department of Transportation (TDOT) highway improvement projects and \$7.5 million for water plant and system improvements.

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#### Fiscal Year 2015 Compared to Fiscal Year 2014

Capital assets (net) increased \$102.3 million or 6.6 percent. Major plant expenditures (reflected in both plant additions and work in progress) during fiscal year 2015 included \$28.7 million for various electric distribution system improvements, \$25.3 million for Century II projects for the wastewater collection system, \$12.5 million for water main replacement, \$8.4 million for information system upgrades, \$7.8 million for water plant and system improvements, \$6 million for gas main replacement and \$6 million for pole replacements for the electric system.

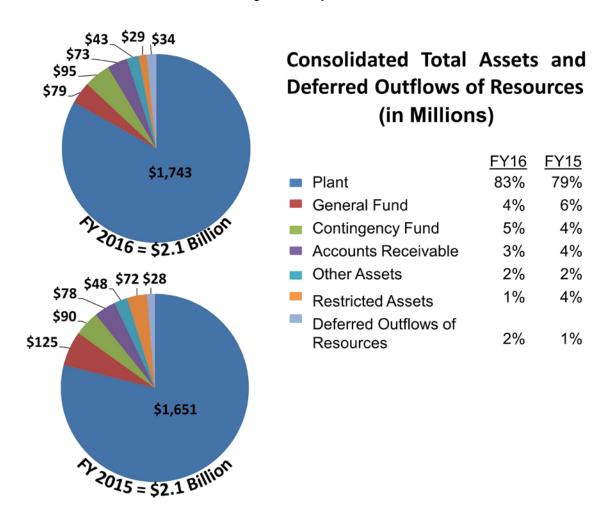
#### **Deferred Outflows of Resources**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Deferred outflows of resources increased \$5.8 million compared to the prior year, reflecting an increase in pension outflow of \$7.2 million and a \$1.4 million decrease in unamortized bonds refunding costs when compared to the prior fiscal year.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Deferred outflows of resources increased \$16.1 million compared to the prior year, reflecting amortization of deferred losses on bonds refunded during the fiscal year.



#### **Current and Other Liabilities**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Current and other liabilities increased \$7 million or 4.6 percent. This was primarily due to an actuarially determined net pension obligation of \$5 million recognized during fiscal year 2016. The current portion of revenue bonds increased \$1.2 million and accrued interest on revenue bonds increased \$1.5 million. Accrued expenses were \$1.9 million higher than the prior fiscal year.

The increases were offset by the reductions to the over recovered purchased power cost and over recovered purchased gas cost liabilities of \$0.5 million and \$1.1 million, respectively. The over recoveries of cost were flowed back to KUB's electric and gas customers during fiscal year 2016 through adjustments to rates via the Purchased Power Adjustment and Purchased Gas Adjustment.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Current and other liabilities decreased \$9 million or 5.6 percent. KUB over recovered \$1.1 million in wholesale gas costs from its customers in fiscal year 2015, as compared to a \$1.3 million over recovery in fiscal year 2014. Over recovery of purchased power expenses decreased \$3.9 million in fiscal year 2015. The over recovery of purchased power and gas costs will be refunded to KUB's electric and gas customers through future adjustments to electric and gas rates via the Purchased Power Adjustment and Purchased Gas Adjustment, respectively. Accrued expenses decreased \$7.5 million and accounts payable decreased \$2.5 million. This decrease was partially offset by an increase in the current portion of debt related to bonds of \$4.1 million.

#### **Long-term Debt**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Long-term debt decreased \$32.7 million or 3.3 percent. The decrease was primarily due to \$31.1 million of long-term bond debt that shifted to current liabilities as payable within the next year. During the fiscal year, \$29.8 million of bond debt was repaid.

### Fiscal Year 2015 Compared to Fiscal Year 2014

Long-term debt increased \$151.2 million or 17.7 percent. During the fiscal year, \$26.2 million of bond debt was repaid. During the fiscal year, KUB issued \$163 million in revenue bonds to fund capital improvements for the electric, water and wastewater systems. The increase was partially offset by the scheduled repayment of bond debt.

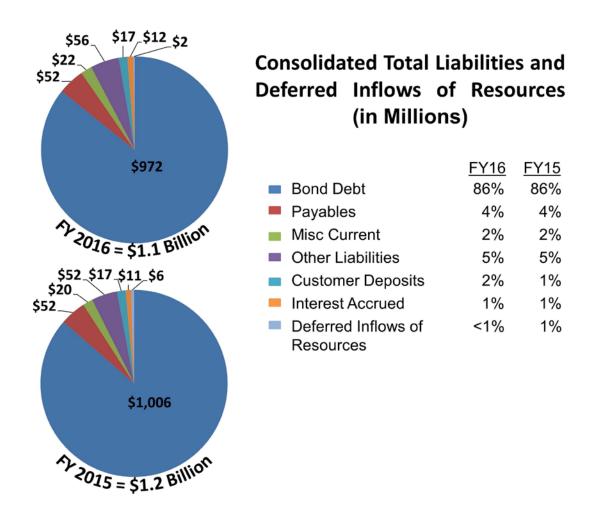
#### **Deferred Inflows of Resources**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Deferred inflows decreased \$4.9 million compared to the prior fiscal year due to differences in pension inflows.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Deferred inflows increased \$6.4 million compared to the prior fiscal year due to the addition of pension inflow.



#### **Net Position**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Net position increased by \$34 million in fiscal year 2016. Net investment in capital assets increased \$121.5 million or 18.7 percent, the result of net capital assets increasing \$92 million and a \$32.7 million decrease in long term debt. Restricted net position increased \$1.3 million compared to the prior year. Unrestricted net position decreased \$88.9 million or 33.8 percent compared to the previous fiscal year, reflecting a decrease in unused bond proceeds and general fund cash.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Net position increased by \$35.2 million in fiscal year 2015. Net investment in capital assets decreased \$37.9 million or 5.5 percent, the net result of net capital assets increasing \$102.3 million offset by the \$137.4 million increase in long term debt from new bond issuances. Restricted net position increased \$1.7 million compared to the prior year. Unrestricted net position increased \$71.4 million or 37.2 percent compared to the previous fiscal year, reflecting increased unused bond proceeds and general fund cash.

### 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 year and the year preceding the prior year.

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

(in thousands of dollars)		2016		2015		2014
Operating revenues	\$	733,362	\$	763,704	\$	751,710
Less: Purchased energy expense		439,301		479,166		484,074
Margin from sales	•	294,061		284,538		267,636
Operating expenses	•					
Treatment		16,618		15,319		14,038
Distribution and collection		59,536		62,319		60,100
Customer service		13,893		13,725		12,607
Administrative and general		33,239		30,741		31,747
Depreciation		68,370		61,708		55,885
Taxes and tax equivalents	_	31,440	_	29,649	_	27,097
Total operating expenses	_	223,096		213,461		201,474
Operating income	_	70,965		71,077	-	66,162
Interest income		1,388		917		852
Interest expense		(39,143)		(37,968)		(37,033)
Other income/(expense)		(408)		1,340		(948)
Change in net position before capital contributions		32,802		35,366		29,033
Capital contributions	_	1,170		606		736
Change in net position	\$	33,972	\$	35,972	\$	29,769

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

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

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

- Interest income is impacted by level of interest rates and investments.
- Interest expense on debt is impacted by level of outstanding debt and the interest rate(s) on the outstanding debt.
- Other income/(expenses) is impacted by miscellaneous non-operating revenues and expenses.
- Capital contributions are impacted by a donation of facilities/infrastructure to KUB by developers and governmental agencies. The contributions are recognized as revenue and recorded as plant in service based on the fair market value of the asset(s).

#### **Impacts and Analysis**

### **Change in Net Position**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

KUB's consolidated net position increased \$34 million. This increase was \$2 million less than the prior year's change in net position. A restatement to the fiscal year 2014's net position based on a change in method of accounting for pension expense reduced the total net position by \$0.8 million during fiscal year 2015.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

KUB's consolidated net position increased \$36 million. This increase was \$6.2 million greater than the prior year's change in net position. A restatement to the prior fiscal year's net position based on a change in method of accounting for pension expense reduced the total net position by \$0.8 million during fiscal year 2015. This change resulted in a net increase of \$35.2 million or 3.9 percent in KUB's consolidated net position.

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#### **Margin from Sales**

### Fiscal Year 2016 Compared to Fiscal Year 2015

Operating revenue was \$30.3 million or 4 percent lower than the previous fiscal year. Sales in both the Electric and Gas Divisions were impacted by the second mildest winter in the last forty years. Electric Division operating revenue decreased \$12.2 million due to the net effect of additional revenue from KUB's one percent electric rate increase, a 3.1 percent decline in total power sales, 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 decreased \$25.7 million for the fiscal year, the net result of 10.2 percent lower billed sales due to the warmer winter, lower purchased gas commodity prices flowed through to customer rates and additional revenue generated from rate increases. Water Division revenue increased \$3.1 million, the result of additional revenue from the water rate increases and a 0.8 percent increase in water sales volumes. Wastewater Division revenue was \$4.4 million higher than the previous year due to additional revenue from wastewater rate increases, as well as a 1.1 percent increase in wastewater billed volumes.

Wholesale energy expense decreased \$39.9 million or 8.3 percent. Purchased power expense decreased \$17.4 million compared to last year, due to lower customer demand. Purchased gas expense was \$22.5 million lower due to less customer demand and reduced commodity prices for natural gas during the fiscal year.

Margin from sales (operating revenue less purchased energy expense) increased \$9.5 million compared to the previous year. The increase reflects additional revenue from the electric, natural gas, water, and wastewater rate increases offset by lower electric and natural gas sales volumes.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Operating revenue was \$12 million or 1.6 percent higher than the previous fiscal year. Electric Division operating revenue increased \$5.9 million, the net result of additional revenue from KUB's electric rate increases, the flow through of TVA rate adjustments and the flow through of prior year over recovered purchased power costs. Gas Division revenue decreased \$3 million for the fiscal year, the net result of additional revenue from rate increases effective October 2013 and October 2014 and the flow through of lower wholesale gas commodity costs. Water Division revenue increased \$4.8 million, the result of additional revenue from water rate increases and a 1.6 percent increase in water sales volumes. Wastewater Division revenue was \$4.3 million higher than the previous year due to additional revenue from the wastewater rate increase effective October 2014 and a 0.9 percent increase in wastewater billed sales volumes.

Wholesale energy expense decreased \$4.9 million or 1 percent. Purchased power expense increased \$0.7 million compared to last year, the net effect of a 1.5 percent increase to wholesale rate from TVA, coupled with decreased fuel costs. Purchased gas expense was \$5.6 million lower, due to lower commodity costs.

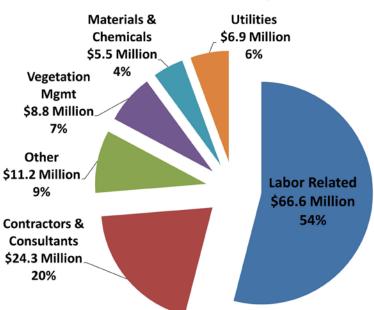
Margin from sales (operating revenue less purchased energy expense) increased \$16.9 million compared to the previous year. The increase reflects a higher level of gas sales volumes and additional revenue from the electric, gas, water, and wastewater rate increases.

### **Operating Expenses**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Operating expenses (excluding wholesale purchased energy expense) increased \$9.6 million or 4.5 percent compared to fiscal year 2015. 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 \$1.3 million or 8.5 percent higher than the prior year, reflecting higher labor related expenses for the water and wastewater system and increased outside contractor expenses for the wastewater system.
- Distribution and collection expenses decreased \$2.8 million or 4.5 percent, primarily due to reduced use of outside contractors and consultants offset by increased labor related expenses.
- Customer service expenses rose \$0.2 million or 1.2 percent.
- Administrative and general expenses increased \$2.5 million or 8.1 percent, primarily due to an increase in pension expense.



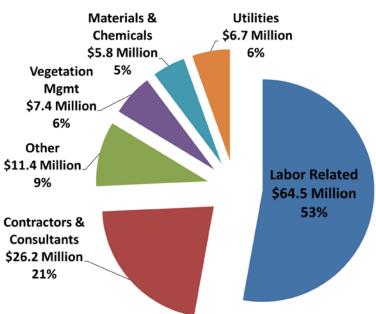
FY 2016 Consolidated O&M Expense = \$123.3 Million

 Depreciation expense increased \$6.7 million or 10.8 percent. KUB added \$94.5 million in assets during fiscal year 2015. A full year of depreciation expense was recorded on these capital investments and a partial year of depreciation expense was incurred on \$213.7 million in assets placed in service during fiscal year 2016. Taxes and tax equivalents increased \$1.8 million or 6 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 sales.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Operating expenses (excluding wholesale purchased energy expense) increased \$12 million or 5.9 percent compared to fiscal year 2014. 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 \$1.3 million or 9.1 percent higher than the prior year, reflecting an increase in consultant and contractor expenses for the water and wastewater systems.
- Distribution and collection expenses increased \$2.2 million or 3.7 percent, primarily the result of restoration expenses related to the February 2015 ice storm, higher labor related expenses, vegetation management expenses, and outside consultant expenses.
- Customer service expenses rose \$1.1 million or 8.9 percent, due to an increase in computer software expenses and consultant expense during the fiscal year.
- Administrative and general expenses decreased \$1 million or 3.2 percent, primarily due to a decrease in pension expense.

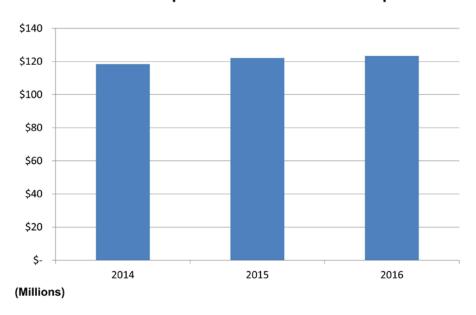


# FY 2015 Consolidated O&M Expense = \$122.1 Million

Depreciation expense increased \$5.8 million or 10.4 percent. KUB added \$174 million in assets during fiscal year 2014. A full year of depreciation expense was recorded on these capital investments during fiscal year 2014 and a partial year of depreciation expense was incurred on \$94.5 million in assets placed in service during fiscal year 2015.

Taxes and tax equivalents increased \$2.6 million or 9.4 percent. 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 sales. The City of Knoxville's property tax rate increased this year and higher plant in service and margin levels both contributed to the growth in tax equivalent payments.

## **Consolidated Operation & Maintenance Expense**



#### Other Income and Expense

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Contributions in aid of construction increased \$7.4 million compared to the prior fiscal year. This was primarily due to a \$4 million contribution from the University of Tennessee, representing the remaining portion of the University's contribution for the natural gas South Loop project.

Interest income increased \$0.5 million compared to the prior fiscal year.

Interest expense increased \$1.2 million or 3.1 percent, reflecting interest expense from bonds issued in fiscal year 2015.

Other income (net) decreased \$1.7 million. Reimbursements of \$1.6 million were recognized as non-operating income in fiscal year 2015 for the February 2015 ice storm. KUB recorded a \$0.8 million loss on disposition of assets in fiscal year 2016 compared to a \$0.1 million loss in fiscal year 2015.

Capital contributions by developers were \$0.6 million higher than last fiscal year.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Contributions in aid of construction decreased \$4.6 million compared to the prior fiscal year. This was due to a \$3.9 million contribution from the University of Tennessee during the prior fiscal year, representing a portion of the University's contribution for the South Loop project, a new gas transmission main. The

South Loop project will provide additional capacity to meet the University's increased natural gas demand in the future.

Interest income was consistent with the prior fiscal year.

Interest expense increased \$0.9 million or 2.5 percent, reflecting interest expense on \$78 million in bonds issued in August 2014, and \$85 million in bonds issued in April 2015.

Other income (net) increased \$2.3 million, primarily due to \$1.6 million in non-operating income from the accrual of the expected reimbursement of electric system restoration expenses related to the February 2015 ice storm. The loss on disposal of property decreased \$0.5 million compared to the prior fiscal year.

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

### **Capital Assets**

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

(in thousands of dollars)

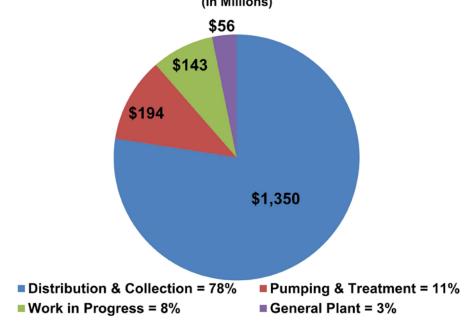
	2016		2015		2014
Production Plant (Intakes)	\$ 58	\$	62	\$	76
Pumping and Treatment Plant	194,450		174,660		177,256
Distribution and Collection Plant					
Mains and metering	\$ 755,850	\$	685,480	\$	670,953
Services and meters	92,121		89,086		85,654
Electric station equipment	56,487		34,643		32,797
Poles, towers and fixtures	104,867		93,780		84,332
Overhead conductors	84,937		79,199		73,663
Line transformers	59,587		56,774		55,600
Other accounts	195,751	_	192,417	_	191,564
<b>Total Distribution &amp; Collection Plant</b>	\$ 1,349,600	\$	1,231,379	\$	1,194,563
General Plant	55,791	_	51,234		52,149
Total Plant Assets	\$ 1,599,899	\$	1,457,335	\$	1,424,044
Work In Progress	143,206	_	193,812		124,830
Total Net Plant	\$ 1,743,105	\$	1,651,147	\$	1,548,874

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#### Fiscal Year 2016 Compared to Fiscal Year 2015

As of June 30, 2016, KUB had \$1.7 billion invested in capital assets, as reflected in the schedule of Capital Assets, which represents a net increase (including additions, retirements, and depreciation) of \$92 million or 5.6 percent over the end of the last fiscal year.

FY 2016 Consolidated Capital Assets = \$1.7 Billion (in Millions)



Major capital asset additions during the year were as follows:

- \$32.6 million related to wastewater Century II projects
  - \$15.8 million for sewer mini-basin rehabilitation and replacement
  - \$7.7 million for sewer trunk line rehabilitation and replacement
  - \$5.3 million for pump station design and construction
  - \$3.8 million for wastewater treatment plant upgrades
- \$25.1 million for various electric distribution system improvements
- \$15.1 million for installation of new gas main and service extensions
- \$13.5 million for main replacement for the water system
- \$8.4 million for upgrades to various information systems
- \$8.4 million for replacement and relocation of utility assets to accommodate TDOT highway improvement projects
- \$7.7 million for pole replacements for the electric system
- \$7.5 million for water plant and system improvements

#### Fiscal Year 2015 Compared to Fiscal Year 2014

As of June 30, 2015, KUB had \$1.7 billion invested in capital assets, as reflected in the schedule of Capital Assets, which represents a net increase (including additions, retirements, and depreciation) of \$102.3 million or 6.6 percent over the end of the last fiscal year.

FY 2015 Consolidated Capital Assets = \$1.7 Billion (in Millions)

\$51

\$1,231

Distribution & Collection = 74%

Work in Progress = 12%

■ General Plant = 3%

Major capital asset additions during the year were as follows:

■ Pumping & Treatment = 11%

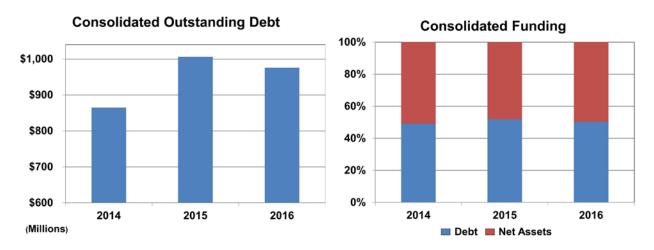
- \$28.7 million for various electric distribution system improvements
- \$25.3 million related to wastewater Century II projects
  - \$20.4 million for sewer mini-basin rehabilitation and replacement
  - \$2.6 million for pump station design and construction
  - \$1.3 million for wastewater treatment plant upgrades
  - \$1 million for sewer trunk line rehabilitation and replacement
- \$12.5 million for main replacement for the water system
- \$8.4 million for information system upgrades
- \$7.8 million for water plant and system improvements
- \$6 million for gas main replacement
- \$6 million for pole replacements for the electric system

#### **Debt Administration**

KUB's outstanding debt was \$976.4 million at June 30, 2016. No new debt was issued in fiscal year 2016. Debt as a percentage of capital structure was 50.4 percent in 2016, 52 percent in 2015 and 49.2 percent at the end of fiscal year 2014.

# Outstanding Debt As of June 30

(in thousands of dollars)		2016	2016		2014
Revenue bonds	\$	976,430	\$	1,006,260	\$ 864,740
Total outstanding debt	\$	976,430	\$	1,006,260	\$ 864,740



KUB will pay \$365.1 million in principal payments over the next ten years, representing 37.4 percent of outstanding bonds.

#### Fiscal Year 2016 Compared to Fiscal Year 2015

As of June 30, 2016, KUB had \$976.4 million in outstanding debt (including the current portion of revenue bonds) compared to \$1 billion last year, a decrease of \$29.8 million. KUB's weighted average cost of debt as of June 30, 2016 was 3.95 percent.

KUB's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2016, 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 all four Divisions Aa2.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

As of June 30, 2015, KUB had \$1 billion in outstanding debt (including the current portion of revenue bonds) compared to \$864.7 million last year, an increase of \$141.5 million. KUB's weighted average cost of debt as of June 30, 2015 was 3.95 percent.

During fiscal year 2015, \$26.2 million in bonds were repaid.

In August 2014, KUB issued \$78 million of new revenue bonds to fund capital system improvements, including \$40 million for the electric system, \$8 million for the water system and \$30 million for the wastewater system.

In April 2015, KUB issued \$85 million of new revenue bonds to fund capital system improvements, including \$35 million for the electric system, \$20 million for the water system and \$30 million for the wastewater system.

In April 2015, KUB issued \$193.2 million in revenue refunding bonds to refinance certain outstanding bonds, including \$28.6 million for the electric system, \$11.8 million for the gas system, \$23 million for the water system and \$129.8 million for the wastewater system. The refunding of certain bonds at lower interest rates will provide debt service savings of \$19.2 million over the life of the bonds

KUB's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2015, 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 all four Divisions Aa2. The Standard and Poor's water rating represented an upgrade for water system bonds and the highest credit rating available from Standard and Poor's. In the rating report on the water system bonds, Standard & Poor's stated "the upgrade is based on the water system's extremely strong financial risk profile, which we view as sustainable over time after reviewing management's long-term financial forecast."

#### **Impacts on Future Financial Position**

KUB anticipates net customer growth of 2,550 customers during fiscal year 2017.

In June 2014, the KUB Board adopted three years of rate increases for all four Divisions to help fund the ongoing Century II infrastructure programs for each system. Two of those rate increases have gone into effect.

The remaining electric rate increase will be effective July 2016. The rate increase will provide \$5.2 million in additional annual Electric Division revenue.

The remaining natural gas rate increase will be effective October 2016. The rate increase will result in \$1.8 million in additional annual Gas Division revenue.

The remaining water rate increase will be effective July 2016. The rate increase will result in additional annual Water Division revenue of \$2 million.

The remaining wastewater rate increase will be effective October 2016. The wastewater rate increase will provide additional annual revenue of \$4.7 million.

In April 2016, KUB management presented the fiscal year 2017 budget to the KUB Board of Commissioners that accommodates the projected level of capital investment for the fiscal year. Over the

course of the next ten years KUB plans to spend \$108 million dollars on Grid Modernization. In July 2016, the four-year deployment of advanced meters began.

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 \$12 million in natural gas system revenue bonds in July 2016 for the purpose of funding natural 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 \$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.

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 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."

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 long-term debt includes \$130.4 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 6.8 percent. Any future actions by Congress may also affect the anticipated rebates for future fiscal years.

GASB Statement No. 82, Pension Issues – An amendment of GASB Statements No. 67, No. 68 and No. 73 is effective for fiscal years beginning after June 15, 2016. GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, and GASB No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, are effective for periods beginning after June 15, 2017. 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 2016.

### **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, 2016 and 2015. 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, 2016 and 2015**

		2016	2015
Assets and Deferred Outflows of Resources			
Current assets:			
Cash and cash equivalents	\$	78,946,397	\$ 124,892,534
Short-term contingency fund investments		25,699,396	6,296,090
Other current assets		859,383	1,638,388
Accrued interest receivable		43,237	43,229
Accounts receivable, less allowance of uncollectible accounts		70.045.000	77 044 540
of \$805,684 in 2016 and \$720,939 in 2015		72,945,320	77,844,543
Inventories		10,524,829	8,421,065
Prepaid expenses		886,725	809,844
Gas storage	-	8,010,091	9,447,403
Total current assets	-	197,915,378	229,393,096
Restricted assets:			
Bond funds		28,935,445	26,154,107
Other funds		21,418	43,897
Unused bond proceeds		-	46,053,950
Total restricted assets		28,956,863	72,251,954
Plant in service		2,397,423,083	2,210,535,681
Less accumulated depreciation		(797,524,421)	(753,200,620)
2000 accumulated approbation	-	1,599,898,662	1,457,335,061
Retirement in progress		1,327,498	940,386
Construction in progress		141,878,991	192,871,763
Net plant in service	<u>-</u>	1,743,105,151	1,651,147,210
Other coests.			
Other assets:			6,021,629
Net pension asset		- 69,184,035	84,036,694
Long-term contingency fund investments			10,109,135
TVA conservation program receivable Under recovered purchased power cost		8,153,192 1,379,643	10,109,133
· · · · · · · · · · · · · · · · · · ·		2,178,653	-
Under recovered purchased gas cost Other		10,882,837	11,248,778
Total other assets	-	91,778,360	111,416,236
Total assets	-	2,061,755,752	2,064,208,496
Total assets	-	2,001,755,752	2,004,208,490
Deferred outflows of resources:			
Pension outflow		10,357,291	3,157,199
Unamortized bond refunding costs	_	23,877,411	25,230,799
Total deferred outflows of resources	_	34,234,702	28,387,998
Total assets and deferred outflows of resources	\$	2,095,990,454	\$ 2,092,596,494

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

# **Knoxville Utilities Board**Consolidated Statements of Net Position June 30, 2016 and 2015

		2016		2015
Liabilities, Deferred Inflows, and Net Position				
Current liabilities: Current portion of revenue bonds	\$	31,050,000	\$	29,830,000
Sales tax collections payable	Ψ	1,238,516	Ψ	1,251,145
Accounts payable		50,663,005		50,651,280
Accrued expenses		21,610,050		19,729,155
Customer deposits plus accrued interest		17,135,891		16,465,292
Accrued interest on revenue bonds		12,755,853		11,306,248
Total current liabilities		134,453,315	-	129,233,120
Other liabilities:				
TVA conservation program		8,412,853		10,336,682
Accrued compensated absences		9,061,226		8,616,844
Customer advances for construction		2,247,599		2,305,058
Net pension liability		5,040,160		-
Over recovered purchased power cost		-		500,522
Over recovered purchased gas cost		-		1,063,761
Other		303,673	_	478,797
Total other liabilities		25,065,511	-	23,301,664
Long-term debt:				
Revenue bonds		945,380,000		976,430,000
Unamortized premiums/discounts		26,985,541	_	28,631,810
Total long-term debt		972,365,541	-	1,005,061,810
Total liabilities		1,131,884,367	-	1,157,596,594
Deferred inflows of resources:				
Pension inflow		1,512,267	_	6,378,310
Total deferred inflows of resources		1,512,267	-	6,378,310
Total liabilities and deferred inflows of resources		1,133,396,634	-	1,163,974,904
Net position				
Net investment in capital assets		772,012,085		650,464,457
Restricted for:				
Debt service		16,179,592		14,847,859
Other		21,418		43,896
Unrestricted		174,380,725	_	263,265,378
Total net position		962,593,820		928,621,590
Total liabilities, deferred inflows, and net position	\$	2,095,990,454	\$ <u>-</u>	2,092,596,494

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, 2016 and 2015

	2016			2015
Operating revenues				
Electric	\$	515,031,267	\$	527,233,806
Gas		88,193,346		113,850,059
Water		46,899,326		43,777,160
Wastewater		83,238,147		78,842,964
Total operating revenues		733,362,086		763,703,989
Operating expenses	_			
Purchased power		398,205,855		415,610,969
Purchased gas		41,095,212		63,555,513
Treatment		16,617,907		15,318,610
Distribution and collection		59,535,776		62,318,632
Customer service		13,893,287		13,725,067
Administrative and general		33,239,284		30,741,405
Provision for depreciation		68,369,697		61,708,086
Taxes and tax equivalents		31,439,759		29,648,873
Total operating expenses	_	662,396,777		692,627,155
Operating income	_	70,965,309		71,076,834
Non-operating revenues (expenses)				
Contributions in aid of construction		10,258,938		2,871,465
Interest and dividend income		1,388,168		916,983
Interest expense		(39,142,974)		(37,967,821)
Amortization of debt costs		(297,772)		(225,173)
Write-down of plant for costs recovered through contributions		(10,258,938)		(2,871,465)
Other	_	(110,775)		1,565,032
Total non-operating revenues (expenses)	_	(38,163,353)		(35,710,979)
Change in net position before capital contributions		32,801,956		35,365,855
Capital contributions	_	1,170,274		605,907
Change in net position		33,972,230		35,971,762
Net position, beginning of year, as previously reported		928,621,590		893,413,803
Change in method of accounting for pension	_	-		(763,975)
Net position, beginning of year, as restated	_	928,621,590		892,649,828
Net position, end of year	\$ _	962,593,820	\$	928,621,590

# **Knoxville Utilities Board**Consolidated Statements of Cash Flows June 30, 2016 and 2015

		2016		2015
Cash flows from operating activities:	_		_	
Cash receipts from customers	\$	735,166,499	\$	761,548,382
Cash receipts from other operations		14,425,337		11,720,197
Cash payments to suppliers of goods or services		(524,357,750)		(569,272,217)
Cash payments to employees for services		(55,202,648)		(50,466,843)
Payment in lieu of taxes		(27,404,220)		(25,910,417)
Cash receipts from collections of TVA conservation loan program participants		3,067,056		3,046,131
Cash payments for TVA Conservation loan program		(3,034,941)	_	(3,071,013)
Net cash provided by operating activities		142,659,333	_	127,594,220
Cash flows from capital and related financing activities:				
Net proceeds from bond issuance		-		165,499,847
Principal paid on revenue bonds and notes payable		(29,830,000)		(26,240,000)
(Increase) decrease in unused bond proceeds		46,053,950		(44,998,540)
Interest paid on revenue bonds and notes payable		(37,693,370)		(37,130,082)
Acquisition and construction of plant		(171,820,155)		(168,110,486)
Changes in bond funds, restricted		(2,781,338)		(1,491,853)
Customer advances for construction		301,071		697,695
Proceeds received on disposal of plant		269,540		-
Cash received from developers and individuals for capital purposes		10,258,938		2,871,465
Net cash used in capital and related financing activities	•	(185,241,364)	_	(108,901,954)
Cash flows from investing activities:				
Purchase of investment securities		(10,460,222)		(20,286,901)
Maturities of investment securities		6,292,200		19,495,562
Interest received		1,388,160		903,509
				9,256
Other property and investments		(584,244)	_	121,426
Net cash provided by (used in) investing activities	-	(3,364,106)	-	121,420
Net increase (decrease) in cash and cash equivalents		(45,946,137)		18,813,692
Cash and cash equivalents, beginning of year	-	124,892,534	_	106,078,842
Cash and cash equivalents, end of year	\$	78,946,397	\$ =	124,892,534
Reconciliation of operating income to net cash provided by operating activities				
Operating income	\$	70,965,309	\$	71,076,834
Adjustments to reconcile operating income to net cash provided by operating activities:				
Depreciation expense		70,236,319		63,406,737
Changes in operating assets and liabilities:		,,		,,
Accounts receivable		4,980,351		1,848,310
Inventories		(2,103,762)		669,347
Prepaid expenses		1,360,432		881,113
TVA conservation program receivable		1,874,818		523,680
Other assets		576,770		(2,942,632)
Sales tax collections payable		(12,629)		52,021
Accounts payable and accrued expenses		1,332,656		(4,201,309)
TVA conservation program payable		(1,923,829)		(548,563)
Unrecovered purchased power cost		(1,880,165)		(3,912,247)
Underrecovered gas costs		(3,242,414)		(214,383)
Customer deposits plus accrued interest		670,600		732,639
Other liabilities		(175,123)		222,673
Net cash provided by operating activities	\$	142,659,333	\$ -	127,594,220
		,,,,,,,	· =	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Noncash capital activities:  Acquisition of plant assets through developer contributions	¢	1 170 074	Ф	605,907
Acquisition of plant assets through developer contributions	\$	1,170,274	\$	005,907

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

# Knoxville Utilities Board Notes to Consolidated Financial Statements June 30, 2016 and 2015

#### 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 sevenmember 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 will 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 February 2015, the Governmental Accounting Standards Board (GASB) issued Statement No. 72 (Statement No. 72), *Fair Value Measurement and Application*. Statement No. 72 is intended to provide guidance for determining a fair value measurement for financial reporting purposes and for applying fair value to certain investments and disclosures related to all fair value measurements.

In June 2015, the GASB issued GASB Statement No. 73 (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 Provision of GASB Statements 67 and 68. The requirements of this Statement will improve financial reporting by establishing a single framework for the presentation of information about pensions and enhance comparability.

# Knoxville Utilities Board Notes to Consolidated Financial Statements June 30, 2016 and 2015

In June 2015, the GASB issued GASB Statement No. 76 (Statement No. 76), *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*. The objective of this Statement is to simplify the hierarchy of generally accepted accounting principles (GAAP) used to prepare financial statements of state and local governmental entities. This Statement supersedes Statement No. 55, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*, and amends Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, paragraphs 64, 74, and 82.

In December 2015, the GASB issued GASB Statement No. 79 (Statement No. 79), *Certain External Investment Pools and Pool Participants*. This statement establishes criteria for an external investment pool to qualify for making the election to measure all of its investments at amortized cost for financial reporting purposes.

Statements No. 72, 73, 76, and 79 are effective for fiscal years beginning after June 15, 2015.

#### **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 \$1,866,622 in fiscal year 2016 and \$1,698,650 in fiscal year 2015. 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 \$1,820,030 in fiscal year 2016 and \$2,504,785 in fiscal year 2015.

#### **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.

# **Knoxville Utilities Board Notes to Consolidated Financial Statements June 30, 2016 and 2015**

#### **Net Position**

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

These classifications are defined as follows:

- Net investment in capital assets This component of net position consists of capital assets, including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt also should be included in this component of net position. If there are significant unspent related debt proceeds at year end, the portion of the debt attributable to the unspent proceeds are not included in the calculation of net investment in capital assets. Rather, that portion of the debt is included in the same net position component as the unspent proceeds.
- Net position-restricted This component of net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets. Generally, a liability relates to restricted assets if the asset results from a resource flow that also results in the recognition of a liability or if the liability will be liquidated with the restricted assets reported.
- Net position-unrestricted This component of net position consists of assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or the restricted component of net position.

#### **Contributions in Aid of Construction and Capital Contributions**

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

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

#### **Inventories**

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

#### **Change in Method of Accounting for Pension**

In June 2012, the Governmental Accounting Standards Board (GASB) issued Statement No. 68, Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27, which revises existing standards of financial reporting for pensions. In addition, during November 2013, GASB issued Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date, which requires deferred outflow of resources to be recognized for any contributions made subsequent to the measurement date of the beginning net pension liability. These standards were adopted by KUB in 2015 and resulted in a restatement of 2015 beginning net position of \$763,975.

#### **Pension Plan**

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, 2016 and 2015 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2016 and 2015 are based on a December 31, 2015 and 2014 measurement date, respectively.

#### **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 previously reported as assets 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 previously reported as liabilities 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 differences between expected and actual experience in accordance with Statement No. 68.

#### **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, no loans were made through this program after October 31, 2015.

#### **Subsequent Events**

KUB has evaluated events and transactions through October 27, 2016, 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 July 2016 for the purpose of funding electric system capital improvements in fiscal year 2017. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.75 percent. KUB sold \$12 million in natural gas system revenue bonds in July 2016 for the purpose of funding natural gas system capital improvements in fiscal year 2017. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.78 percent. KUB sold \$25 million in water system revenue bonds in July 2016 for the purpose of funding water system capital improvements in fiscal year 2017. 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 with an average interest rate of 2.5 percent to advance refund \$19.9 million of outstanding bonds with an average interest rate of 4.18 percent. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.07 percent. The net proceeds of \$22 million (after payment of \$0.3 million in underwriting fees and other issuance costs plus premium of \$1 million and an additional issuer equity contribution of \$0.4 million) were used to purchase U.S. government securities. Those securities were deposited in an irrevocable trust with an escrow agent to provide

for all future debt service payments on the bonds. As a result, the bonds will be considered defeased and the liability for those bonds will be removed from the financial statements. This refunding decreases total debt service payments over the next 17 years by \$2.5 million resulting in an economic gain (difference between the present values of the debt service payments on the old and new debt) of \$2.2 million. KUB sold \$20 million in wastewater system revenue bonds in July 2016 for the purpose of funding wastewater system capital improvements in fiscal year 2017. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.72 percent.

#### **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 Costs 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 (\$1,379,643) at June 30, 2016 and \$500,522 at June 30, 2015.

#### **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 assure 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 assure 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 Costs accounts. These accounts are rolled into the PGA rate adjustment on June 30 of each year thereby assuring that any over/(under) recovered amounts

are passed on to KUB's gas system customers. The amount of over/(under) recovered cost was (\$2,178,653) at June 30, 2016 and \$1,063,761 at June 30, 2015.

#### **Recently Issued Accounting Pronouncements**

In June 2015, the GASB issued two related Statements that affect accounting and financial reporting by state and local governments for postemployment benefits other than pensions (OPEB). GASB Statement No. 74 (Statement No. 74), *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, addresses reporting by OPEB plans that administer benefits on behalf of governments. GASB Statement No. 75 (Statement No. 75), *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, addresses reporting by governments that provide OPEB to their employees. Statement No. 74 is effective for fiscal years beginning after June 15, 2016, and Statement No. 75 is effective for fiscal years beginning after June 15, 2017.

In March 2016, the GASB issued GASB Statement No. 82 (Statement No. 82), *Pension Issues – An amendment of GASB Statements No. 67, No. 68 and No. 73.* The objective of this Statement is to address certain issues that have been raised with respect to the presentation of payroll-related measures in required supplementary information, the selection of assumptions and treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes and the classification of payments made by employers to satisfy employee contribution obligations. Statement No. 82 is effective for fiscal years beginning after June 15, 2016.

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. KUB's Agency Bond investments are rated Aaa by Moody's Investors Service.

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:

		2016		2015
Current assets				
Cash and cash equivalents	\$	78,946,397	\$	124,892,534
Short-term contingency fund investments		25,699,396		6,296,090
Other assets				
Long-term contingency fund investments		68,914,368		83,847,641
Restricted assets				
Unused bond proceeds		-		46,053,447
Bond fund		28,935,445		26,154,107
Other funds		21,418		43,897
	\$	202,517,024	\$	287,287,716
	_		_	

The above amounts do not include accrued interest of \$269,667 in fiscal year 2016 and \$189,556 in fiscal year 2015. 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, 2016:

		Deposit and	lnv	estment Matur	ities	(in Years)
		Fair		Less		
		Value		Than 1		1-5
Supersweep NOW and Other Deposits	\$	100,126,611	\$	100,126,611	\$	-
State Treasurer's Investment Pool		15,439,274		15,439,274		-
Agency Bonds		107,268,539		25,699,396		81,569,143
Certificates of Deposits	_	13,393,246	_	10,968,246	_	2,425,000
	\$	236,227,670	\$	152,233,527	\$	83,994,143

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, 2016:

• U.S. Agency bonds of \$81,569,143, which have a maturity at purchase of greater than one year, are valued using quoted market prices (Level 1 inputs)

Certificates of deposits of \$2,425,000, which have a maturity at purchase of greater than
one year, are valued at interest rates and yield curves observable at commonly quoted
intervals (Level 2 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:

	2016	2015
Wholesale and retail customers		
Billed services	\$ 42,412,998	\$ 47,996,899
Unbilled services	26,904,562	25,602,160
Other	4,433,444	4,966,423
Allowance for uncollectible accounts	(805,684)	(720,939)
	\$ 72,945,320	\$ 77,844,543

#### 5. Accounts Payable and Accruals

Accounts payable and accruals consist of the following:

	2016	2015
Trade accounts	\$ 50,663,005	\$ 50,651,280
Salaries and wages	2,129,489	1,509,808
Advances on pole rental	2,135,320	1,147,346
Self-insurance liabilities	1,758,352	1,699,525
Other current liabilities	15,586,889	15,372,476
	\$ 72,273,055	\$ 70,380,435

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#### 6. Long-Term Obligations

Electric	Balance June 30, 2015		Additions		Payments	ı	Defeased		Balance June 30, 2016		Amounts Due Within One Year
W-2005 - 3.0 - 4.5%	\$ 31,350,000	\$	_	\$	1,870,000	\$	_	\$	29,480,000	\$	1,940,000
X-2006 - 4.0 - 5.0%	1,825,000	Ψ	_	Ψ	1,825,000	Ψ	_	Ψ	-	Ψ	-
Y-2009 - 2.5 - 5.0%	6,875,000		-		1,600,000		-		5,275,000		1,675,000
Z-2010 - 1.45 - 6.35%	25,205,000		-		1,285,000		-		23,920,000		1,305,000
AA-2012 - 3.0 - 5.0%	34,840,000		-		990,000		-		33,850,000		2,540,000
BB-2012 - 3.0 - 4.0%	33,875,000		-		650,000		-		33,225,000		675,000
CC-2013 - 3.0 - 4.0%	9,535,000		-		50,000		-		9,485,000		450,000
DD-2014 - 2.0 - 4.0%	40,000,000		-		675,000		-		39,325,000		700,000
EE-2015 - 2.0 - 5.0%	28,550,000		-		125,000		-		28,425,000		150,000
FF-2015 - 2.0 - 5.0%	35,000,000	_	-	_		_	-		35,000,000		675,000
Total bonds	\$ 247,055,000	\$	-	\$	9,070,000	\$	-	\$	237,985,000	\$	10,110,000
Unamortized premium	10,345,326	_	-	_	617,044	_	-	_	9,728,282	_	-
Total long term debt	\$ 257,400,326	\$	-	\$	9,687,044	: _	-	\$_	247,713,282	\$	10,110,000
Gas		-	-,	_				_			
L-2005 - 3.0 - 4.75%	\$ 10,715,000	\$	-	\$	695,000	\$	-	\$	10,020,000	\$	725,000
N-2007 - 4.0 - 5.0%	550,000		-		-		-		550,000		550,000
O-2010 - 2.0 - 3.0%	3,475,000		-		3,475,000		-		-		-
P-2010 - 3.3 - 6.2%	12,000,000		-		-		-		12,000,000		540,000
Q-2012 - 2.0 - 4.0%	23,345,000		-		700,000		-		22,645,000		2,065,000
R-2012 - 2.0 - 4.0%	9,600,000		-		200,000		-		9,400,000		400,000
S-2013 - 2.0 - 4.0%	11,480,000		-		50,000		-		11,430,000		570,000
T-2013 - 2.0 - 4.6%	24,600,000		-		200,000		-		24,400,000		500,000
U-2015 - 2.0 - 3.5%	11,780,000				100,000	_			11,680,000		100,000
Total bonds	\$ 107,545,000	\$	-	\$	5,420,000	Ъ	-	\$	102,125,000	\$	5,450,000
Unamortized premium	3,794,404	<u>-</u> ф		φ-	305,551	<sub>~</sub> –		φ-	3,488,853	φ-	
Total long term debt	\$ 111,339,404	\$		\$	5,725,551	Φ=	-	\$ _	105,613,853	\$_	5,450,000
Water	Ф 0.705.000	Φ.		•	440.000.0	Φ		Φ.	0.005.000	•	405.000
S-2005 - 3.5 - 5.0%	\$ 6,735,000	\$	-	\$	440,000	Ъ	-	\$	6,295,000	\$	465,000
T-2007 - 4.0 - 5.5%	1,450,000		-		700,000		-		750,000		750,000
U-2009 - 3.0 - 4.5% W-2011 - 2.0 - 4.0%	23,450,000 23,350,000		-		825,000 550,000		-		22,625,000 22,800,000		875,000 550,000
X-2012 - 3.0 - 5.0%	9,150,000		-		485,000		-		8,665,000		515,000
Y-2013 - 3.0 - 4.0%	9,235,000		_		265,000		_		8,970,000		280,000
Z-2013 - 2.0 - 5.0%	24,150,000		_		475,000		_		23,675,000		500,000
AA-2014 - 2.0 - 4.0%	7,875,000		_		150,000		_		7,725,000		150,000
BB-2015 - 2.0 - 5.0%	23,005,000		_		170,000		_		22,835,000		100,000
CC-2015 - 2.0 - 4.0%	20,000,000		-		350,000		-		19,650,000		375,000
Total bonds	\$ 148,400,000	\$	-	\$	4,410,000	\$_	-	\$ -	143,990,000	<b>\$</b> _	4,560,000
Unamortized premium	2,866,890		-		164,708		-		2,702,182		· · · · ·
Total long term debt	\$ 151,266,890	\$	-	\$		\$_	-	\$	146,692,182	\$	4,560,000
Mostowater		=		=		=		=			
<b>Wastewater</b> 2005 B - 3.0 - 5.0%	\$ 16,045,000	\$		\$	1,410,000	Ф		\$	14,635,000	\$	1,470,000
2008 - 4.0 - 6.0%	11,000,000	φ	-	φ	4,450,000	φ	-	φ	6,550,000	φ	4,600,000
2010 - 6.3 - 6.5%	30,000,000		_		4,430,000		_		30,000,000		4,000,000
2010 - 0.3 - 0.5% 2010C - 1.18 - 6.1%	65,750,000		_		1,250,000		_		64,500,000		1,400,000
2012A - 2.0 - 4.0%	15,415,000		_		820,000		_		14,595,000		840,000
2012B - 1.25 - 5.0%	63,275,000		_		925,000		_		62,350,000		975,000
2013A - 2.0 - 4.0%	112,325,000		_		610,000		_		111,715,000		620,000
2014A - 2.0 - 4.0%	29,625,000		-		425,000		-		29,200,000		450,000
2015A - 3.0 - 5.0%	129,825,000		-		465,000		_		129,360,000		125,000
2015B - 3.0 - 5.0%	30,000,000		-		575,000		-		29,425,000		450,000
Total bonds	\$ 503,260,000	\$	-	\$	10,930,000	\$_	-	\$	492,330,000	\$_	10,930,000
Unamortized premium	11,625,190	•	-		558,966		-		11,066,224	•	-
Total long term debt	\$ 514,885,190	\$	-	\$	11,488,966	\$_	-	\$ -	503,396,224	\$	10,930,000
Consolidated		= `		. =		=		=	<u> </u>	_	
Total Bonds	\$ 1,006,260,000	\$	-	\$	29,830,000	\$	-	\$	976,430,000	\$	31,050,000
Total unamortized premium		*	=	,	1,646,269		-	•	26,985,541		-
Total long term debt	\$ 1,034,891,810	\$	-	\$	31,476,269	\$_		\$ -	1,003,415,541	\$	31,050,000
				-				=		_	

Electric	Balance June 30, 2014	Additions	Payments	Defeased	Balance June 30, 2015	Amounts Due Within One Year
W-2005 - 3.0 - 4.5%	\$ 33,140,000	\$ -	\$ 1.790.000 \$	_	\$ 31,350,000	\$ 1,870,000
X-2006 - 4.0 - 5.0%	3,550,000	-	1,725,000	-	1,825,000	1,825,000
Y-2009 - 2.5 - 5.0%	35,900,000	-	1,525,000	27,500,000	6,875,000	1,600,000
Z-2010 - 1.45 - 6.35%	26,470,000	-	1,265,000	=	25,205,000	1,285,000
AA-2012 - 3.0 - 5.0%	35,795,000	-	955,000	-	34,840,000	990,000
BB-2012 - 3.0 - 4.0% CC-2013 - 3.0 - 4.0%	34,500,000 9,585,000	-	625,000 50,000	-	33,875,000	650,000 50,000
DD-2014 - 2.0 - 4.0%	9,363,000	40,000,000	50,000	-	9,535,000 40,000,000	675,000
EE-2015 - 2.0 - 5.0%	_	28,550,000	_	-	28,550,000	125,000
FF-2015 - 2.0 - 5.0%	-	35,000,000	-	-	35,000,000	-
Total bonds	\$ 178,940,000	\$ 103,550,000	\$ 7,935,000 \$	27,500,000	\$ 247,055,000	\$ 9,070,000
Unamortized premium	5,779,555	5,617,592	411,968	639,853	10,345,326	-
Total long term debt	\$ 184,719,555	\$ 109,167,592	\$ 8,346,968	28,139,853	\$ 257,400,326	\$ 9,070,000
Gas						
L-2005 - 3.0 - 4.75%	\$ 11,380,000	\$ -	\$ 665,000 \$	-	\$ 10,715,000	\$ 695,000
N-2007 - 4.0 - 5.0% O-2010 - 2.0 - 3.0%	12,000,000 6,825,000	-	3,350,000	11,450,000	550,000 3,475,000	3,475,000
P-2010 - 3.3 - 6.2%	12,000,000	-	3,330,000	-	12,000,000	3,473,000
Q-2012 - 2.0 - 4.0%	24,030,000	-	685.000	_	23,345,000	700,000
R-2012 - 2.0 - 4.0%	9,800,000	-	200,000	-	9,600,000	200,000
S-2013 - 2.0 - 4.0%	11,530,000	-	50,000	=	11,480,000	50,000
T-2013 - 2.0 - 4.6%	24,800,000	-	200,000	-	24,600,000	200,000
U-2015 - 2.0 - 3.5%	-	11,780,000	·	-	11,780,000	100,000
Total bonds	\$ 112,365,000	\$ 11,780,000	\$ 5,150,000 \$	11,450,000	\$ 107,545,000	\$ 5,420,000
Unamortized premium	3,434,514	701,501	296,934	44,677	3,794,404	\$ 5,420,000
Total long term debt	\$ 115,799,514	\$ 12,481,501	\$ 5,446,934 \$	11,494,677	\$ 111,339,404	\$ 5,420,000
Water						
R-2005 - 3.5 - 5.0%	\$ 255,000	\$ -	\$ 255,000 \$	-	\$ -	\$ -
S-2005 - 3.5 - 5.0%	7,160,000	=	425,000	=	6,735,000	440,000
T-2007 - 4.0 - 5.5%	24,350,000	-	675,000	22,225,000	1,450,000	700,000
U-2009 - 3.0 - 4.5%	24,250,000	-	800,000	-	23,450,000	825,000
W-2011 - 2.0 - 4.0%	23,900,000	-	550,000	-	23,350,000	550,000
X-2012 - 3.0 - 5.0% Y-2013 - 3.0 - 4.0%	9,610,000 9,260,000	-	460,000 25,000	-	9,150,000 9,235,000	485,000 265,000
Z-2013 - 2.0 - 5.0%	24,600,000	-	450,000	- -	24,150,000	475,000
AA-2014 - 2.0 - 4.0%	-	8,000,000	125,000	=	7,875,000	150,000
BB-2015 - 2.0 - 5.0%	-	23,005,000	, <u>-</u>	-	23,005,000	170,000
CC-2015 - 2.0 - 4.0%		20,000,000		-	20,000,000	350,000
Total bonds	\$ 123,385,000	\$ 51,005,000	\$ 3,765,000 \$	22,225,000	\$ 148,400,000	\$ 4,410,000
Unamortized premium	1,518,734	1,493,612	102,471	42,985	2,866,890	
Total long term debt	\$ 124,903,734	\$ 52,498,612	\$ 3,867,471 \$	22,267,985	\$ 151,266,890	\$ 4,410,000
Wastewater		_				_
2005 A - 4.0 - 5.0%	\$ 36,550,000	\$ -	\$ - \$	36,550,000	\$ -	\$ -
2005 B - 3.0 - 5.0%	17,395,000	-	1,350,000	75,000,000	16,045,000	1,410,000
2007 - 4.0 - 5.0% 2008 - 4.0 - 6.0%	75,000,000 30,975,000	-	4,300,000	15,675,000	11,000,000	4,450,000
2010 - 6.3 - 6.5%	30,000,000	-	-,000,000	-	30,000,000	-,400,000
2010C - 1.18 - 6.1%	66,850,000	-	1,100,000	-	65,750,000	1,250,000
2012A - 2.0 - 4.0%	16,215,000	-	800,000	=	15,415,000	820,000
2012B - 1.25 - 5.0%	64,150,000	-	875,000	-	63,275,000	925,000
2013A - 2.0 - 4.0%	112,915,000	<u>-</u>	590,000	=	112,325,000	610,000
2014A - 2.0 - 4.0%	-	30,000,000	375,000	=	29,625,000	425,000
2015A - 3.0 - 5.0%	-	129,825,000	-	-	129,825,000	465,000 575,000
2015B - 3.0 - 5.0% Total bonds	\$ 450,050,000	30,000,000 \$ 189,825,000	\$ 9,390,000 \$	127 225 000	\$\frac{30,000,000}{503,260,000}	\$ 10,930,000
Unamortized premium	4,154,409	8,539,211	312,636	755,794	11,625,190	ψ 10,000,000 -
Total long term debt	\$ 454,204,409	\$ 198,364,211		127,980,794	\$ 514,885,190	\$ 10,930,000
Consolidated			· <u>,,</u> •	, 1		
Total Bonds	\$ 864,740,000	\$ 356,160,000	\$ 26,240,000 \$	188,400,000	\$ 1,006,260,000	\$ 29,830,000
Total unamortized premiu		16,351,916	1,124,009	1,483,309	28,631,810	. <u> </u>
Total long term debt	\$ 879,627,211	\$ 372,511,916	\$ 27,364,009 \$	189,883,309	\$ 1,034,891,810	\$ 29,830,000
			//			

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

Fiscal Year	Principal		Interest		Total
2017	31,050,000		38,413,632		69,463,632
2018	32,195,000		37,216,662		69,411,662
2019	33,415,000		35,933,587		69,348,587
2020	34,810,000		34,573,291		69,383,291
2021	36,200,000		33,141,894		69,341,894
2022-2026	197,410,000		141,956,861		339,366,861
2027-2031	192,140,000		104,499,778		296,639,778
2032-2036	149,440,000		72,309,054		221,749,054
2037-2041	150,245,000		43,627,770		193,872,770
2042-2046	105,150,000		14,594,919		119,744,919
2047-2050	14,375,000		1,076,675		15,451,675
Total	\$ 976,430,000	\$_	557,344,123	\$_	1,533,774,123

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, 2016 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, 2015 these bonds became subject to a 6.8 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. 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, 2016, and the trust account assets are not included in the financial statements.

During fiscal year 2006, KUB's Gas Division issued Series L 2005 bonds in part to retire certain existing debt and fund gas system capital improvements. Concurrent with the issuance of these bonds, KUB transferred funds to an irrevocable trust to pay a portion of the Series J 2001 bonds, as such amounts mature. During fiscal year 2008, KUB's Gas Division issued Series N 2007 to fund gas system capital improvements. 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, 2015, these bonds became subject to a 6.8 percent reduction in rebate payment amounts due to the United States Government sequestration. The sequestration is effective until intervening Congressional action, at

which time the sequestration rate is subject to change. During fiscal year 2012, KUB's Gas Division issued Series Q 2012 bonds to retire Series K 2004 bonds. During fiscal year 2013, KUB's Gas Division issued Series R 2012 bonds to fund gas system capital improvements. KUB's Gas Division also issued Series S 2013 bonds to retire Series M 2006 outstanding bonds. During fiscal year 2014, KUB's Gas Division issued Series T 2013 to fund gas system capital improvements. During fiscal year 2015, KUB's Gas Division issued Series U 2015 bonds to retire Series N 2007 outstanding bonds. 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, \$11.5 million at June 30, 2016, and the trust account assets are not included in the financial statements.

During fiscal year 2006, KUB's Water Division issued Series S 2005 bonds to retire certain existing debt and fund water system capital improvements. Concurrent with the issuance of these bonds, KUB transferred funds to an irrevocable trust to pay a portion of the Series P 2001 bonds, as such amounts mature. During fiscal year 2008, KUB's Water Division issued Series T 2007 bonds to fund water 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. 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, \$22.2 million at June 30, 2016, and the trust account assets are not included in the financial statements.

During fiscal year 2006, KUB's Wastewater Division issued Series 2005B bonds in part to retire certain existing debt and fund wastewater system capital improvements. Concurrent with the issuance of these bonds, KUB transferred funds to an irrevocable trust to pay a portion of the Series 1998 bonds and Series 2001A bonds, as such amounts mature. 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, 2015, these bonds became subject to a 6.8 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, 2015, these bonds became subject to a 6.8 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 vear 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. 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, \$90.7 million at June 30, 2016, and the trust account assets are not included in the financial statements.

Other liabilities consist of the following:

		Balance June 30, 2015		Increase		Decrease		Balance June 30, 2016
TVA conservation program Accrued compensated	\$	10,336,682	\$	1,174,926	\$	(3,098,755)	\$	8,412,853
absences		8,616,844		16,943,202		(16,498,820)		9,061,226
Customer advances								
for construction		2,305,058		1,499,982		(1,557,441)		2,247,599
Other	_	478,797	_	411,126	_	(586,250)	_	303,673
	\$	21,737,381	\$	20,029,236	\$	(21,741,266)	\$	20,025,351

#### 7. Lease Commitments

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

2017	\$ 256,776
2018	241,790
2019	141,959
2020	8,189
Total operating minimum lease payments	\$ 648,714

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#### 8. Capital Assets

Capital asset activity was as follows:

Production Plant (Intakes) Pumping and Treatment Plant	\$	Balance June 30, 2015 742,503 272,156,011	\$	Increase - 27,948,957	\$	Decrease - (2,131,084)	\$	Balance June 30, 2016 742,503 297,973,884
Distribution and Collection Plant Mains and metering Services and meters Electric station equipment Poles, towers and fixtures Overhead conductors Line transformers Other accounts Total Distribution & Collection Plant	\$	856,463,692 155,306,743 125,338,097 134,306,063 128,493,727 92,547,983 290,373,861 1,782,830,166 \$	\$ -	90,187,145 10,562,942 27,775,476 14,897,225 9,622,260 5,192,889 11,327,465 169,565,402	. \$	(11,856,977) (4,890,909) (880,406) (1,142,671) (1,341,285) (897,720) (1,291,052) (22,301,020)	\$	934,793,860 160,978,776 152,233,167 148,060,617 136,774,702 96,843,152 300,410,274 1,930,094,548
General Plant Total Plant Assets	\$	154,807,001 2,210,535,681 \$	<b>\$</b>	16,109,904 213,624,263	\$	(2,304,757) (26,736,861)	\$	168,612,148 2,397,423,083
Less Accumulated Depreciation Net Plant Assets	\$	<u>(753,200,620)</u> 1,457,335,061	\$	(70,652,307) 142,971,956	\$	26,328,506 (408,355)	\$	(797,524,421) 1,599,898,662
Work In Progress Total Net Plant	\$	193,812,149 1,651,147,210 \$	\$	164,049,004 307,020,960	\$	(214,654,664) (215,063,019)	\$	143,206,489 1,743,105,151
		Balance				_		Balance
Production Plant (Intakes) Pumping and Treatment Plant	\$	Balance June 30, 2014 742,503 \$ 268,416,043		Increase - 4,348,531	\$	Decrease - (608,563)	\$	Balance June 30, 2015 742,503 272,156,011
,	\$ -	June 30, 2014 742,503 \$		-	_	- 3	_	June <b>30, 2015</b> 742,503
Pumping and Treatment Plant  Distribution and Collection Plant  Mains and metering Services and meters Electric station equipment Poles, towers and fixtures Overhead conductors Line transformers Other	· 	June 30, 2014 742,503 268,416,043 \$ 827,485,705 150,206,800 120,964,151 124,328,627 120,168,100 90,103,801 282,320,215	_	32,368,532 7,460,515 6,556,645 12,739,496 9,163,450 3,298,379 8,891,602	\$ -	(3,390,545) (2,360,572) (2,182,699) (2,762,060) (837,823) (854,197) (837,956)		June 30, 2015 742,503 272,156,011 856,463,692 155,306,743 125,338,097 134,306,063 128,493,727 92,547,983 290,373,861
Pumping and Treatment Plant  Distribution and Collection Plant  Mains and metering Services and meters Electric station equipment Poles, towers and fixtures Overhead conductors Line transformers Other Total Distribution & Collection Plant  General Plant	\$	June 30, 2014 742,503 268,416,043  827,485,705 150,206,800 120,964,151 124,328,627 120,168,100 90,103,801 282,320,215 1,715,577,399 \$ 146,172,851	_	4,348,531 32,368,532 7,460,515 6,556,645 12,739,496 9,163,450 3,298,379 8,891,602 80,478,619 10,527,779 95,354,929 (63,051,875)	\$ -	(3,390,545) (2,360,572) (2,182,699) (2,762,060) (837,823) (854,197) (837,956) (13,225,852) (1,893,629) (15,728,044)		June 30, 2015 742,503 272,156,011 856,463,692 155,306,743 125,338,097 134,306,063 128,493,727 92,547,983 290,373,861 1,782,830,166 154,807,001

#### 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, 2016 and 2015, the amount of these liabilities was \$1,758,352 and \$1,699,525, respectively, resulting from the following changes:

		2016	2015
Balance, beginning of year	\$	1,699,525	\$ 1,572,570
Current year claims and changes in estimates		14,043,332	14,222,337
Claims payments	_	(13,984,505)	(14,095,382)
Balance, end of year	\$	1,758,352	\$ 1,699,525

#### 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, 2014 to include all prior approved amendments. The Plan is a single-employer contributory, defined benefit pension plan established by Knoxville Utilities Board ("KUB") 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 KUB 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:

	2015	2014
Inactive plan members:		
Terminated vested participants	39	40
Retirees and beneficiaries	628	627
Active plan members	<u>692</u>	<u>725</u>
Total	<u>1,359</u>	1,392

#### **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 will not be 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 address the loss 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. Plan B participants may not make contributions to the Plan. 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 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 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, 2015:

Asset Class	<b>Target Allocation</b>
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 \$5,669,380 and \$6,314,399 for 2014 and 2013, respectively, were made during KUB's fiscal years ending June 30, 2016 and 2015, respectively. The contribution was determined as part of the January 1, 2014 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. The actuarial valuation for the Plan year ending December 31, 2015 resulted in an actuarially determined contribution of \$4,816,913 for the fiscal year ending June 30, 2017, based on the Plan's current funding policy.

Subsequent to June 30, 2016, the actuarial valuation for the Plan year ending December 31, 2016 was completed. The actuarial valuation resulted in an actuarially determined contribution of \$3,756,283 for the fiscal year ending June 30, 2018, based on the Plan's current funding policy. For the Plan year ending December 31, 2016, the Plan's actuarial funded ratio was 103.04 percent.

The actuarial valuations for the Plan years ending December 31, 2015 and 2016, which determine the actuarially determined contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

#### Implementation of GASB 68

In fiscal year 2015, KUB adopted 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, 2016 and 2015 will be based on the December 31, 2015 and 2014 measurement date, respectively.

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

	2015	2014
Total pension liability	\$ 204,502,350 \$	202,773,764
Plan fiduciary net position	199,462,190	(208,795,394)
Plan's net pension liability (asset)	\$ 5,040,160 \$	(6,021,630)
Plan fiduciary net position as a percentage of the		
total pension liability	97.54%	102.97%

Changes in Net Pension Liability are as follows:

	Increase					
	Total Pension Liability (a)		Р	(Decrease) Plan Fiduciary Net Position (b)		let Pension bility (a) - (b)
Balances at December 31, 2014	\$	202,773,764	\$	208,795,394	\$	(6,021,630)
Changes for the year:						
Service cost		4,157,062		-		4,157,062
Interest		14,812,784		-		14,812,784
Differences between Expected						
and Actual Experience		(1,890,334)		-		(1,890,334)
Changes of Assumptions		-		-		-
Contributions - employer		-		5,991,887		(5,991,887)
Contributions - rollovers		-		482,060		(482,060)
Contributions - member		-		5,486		(5,486)
Net investment income		-		(64,551)		64,551
Benefit payments		(15,350,926)		(15,350,926)		-
Administrative expense		-		(397,160)		397,160
Net changes		1,728,586		(9,333,204)		11,061,790
Balances at December 31, 2015	\$	204,502,350	\$	199,462,190	\$	5,040,160

#### Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of December 31, 2015 and 2014, 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 28 years remaining as of

January 1, 2013 and 27 years remaining as of January 1, 2014

Discount rate: 8% at January 1, 2013 and 7.5% at January 1, 2014

Salary increases: From 2.58% to 7.92% for January 1, 2013 and from 2.80% to

5.15% for January 1, 2014, based on years of service

Mortality: Sex distinct RP-2000 Combined Mortality projected to 2018

using Scale AA for the January 1, 2013 valuation. Sex distinct RP-2000 Combined Mortality projected to 2024 using Scale

AA for the January 1, 2014 valuation

Inflation 2.8 percent

The actuarial assumptions used in the December 31, 2015 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, 2015

and 2014 are summarized in the following table. The real rate of return reported for fixed income is for aggregate fixed income. The Plan has both aggregate and long duration fixed income.

	Long Term Expected Real Rate of Return			
Asset Class	2015	2014		
Domestic equity	7.2%	6.0%		
Non-U.S. equity	7.4%	7.0%		
Real estate equity	6.5%	5.7%		
Fixed income	3.7%	1.8%		
Cash and deposits	2.6%	0.5%		

#### Discount rate

The discount rate used to measure the total pension liability was 7.5 percent as of January 1, 2015 and 2014. 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, 2015, 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:

		Decrease Discou		Current	1%	
				Discount		Increase
		(6.5%)	F	Rate (7.5%)		(8.5%)
Plan's net pension liability	\$	17,128,897	\$	5,040,160	\$	(5,963,331)

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

For the year ended June 30, 2015, KUB recognized pension expense of \$2,749,905.

The impact of experience gains or losses and assumption changes on the Total Pension Liability are recognized in expense over the average expected remaining service life of all active and inactive members. As of the measurement date, this recognition period was 3.72 years. However, there were no experience gains or losses, and there were no assumption changes during the measurement year.

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 \$7,972,887. \$1,594,577 of that gain was recognized in the current year and an identical amount will be recognized in each of the next four years, resulting in a deferred inflow of resources of \$6,378,310.

The table below summarizes the current balances of deferred outflows and deferred inflows of resources along with the net recognition over the next five years. In addition, KUB recorded a deferred outflow of resources of \$3,157,199 at June 30, 2015 for employer contributions made between December 31, 2014 and June 30, 2015.

	Deferred Outflows of Resources		Deferred Inflows of Resources	
Differences between expected and actual				
experience	\$	-	\$	-
Changes in assumptions		-		-
Net difference between projected and actual				
earnings on pension plan investments		-		6,378,310
Contributions subsequent to measurement date		3,157,199		-
Total	\$	3,157,199	\$	6,378,310

For the year ended June 30, 2016, KUB recognized pension expense of \$4,665,035.

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, 2014, this average was 5.00 years. During the measurement year, there were no assumption or benefit changes. There was an experience gain of \$1,890,334 with \$378,067 of that recognized in the current year and in each of the next four years.

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 \$15,382,915. \$3,076,583 of that loss was recognized in the current year and an identical amount will be recognized in each of the next four years. Unrecognized investment gains from prior periods were \$6,378,310 of which \$1,594,577 was recognized as a reduction in pension expense in the current year.

Experience gains this year created a deferred inflow of resources of \$1,512,267. The combination of unrecognized investment losses this year along with unrecognized net investment gains from prior periods results in a deferred outflow of resources as of December 31, 2015 of \$7,522,599. The table below 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 \$2,834,692 at June 30, 2016 for employer contributions made between December 31, 2015 and June 30, 2016.

	Deferred Outflows of Resources		 erred Inflows Resources
Differences between expected and actual			
experience	\$	-	\$ 1,512,267
Changes in assumptions		-	-
Net difference between projected and actual			
earnings on pension plan investments		7,522,599	-
Contributions subsequent to measurement date		2,834,692	-
Total	\$	10,357,291	\$ 1,512,267

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

Year ended June 30:	
2017 \$	3,938,630
2018	1,103,939
2019	1,103,938
2020	2,698,517
Thereafter	_

#### 11. 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 \$1,739,057 and \$1,593,350, respectively, for the years ended June 30, 2016 and 2015.

#### 12. Other Post-Employment Benefits (OPEB)

The Governmental Accounting Standards Board (GASB) established standards for the measurement, recognition, and reporting of other post-employment benefits (OPEB). OPEB includes post-employment benefits other than pension, which, for KUB, is presently limited to post-employment health care. GASB Statement No. 45 (Statement No. 45) requires the recognition of the accrued OPEB liability for the respective year, plus the disclosure of the total unfunded liability.

KUB currently provides post-employment health care benefits to 585 former employees and 593 covered dependents. The cost of coverage is shared with retirees and beneficiaries. KUB recognizes its share of the cost of post-employment health care benefits as an expense as claims are paid.

KUB amended its Group Health Plan in 1999, eliminating post-employment health care benefits for all employees hired on or after July 1, 1999. As of June 30, 2016, 356 active employees were eligible for individual and dependent coverage at separation. To qualify, the employee must meet the Rule of 80 (age plus years of service) with a minimum of 20 years of service, and be enrolled in medical coverage on their last day.

In May 2006, the State of Tennessee adopted Tennessee Code Annotated, Title 8, Chapter 50, Part 12 authorizing governmental entities to establish Trusts for the purpose of pre-funding their respective OPEB liabilities.

Although Statement No. 45 does not require pre-funding of the liability, KUB has determined that it is in the long-term economic interest of KUB and its ratepayers to establish a Trust to pre-fund KUB's OPEB liability.

Knoxville Utilities Board Other Post-Employment Benefits Trust (the "Trust") is a single-employer Other Post-Employment Benefits Plan established by the Knoxville Utilities Board (KUB) 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 KUB 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.

KUB makes annual contributions to the Trust at an actuarially determined rate. 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.

An actuarial valuation of KUB's Postretirement Benefit Plan was performed for the Trust as of January 1, 2014 for fiscal year June 30, 2015 and January 1, 2015 for fiscal year June 30, 2016. The following table presents the OPEB cost for the year, the amount contributed to the Trust, and changes in the net OPEB obligation for fiscal year ending June 30:

	2016	2015		
<ul> <li>a) Net OPEB Obligation/(Asset) at beginning of fiscal year</li> </ul>	\$ (174,410)	\$	(177,322)	
<b>b)</b> Annual Required Contribution (ARC)	953,221		3,497,372	
<ul><li>c) Interest on Net OPEB Obligation/(Asset)</li></ul>	(13,081)		(14,186)	
d) Adjustment to ARC	(16,427)		(17,098)	
<ul><li>e) Annual OPEB Cost (b+c-d)</li></ul>	956,567		3,500,284	
f) Employer Contributions	953,221		3,497,372	
g) Net OPEB Obligation/(Asset) at				
end of fiscal year (a+e-f)	\$ (171,064)	\$	(174,410)	

KUB's annual OPEB cost, the percentage of annual OPEB cost contributed to the Trust, and the net OPEB obligation for fiscal year 2016 and the two preceding years were as follows:

#### **Schedule of Employer Contributions**

Actuarial Valuation Date	Employer Fiscal Year	Annual Required Contribution	Fiscal Year Actual Contribution	Percentage Contributed	Net OPEB Obligation
1/1/2012	6/30/2014	3,327,412	4,057,091	121.93%	(177,322)
1/1/2013	6/30/2015	3,497,372	3,497,372	100.00%	(174,410)
1/1/2014	6/30/2016	953,221	953,221	100.00%	(171,064)

Total contributions to the OPEB Trust for the fiscal year ended June 30, 2016 were \$953,221. The contribution to the Trust was consistent with the annual required contribution, as determined by the Postretirement Benefit Plan's actuarial valuation as of January 1, 2014, which was \$953,221. As of June 30, 2016, the employer's OPEB obligation has been exceeded by \$171,064.

The annual required contribution for the fiscal year ending June 30, 2017, as determined by the Plan's actuarial valuation as of January 1, 2015 is \$620,015.

The actuarial valuation for the Plan as of January 1, 2016 has been completed. The valuation determined that the Plan's actuarial accrued liability was \$45,118,624. The actuarial value of the Plan's assets was \$48,510,796. As a result, the Plan's unfunded actuarial accrued liability was (\$3,392,172). The Plan's actuarial funded ratio was 108 percent. Due to the future implementation of GASB 75, the contributions made for fiscal year ending June 30, 2018 will be the actuarially determined contribution instead of the annual required contribution and the actuarial cost method used to determine the contributions will change from the projected unit credit cost method to the entry age normal cost method. The actuarially determined contribution for fiscal year ending June 30, 2018 will be zero. See Required Supplementary Information for OPEB Schedule of Funding Progress.

The actuarial valuations dated January 1, 2015 and 2016, which determine the annual required contribution and actuarially determined contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

The required schedule of funding progress immediately following the notes to the financial statements presents multi-year trend information about whether the actuarial value of Trust assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members to that point.

Actuarial calculations reflect a long-term perspective. Consistent with that perspective, actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets.

Identification of actuarial methods and significant assumptions used to determine the annual required contribution for the fiscal year ending June 30, 2016:

Actuarial cost method	Projected unit credit cost method
II. Actuarial value of assets	Smoothed market value with
	phase-in method using a
	smoothing period of 5 years
III. Investment return	7.5%, based on the expected portfolio return
Projected salary increases	N/A
Healthcare cost Trend:	
Medicare	2014 - 2030+, ranging from 4.5% to 7.45%
Non-Medicare	2014 - 2030+, ranging from 4.5% to 8.75%
IV. Amortization method	Level dollar closed (30-year)
Remaining amortization period	22 years

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.

#### 13. 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, 2016 and 2015 are summarized as follows:

	2016	2015
City of Knoxville		
Amounts billed by KUB for utilities and		
related services	\$ 14,383,228	\$ 14,250,324
Payments by KUB in lieu of property tax	17,428,232	16,535,897
Payments by KUB for services provided	2,183,335	1,804,675

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

	2016	2015
Accounts receivable	\$ 902,254	\$ 869,815

#### 14. Natural Gas Supply Contract Commitments

For fiscal year 2016, the Gas Division hedged 67 percent of its total gas purchases via gas supply contracts. As of June 30, 2016, the Gas Division had hedged the price on approximately 20 percent of its anticipated gas purchases for fiscal year 2017.

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

Firm obligations related to purchased gas - demand

	2017	2018	2019	2020	2021
_					
Transportation					
Tennessee Gas Pipeline	\$ 3,269,844	\$ 3,269,844	\$ 3,269,844	\$ 1,089,948	\$ -
East Tennessee Natural Gas	10,066,388	10,066,388	10,066,388	2,748,496	-
Storage					
Tennessee Gas Pipeline	1,787,976	1,787,976	1,787,976	595,992	-
East Tennessee Natural Gas	757,460	757,460	757,460	-	-
Saltville Natural Gas	1,870,560	1,548,030	580,440	435,330	-
Demand Total	\$ 17,752,228	\$ 17,429,698	\$ 16,462,108	\$ 4,869,766	\$ -

Firm obligations related to purchased gas - commodity

	2017	2018	2019	2020	2021
Baseload					
Conoco	\$ 5,719,700	\$ -	\$ -	\$ -	\$ -
Shell Energy	739,680	-	-	-	-
BP	6,104,693	6,181,363	5,874,650	1,801,950	-
CNX	1,709,713	1,648,048	-	-	-
Commodity Total	\$ 14,273,786	\$ 7,829,411	\$ 5,874,650	\$ 1,801,950	\$ -

The total commodity values presented here are based upon firm supply obligations with each individual natural gas supplier. The firm obligations value for Conoco, Shell Energy, and BP are based upon firm supply obligations and locked prices with those suppliers. The firm obligations value for the CNX contract is based upon firm supply obligations and the applicable four month NYMEX strip prices on June 30, 2016.

#### 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 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. The total cost of such improvements is estimated to be approximately \$120 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, 2016, the Wastewater Division had issued \$485 million in bonds to fund system capital improvements since the inception of the Consent Decree. The Board previously 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, and three 6 percent rate increases effective October 2014, October 2015 and October 2016. 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 99.5% of manholes and gravity mains, smoke testing 99.9% of 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 334.9 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 82 percent reduction in SSOs.

As of June 30, 2016, the Wastewater Division had completed its twelfth full year under the Consent Decree, spending \$529.5 million on capital investments to meet Consent Decree requirements. During fiscal year 2016, the Wastewater Division incurred \$37.3 million in total expenditures related to Consent Decree requirements, including \$3.3 million for operating costs and \$34 million in capital improvements which included the rehabilitation or replacement of 28 miles of wastewater main. During the fiscal year, \$26.5 million was spent on sewer mini-basin rehabilitation and replacement. Trunk line rehabilitation and replacement accounted for \$2 million of capital expenditures, while pump station improvements accounted for \$4.6 million.

#### 16. 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**

	2016							
		Electric		Gas		Water		Wastewater
Assets and Deferred Outflows of Resources								
Current assets	\$	105,152,996	\$	28,023,783	\$	20,524,335	\$	44,214,264
Restricted assets		14,749,362		3,149,495		3,356,910		7,701,096
Net capital assets		511,260,136		263,531,420		281,257,624		687,055,971
Other assets		37,107,982		16,503,157	_	10,007,552		28,159,669
Total assets	\$	668,270,476	\$	311,207,855	\$	315,146,421	\$	767,131,000
Deferred outflows of resources		8,543,965		3,004,672		3,273,002		19,413,063
Total assets and deferred outflows of								
resources	\$	676,814,441	\$	314,212,527	\$	318,419,423	\$	786,544,063
Liabilities and Deferred Inflows of Resources					· · ·			_
Current liabilities	\$	87,318,966	\$	16,464,233	\$	10,801,558	\$	19,868,558
Other liabilities		16,598,461		3,410,619		2,295,413		2,761,018
Long-term debt		237,603,282		100,163,853		142,132,182		492,466,224
Total liabilities	\$	341,520,709	\$	120,038,705	\$	155,229,153	\$	515,095,800
Deferred inflows of resources		725,888		257,085		196,595		332,699
Total liabilities and deferred inflows of								
resources	\$	342,246,597	\$	120,295,790	\$	155,425,748	\$	515,428,499
Net position								
Net investment in capital assets	\$	268,462,479	\$	159,696,458	\$	138,069,365	\$	205,783,783
Restricted		10,120,406		1,820,408		1,522,884		2,737,312
Unrestricted		55,984,959		32,399,871		23,401,426		62,594,469
Total net position	\$	334,567,844	\$	193,916,737	\$	162,993,675	\$	271,115,564

#### **Condensed Statement of Net Position**

	2015								
		Electric		Gas		Water	,	Wastewater	
Assets and Deferred Outflows of Resources									
Current assets	\$	113,395,720	\$	45,488,784	\$	27,984,680	\$	42,523,912	
Restricted assets		33,517,297		3,119,403		12,903,096		22,712,158	
Net capital assets		480,797,659		248,032,207		258,138,759		664,178,585	
Other assets		43,446,286	_	14,911,384		14,195,562		38,863,004	
Total assets	\$	671,156,962	\$	311,551,778	\$	313,222,097	\$	768,277,659	
Deferred outflows of resources		5,410,730		1,925,346		2,459,219		18,592,703	
Total assets and deferred outflows of									
resources	\$	676,567,692	\$	313,477,124	\$	315,681,316	\$	786,870,362	
Liabilities and Deferred Inflows of Resources								_	
Current liabilities	\$	85,227,269	\$	16,716,438	\$	9,361,281	\$	17,928,132	
Other liabilities		16,261,143		3,352,842		1,634,788		2,052,891	
Long-term debt		248,330,326		105,919,404		146,856,890		503,955,190	
Total liabilities	\$	349,818,738	\$	125,988,684	\$	157,852,959	\$	523,936,213	
Deferred inflows of resources		3,061,589		1,148,096		829,180		1,339,445	
Total liabilities and deferred inflows of									
resources	\$	352,880,327	\$	127,136,780	\$	158,682,139	\$	525,275,658	
Net position									
Net investment in capital assets	\$	228,768,196	\$	138,973,111	\$	110,579,425	\$	172,143,725	
Restricted		9,091,195		1,801,334		1,375,362		2,623,864	
Unrestricted		85,827,974		45,565,899		45,044,390		86,827,115	
Total net position	\$	323,687,365	\$	186,340,344	\$	156,999,177	\$	261,594,704	

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### Condensed Statement of Revenues, Expenses and Changes in Net Position

	2016								
	Electric		Gas		Water	١	Wastewater		
Operating revenues	\$ 521,369,202	\$	88,441,144	\$	47,453,401	\$	83,645,509		
Operating expenses	472,905,855		65,567,807		27,052,009		36,048,577		
Provision for depreciation	29,490,370		11,481,432		9,055,221		18,342,674		
Total operating expenses	502,396,225		77,049,239		36,107,230		54,391,251		
					_		_		
Operating income	18,972,977		11,391,905		11,346,171		29,254,258		
Non-operating expense	(8,270,894)		(3,815,512)		(5,652,869)		(20,424,080)		
Change in net position before capital contributions	10,702,083		7,576,393		5,693,302		8,830,178		
Capital contributions	178,396		-		301,196		690,682		
Change in net position	10,880,479		7,576,393		5,994,498		9,520,860		
Net position									
Beginning of year	323,687,365		186,340,344		156,999,177		261,594,704		
End of year	\$ 334,567,844	\$	193,916,737	\$	162,993,675	\$	271,115,564		

### Condensed Statement of Revenues, Expenses and Changes in Net Position

	2015							
	Electric	Gas	Water	Wastewater				
Operating revenues	\$ 533,205,845	\$ 114,168,784	\$ 44,173,190	\$ 79,206,028				
Operating expenses	489,617,790	86,845,366	26,315,917	35,189,854				
Provision for depreciation	25,887,777	10,894,826	7,794,763	17,130,721				
Total operating expenses	515,505,567	97,740,192	34,110,680	52,320,575				
Operating income	17,700,278	16,428,592	10,062,510	26,885,453				
Non-operating expense	(6,642,081)	(4,272,667)	(5,309,339)	(19,486,890)				
Change in net position before capital contributions	11,058,197	12,155,925	4,753,171	7,398,563				
Capital contributions	11,611	4,353	232,696	357,246				
Change in net position	11,069,808	12,160,278	4,985,867	7,755,809				
Net position								
Beginning of year, as previously reported	312,984,264	174,317,582	152,112,627	253,999,330				
Change in method of accounting for pension	(366,707)	(137,516)	(99,317)	(160,435)				
Net position, beginning of year, as restated	312,617,557	174,180,066	152,013,310	253,838,895				
End of year	\$ 323,687,365	\$ 186,340,344	\$ 156,999,177	\$ 261,594,704				

#### **Condensed Statement of Cash Flows**

	2016									
	Electric		Gas		Water	1	Nastewater			
Net cash provided by operating activities	\$ 50,904,8	83 \$	22,442,923	\$	20,792,761	\$	48,518,765			
Net cash used in capital and related financing activities	(59,358,2		(36,629,153)	Ψ	(32,331,239)	Ψ	(56,922,694)			
Net cash provided by (used in) investing activities	(1,226,6	70)	(1,040,540)		(373,199)		(723,696)			
Net increase (decrease) in cash and cash equivalents	(9,680,0	65)	(15,226,770)		(11,911,677)		(9,127,625)			
Cash and cash equivalents, beginning of year	44,471,8	51	26,262,919		21,304,494		32,853,270			
Cash and cash equivalents, end of year	\$ 34,791,7	86 \$	11,036,149	\$	9,392,817	\$	23,725,645			

#### **Condensed Statement of Cash Flows**

	2015									
		Electric		Gas		Water	١	<b>Nastewater</b>		
Net cash provided by										
operating activities	\$	38,410,104	\$	28,984,668	\$	17,603,576	\$	42,595,872		
Net cash used in capital and										
related financing activities		(22,524,068)		(46,023,953)		(17,392,294)		(22,961,641)		
Net cash provided by (used in)										
investing activities		(2,886,436)		(712,007)		5,914,751		(2,194,880)		
Net increase (decrease) in										
cash and cash equivalents		12,999,600		(17,751,292)		6,126,033		17,439,351		
Cash and cash equivalents,										
beginning of year		31,472,251		44,014,211		15,178,461		15,413,919		
Cash and cash equivalents,	_		_		_		_			
end of year	\$	44,471,851	\$	26,262,919	\$	21,304,494	\$	32,853,270		

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#### Knoxville Utilities Board Required Supplementary Information - Schedule of Funding Progress June 30, 2016 (Unaudited)

#### **Other Post-Employment Benefits (OPEB)**

Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Actuarial Accrued Liability (UAAL) (b-a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b)-(a)]/(c)
\$ -	\$ 108,329,141	\$ 108,329,141	0%	\$ 31,234,509	346.8%
14,593,487	100,726,738	86,133,251	14%	31,846,091	270.5%
21,275,643	58,475,364	37,199,721	36%	30,069,028	123.7%
40,749,815	64,289,254	23,539,439	63%	28,878,791	81.5%
37,907,357	61,603,466	23,696,109	62%	28,269,123	83.8%
38,571,803	63,341,531	24,769,728	61%	27,566,340	89.9%
43,409,955	46,889,808	3,479,853	93%	26,724,154	13.0%
47,705,478	47,745,640	40,162	100%	25,816,884	0.2%
48,510,796	45,118,624	(3,392,172)	108%	25,243,127	(13.4%)
	Value of Assets (a) \$ - 14,593,487 21,275,643 40,749,815 37,907,357 38,571,803 43,409,955 47,705,478	Actuarial Value of Liability (AAL) (b)  \$ - \$108,329,141 14,593,487 100,726,738 21,275,643 58,475,364 40,749,815 64,289,254 37,907,357 61,603,466 38,571,803 63,341,531 43,409,955 46,889,808 47,705,478 47,745,640	Actuarial Value of Assets (a)Actuarial Liability (b)Accrued Liability (UAAL) (b-a)\$ - 14,593,487\$108,329,141 100,726,738 58,475,364 40,749,815 37,907,357 38,571,803 43,409,955 46,889,808 47,705,478\$108,329,141 \$108,329,141 \$108,329,141 \$108,329,141 \$108,329,141 \$108,329,141 \$108,329,141 \$108,329,141 \$108,329,141 \$20,726,738 \$21,275,643 \$23,539,439 24,769,728 33,479,853 47,705,478	Actuarial Value of Assets (a)         Actuarial Liability (b)         Accrued Liability (UAAL) (b-a)         Funded Ratio (a)/(b)           \$ - 14,593,487         \$ 108,329,141         \$ 108,329,141         0%           14,593,487         100,726,738         86,133,251         14%           21,275,643         58,475,364         37,199,721         36%           40,749,815         64,289,254         23,539,439         63%           37,907,357         61,603,466         23,696,109         62%           38,571,803         63,341,531         24,769,728         61%           43,409,955         46,889,808         3,479,853         93%           47,705,478         47,745,640         40,162         100%	Actuarial Value of Assets (a)Actuarial Liability (b)Actuarial Accrued Liability (b-a)Funded Ratio (a)/(b)Covered Payroll (a)\$ - 14,593,487\$108,329,141\$108,329,1410%\$31,234,509\$1,275,643\$100,726,738\$6,133,25114%31,846,091\$21,275,643\$58,475,36437,199,72136%30,069,028\$40,749,815\$64,289,25423,539,43963%28,878,791\$37,907,357\$61,603,46623,696,109\$62%28,269,123\$38,571,803\$63,341,53124,769,728\$61%27,566,340\$43,409,955\$46,889,8083,479,85393%26,724,154\$47,705,478\$47,745,640\$40,162100%25,816,884

<sup>\*</sup> The actuarial valuations dated January 1, 2015 and 2016, which determine the annual required contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

#### **Knoxville Utilities Board**

#### Required Supplementary Information - Schedule of Changes in Net Pension Liability and Related Ratios June 30, 2016

(Unaudited)

		ember 31		
		2015		2014
Total pension liability				
Service cost	\$	4,157,062	\$	4,092,808
Interest		14,812,784		14,698,657
Differences between expected and actual experience		(1,890,334)		-
Benefit payments, including refunds of member contributions		(15,350,926)		(15,533,167)
Net change in total pension liability		1,728,586		3,258,298
Total pension liability - beginning		202,773,764		199,515,466
Total pension liability - ending (a)	\$	204,502,350	\$	202,773,764
Plan fiduciary net position				
Contributions - employer	\$	5,991,887	\$	5,908,541
Contributions - participants	•	487,546	•	475,854
Net investment income		(95,430)		22,292,369
Other additions		30,879		29,733
Benefit payments, including refunds of member contributions		(15,274,926)		(15,405,167)
Administrative expense		(397,160)		(378,085)
Death benefits		(76,000)		(128,000)
Net change in plan fiduciary net position**		(9,333,204)		12,795,245
Plan fiduciary net position - beginning**		208,795,394		196,000,149
Plan fiduciary net position - ending (b)**	\$	199,462,190	\$	208,795,394
Plan's net pension liability - ending (a) - (b)	\$	5,040,160	\$	(6,021,630)
Plan fiduciary net position as a percentage of the total				
pension liability		97.54%		102.97%
Covered-employee payroll	\$	50,679,585	\$	50,246,074
Plan's net pension liability as a percentage of				
covered-employee payroll		9.95%		(11.98%)

#### Notes to Schedule:

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

<sup>\*\*</sup> Excludes amounts related to 401(k) matching contributions.

#### **Knoxville Utilities Board**

#### Required Supplementary Information - Schedule of Employer Pension

Contributions June 30, 2016

(Unaudited)

		Year ende	d Dec	cember 31 2014
Annual required contribution Contribution in relation to the annual	\$	5,991,887	\$	5,908,541
required contribution		5,991,887		5,908,541
Contribution deficiency	\$	-	\$	-
Covered-employee payroll Contributions as a percentage of	\$ !	50,679,585	\$	50,246,074
covered-employee payroll		11.82%		11.76%

#### **Notes to Schedule:**

Valuation Dates: January 1, 2013 and January 1, 2014

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: Individual entry age
Asset valuation method: 5-year smoothed market

Amortization method: Level dollar closed period with 28 years remaining as of January 1, 2013

and 27 years remaining as of January 1, 2014.

Discount rate: 8% at January 1, 2013 and 7.5% at January 1, 2014

Salary increases: From 2.58% to 7.92% for January 1, 2013 and from 2.8% to 5.15% for

January 1, 2014, based on years of service

Mortality: Sex distinct RP-2000 Combined Mortality projected to 2018 using Scale AA

for the Janaury 1, 2013 valuation. Sex distinct RP-2000 Combined Mortality

projected to 2024 using Scale AA for the January 1, 2014 valuation.

Inflation: 2.8 percent

<sup>\*</sup> 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 Supplemental Information – Schedule of Expenditures of Federal Awards and State Financial Assistance June 30, 2016 Schedule 1

KUB was awarded a grant from Tennessee Emergency Management Agency (as a flow through from FEMA) for reimbursement for costs related to storms in 2015. The schedule below shows the expenditures for the current fiscal year.

		Federal/State			
_	Program Name	Agency	CFDA Number	Contract Number	Expenditures
	U.S. Department of Homeland Security	Tennessee Emergency Management	97.036	34101-06616	\$ 1,325,524
			Total Program 97.036  Total Federal Awards		\$ 1,325,524
					\$ 1,325,524

#### 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 information in this schedule is presented in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. Therefore, some amounts presented in this schedule may differ from amounts presented in, or used in the preparation of, the basic financial statements.

#### **Knoxville Utilities Board**

### Supplemental Information – Schedule of Findings and Questioned Costs June 30, 2016 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 Tennessee Emergency Management

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.

See accompanying Report of Independent Auditors on Supplemental Information.

#### **Knoxville Utilities Board**

### Supplemental Information - Schedule of Insurance in Force June 30, 2016

(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), and OPEB Trust funds. 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 \$400,000 per individual participant.



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

Board of Commissioners Knoxville Utilities Board Knoxville, Tennessee

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Knoxville Utilities Board (KUB), a component unit of the City of Knoxville, Tennessee, as of and for the year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise KUB's basic financial statements, and have issued our report thereon dated October 27, 2016.

#### **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 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 that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control 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 27, 2016



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

Board of Commissioners Knoxville Utilities Board Knoxville, Tennessee

#### Report on Compliance for the Major Federal Program

We have audited the Knoxville Utilities Board's (KUB), a component unit of the City of Knoxville, Tennessee, compliance with the types of compliance requirements described in the OMB Compliance Supplement that could have a direct and material effect on KUB's major federal program for the year ended June 30, 2016. 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 the terms and conditions of its federal awards applicable to its federal programs.

#### **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* 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 a 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 on the Major Federal Program**

In our opinion, KUB complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2016.

#### **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 the major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for the major program 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, 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. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been 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 27, 2016



### **Electric Division**

# Financial Statements and Supplemental Information June 30, 2016 and 2015

#### **KUB Board of Commissioners**

Nikitia Thompson - Chair

Sara Hedstrom Pinnell - Vice Chair

Dr. Jerry W. Askew

Kathy Hamilton

Celeste Herbert

**Eston Williams** 

John Worden

#### Management

#### Mintha Roach

President and Chief Executive Officer

#### **Bill Elmore**

Executive Vice President and Chief Operating Officer

#### **Mark Walker**

Senior Vice President and Chief Financial Officer

#### **Susan Edwards**

Senior Vice President and Chief Administrative Officer

#### **Eddie Black**

Senior Vice President

#### Mike Bolin

Vice President

#### **Julie Childers**

Vice President

#### **Derwin Hagood**

Vice President

#### **Dawn Mosteit**

Vice President

#### **Paul Randolph**

Vice President

#### **Dennis Upton**

Vice President

# **Knoxville Utilities Board Electric Division Index**

June 30, 2016 and 2015

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



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#### Report of Independent Auditors

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, 2016 and 2015, 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

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, 2016 and 2015, 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.



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 24 and the required supplementary information on pages 52 through 54 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 on schedules 3 through 5, as listed on the index, are presented for purposes of additional analysis and are not a required part of the basic financial statements. The schedule of expenditures of federal awards and state financial assistance is presented for purposes of additional analysis as required by Title 2 U.S. Code of Federal Regulations (CFR) Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, and the State of Tennessee Comptroller of the Treasury Office and is also 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 relate 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 have 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 27, 2016, 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 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 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 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, 2016 and 2015, 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, 2016 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 202,843 electric customers over a 688 square mile service area and maintains 5,321 miles of service lines and 63 electric substations to provide 5.6 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 1.82 hours of service interruption for the average customer in fiscal year 2016.

KUB has added 4,487 electric system customers over the past three years representing annual growth of less than one percent.

The typical residential customer's average monthly electric bill was \$101.78 as of June 30, 2016, representing an increase of \$0.49 or 0.5 percent compared to June 30, 2015. The increase in the monthly bill during fiscal year 2016 was the net result of the flow through of TVA wholesale rate adjustments, previously over recovered wholesale power costs and KUB's one percent electric rate increase, which added \$1.00 to the monthly residential customer charge.

KUB's electric system was impacted by an ice storm event in February 2015 that resulted in a cost of \$2 million to the system. KUB received \$1.6 million in reimbursements in fiscal year 2016 from the Federal Emergency Management Agency (FEMA) to offset the cost of the 2015 event.

KUB's electric system was awarded the 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.

#### **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 of Commissioners 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 the proposed three annual rate increases for the Electric Division. The first and second rate increases went into effect in July 2014 and July 2015. In July 2016, the third and final rate increase will go into effect and will generate \$5.2 million in additional annual Electric Division revenue.

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.

During the fiscal year, KUB replaced 2,208 poles, exceeding the target level of 2,000, and replaced 13.3 miles of underground electric cable while staying on track with Century II goals and within the Electric Division's total capital budget.

#### **Financial Highlights**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

The Division's net position during the year increased \$10.9 million compared to an \$11.1 million increase last fiscal year. A restatement to fiscal year 2014's net position based on a change in method of accounting for pension expense reduced the total net position by \$0.4 million during fiscal year 2015. This change resulted in a net increase of \$10.7 million in the Division's net position during fiscal year 2015.

Operating revenue decreased \$11.8 million or 2.2 percent over the prior fiscal year. The decrease in operating revenue was the net result of additional revenue from KUB's one percent electric rate increase, the flow through of TVA rate adjustments, a 3.1 percent decline in total power sales, and the flow through of prior year over recovered purchase power costs to 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, 2016. Purchased power expense decreased \$17.2 million compared to last year, due a very mild winter that resulted in a 3.1 percent decline in total power sales. Lower sales mitigated the impact of a 1.5 percent wholesale power rate increase from TVA.

Margin on electric sales (operating revenue less purchased power expense) increased \$5.3 million or 4.7 percent, reflecting additional revenue from the KUB electric rate increases.

Operating expenses (excluding purchased power expense) increased \$4.1 million or 4.2 percent. Depreciation expense increased \$3.6 million or 13.9 percent. Taxes and tax equivalents were \$0.7 million, or 4.8 percent, higher than the prior fiscal year. Operating and maintenance (O&M) expenditures decreased \$0.3 million or 0.5 percent.

Interest income was \$0.2 million more than the prior fiscal year. Interest expense increased \$0.7 million or 8.3 percent, primarily due to the additional interest accrued on long-term bonds issued in August 2014 and April 2015.

Capital contributions increased \$0.2 million, reflecting a higher level of electric system assets provided to KUB during the fiscal year.

Total plant assets (net) increased \$30.5 million or 6.3 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.

Long-term debt represented 41.6 percent of the Division's capital structure as of June 30, 2016, compared to 43.3 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 3.57. Maximum debt service coverage was 3.28.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

The Division's net position during the year increased \$11.1 million compared to a \$12 million increase last fiscal year. A restatement to the prior fiscal year's net position based on a change in method of accounting for pension expense reduced the total net position by \$0.4 million during fiscal year 2015. This change resulted in a net increase of \$10.7 million in the Division's net position.

Operating revenue increased \$5.4 million or one percent over the prior fiscal year. The increase in operating revenue was the net 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 over recovered purchase power costs to electric customers. KUB flows changes to wholesale power rates directly through to its retail electric rates via its Purchased Power Adjustment.

Eighty-one percent of Electric Division sales revenue was used to purchase electric power from TVA for the fiscal year ended June 30, 2015. Purchased power expense increased \$0.2 million compared to last year, due to a 1.5 percent wholesale power rate increase from TVA effective October 2014.

Margin on electric sales (operating revenue less purchased power expense) increased \$5.2 million or 4.8 percent, reflecting additional revenue from the KUB electric rate increase.

Operating expenses (excluding purchased power expense) increased \$6.8 million or 7.6 percent. Operating and maintenance (O&M) expenditures increased \$2.7 million or 5.1 percent. Depreciation expense increased \$2.7 million or 11.6 percent. Taxes and tax equivalents were \$1.4 million, or 10.6 percent, higher than the prior fiscal year.

Interest income was consistent with the prior fiscal year. Interest expense increased \$0.8 million or 10.5 percent, primarily due to the additional interest accrued on long-term bonds issued in August 2014 and April 2015.

Capital contributions decreased \$0.3 million, reflecting fewer electric system assets provided to KUB during the fiscal year.

Total plant assets (net) increased \$35.3 million or 7.9 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.

KUB sold two series of electric system revenue bonds during fiscal year 2015 for the purpose of funding electric system capital improvements totaling \$75 million. The \$35 million bond issue in April 2015 was accelerated to take advantage of the low interest rate environment which impacted the Division's debt rate and debt service coverage levels for fiscal year 2015. Long-term debt represented 43.3 percent of the Division's capital structure as of June 30, 2015, compared to 36.4 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 3.8. Maximum debt service coverage was 3.06.

#### 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.

#### **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 year and the year preceding the prior year.

## Statements of Net Position As of June 30

(in thousands of dollars)		2016		2015		2014
Current, restricted and other assets Capital assets, net Deferred outflows of resources Total assets and deferred outflows of resources	\$	157,010 511,260 8,544 676,814	\$	190,359 480,798 5,411 676,568	\$ _	151,636 445,495 1,415 598,546
Current and other liabilities Long-term debt outstanding Deferred inflows of resources Total liabilities and deferred inflows of resources	_	103,918 237,603 726 342,247	_	101,489 248,330 3,062 352,881	_	108,777 176,785 - 285,562
Net position Net investment in capital assets Restricted Unrestricted Total net position	\$ <u></u>	268,462 10,120 55,985 334,567	\$ <u></u>	228,768 9,091 85,828 323,687	\$_	262,995 7,956 42,033 312,984

#### **Normal Impacts on Statement of Net Position**

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

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

#### **Impacts and Analysis**

#### **Current, Restricted and Other Assets**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Current, restricted and other assets decreased \$33.3 million or 17.5 percent. The decrease in current assets reflects the utilization of \$20.5 million in bond proceeds, a decrease in general fund cash of \$9.7 million and a decrease in accounts receivable of \$4.1 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 \$0.5 million over recovery in fiscal year 2015. This under recovery of costs will be collected from customers next fiscal year through adjustments to rates via the Purchased Power Adjustment.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Current, restricted and other assets increased \$38.7 million or 25.5 percent. The increase in current assets reflects \$20.5 million more in unused bond proceeds, an increase in general fund cash of \$13 million, and a \$3.2 million rise in operating contingency reserves.

#### **Capital Assets**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Capital assets, net of depreciation, increased \$30.5 million or 6.3 percent. Major capital expenditures included \$25.1 million for distribution system improvements, \$7.7 million for pole replacements, \$7 million for installation or replacement of electric services, \$4.9 million for Grid Modernization, \$4.1 million for upgrades to various information systems, \$1.8 million for replacement and relocation of electric system assets to accommodate Tennessee Department of Transportation (TDOT) highway improvement projects, \$1.4 million for trucks and equipment, and \$1.4 million for street lighting improvements.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Capital assets, net of depreciation, increased \$35.3 million or 7.9 percent. Major capital expenditures included \$28.7 million for distribution system improvements, \$6 million for pole replacements, \$5.9 million for installation or replacement of electric services, \$4 million for a new substation and \$4 million for information system upgrades.

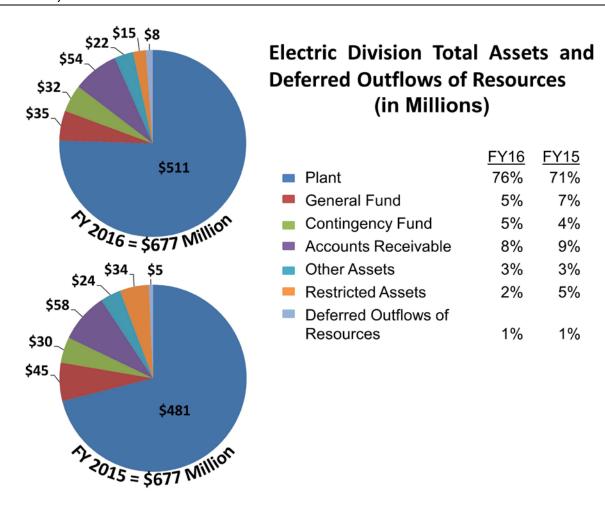
#### **Deferred Outflows of Resources**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Deferred outflows of resources increased \$3.1 million compared to the prior fiscal year primarily due to an increase in pension outflow of \$3.5 million.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Deferred outflows of resources increased \$4 million compared to the prior fiscal year, reflecting a \$2.5 million increase in the amortization of deferred losses on bonds primarily attributable to bonds refunded in April 2015. Pension outflow increased \$1.5 million.



#### **Current and Other Liabilities**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Current and other liabilities increased \$2.4 million or 2.4 percent, due in part to an actuarially determined net pension obligation of \$2.4 million recognized in fiscal year 2016. Accounts payable decreased \$1.9 million, which was offset by a \$1.7 million increase in accrued expenses. The outstanding balance on TVA conservation loans declined by \$1.9 million, as KUB ceased issuance of any new loans in fiscal year 2016.

KUB over recovered \$0.5 million in wholesale power costs from its customers in fiscal year 2015, as compared to a \$1.4 million under recovery in fiscal year 2016. This over recovery of costs was flowed back to KUB's electric customers during fiscal year 2016 through adjustments to rates via the Purchased Power Adjustment.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Current and other liabilities decreased \$7.3 million or 6.7 percent, due in part to a \$4.1 million decrease in accrued expenses from recognizing a \$2.9 million net pension asset during the fiscal year compared to a \$3 million pension contribution liability in the prior year. Accounts payable declined \$1.4 million. The outstanding balance on TVA conservation loans fell \$0.5 million. KUB over recovered \$0.5 million in purchased power costs from its customers in fiscal year 2015, which was \$3.9 million less than last fiscal year. The \$0.5 million over recovery in fiscal year 2015 will be flowed back to KUB's electric customers next fiscal year through adjustments to electric rates via the Purchased Power Adjustment. Those decreases were offset by a \$1.1 million increase in the current portion of revenue bonds payable.

#### **Long-Term Debt**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Long-term debt decreased \$10.7 million or 4.3 percent primarily due to \$10.1 million of long-term bond debt that shifted to current liabilities as payable within the next year.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Long-term debt increased \$71.5 million or 40.5 percent due to new debt issuances of \$40 million in August 2014 and \$35 million in April 2015 for the purpose of funding electric system capital improvements. The increase was partially offset by the scheduled repayment of bond debt.

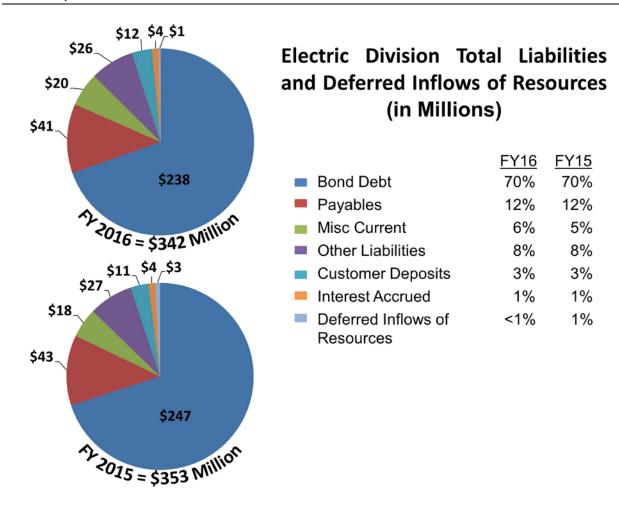
#### **Deferred Inflows of Resources**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Deferred inflows decreased \$2.3 million compared to the prior fiscal year due to differences in pension inflows.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Deferred inflows increased \$3.1 million compared to the prior fiscal year due to the change in valuation of pension liability creating a deferred inflow.



#### **Net Position**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Unrestricted net position decreased \$29.8 million, primarily due to the \$33.3 million decrease in current and other assets. Restricted net position increased \$1 million, due to the net increase of the electric bond fund and the associated interest payable. Net investment in capital assets increased by \$39.7 million or 17.4 percent. The increase was primarily the result of an increase of \$30.5 million in net electric plant additions.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Unrestricted net position increased \$43.8 million, primarily due to the \$38.7 million increase in current and other assets. Restricted net position increased \$1.1 million, due to the net increase of the electric bond fund and the associated interest payable. Net investment in capital assets decreased by \$34.2 million or 13 percent. The decrease was primarily the result of an increase of \$35.3 million of net electric plant additions offset by an increase of \$68.1 million in long-term debt from new bond issuances.

#### 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 year and the year preceding the prior year.

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

(in thousands of dollars)		2016		2015		2014
Operating revenues	\$	521,369	\$	533,206	\$	527,833
Less: Purchased power expense		402,604		419,773	_	419,558
Margin from sales		118,765		113,433	_	108,275
Operating expenses						
Distribution		33,062		34,408		32,905
Customer service		6,589		6,546		5,858
Administrative and general		14,856		13,822		13,351
Depreciation		29,490		25,888		23,190
Taxes and tax equivalents		15,795		15,069		13,627
Total operating expenses		99,792		95,733		88,931
Operating income		18,973		17,700	_	19,344
Interest income		549		322	-	290
Interest expense		(9,258)		(8,549)		(7,739)
Other income/(expense)	_	438	_	1,585	_	(213)
Change in net position before capital contributions		10,702		11,058	_	11,682
Capital contributions		178		12	_	306
Change in net position	\$	10,880	\$	11,070	\$	11,988

## 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.
- 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 2016 Compared to Fiscal Year 2015

The Division's net position increased \$10.9 million, which was \$0.2 million less than last year's \$11.1 million increase. A restatement to fiscal year 2014's net position based on a change in method of accounting for the pension reduced the total net position by \$0.4 million during fiscal year 2015 to \$10.7 million. The lower earnings were attributable to the net effect of a \$5.3 million increase in margin on sales, a \$4.1 million rise in operating expenses, a \$0.7 million increase in interest expense and a \$1.1 million decrease in other income.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

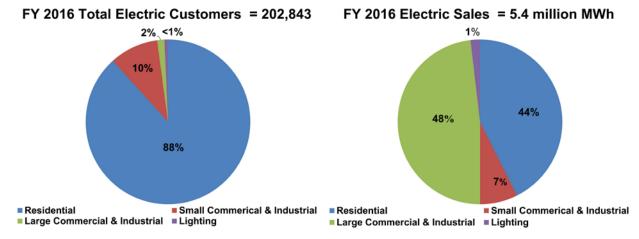
The Division's net position increased \$11.1 million, which was \$0.9 million less than last year's \$12 million increase. A restatement to the prior fiscal year's net position based on a change in method of accounting for the pension reduced the total net position by \$0.4 million during fiscal year 2015 to \$10.7 million. The lower earnings were attributable to the net effect of a \$5.2 million increase in margin on sales, a \$6.8 million rise in operating expenses, a \$0.8 million increase in interest expense, a \$1.8 million increase in other income and a \$0.3 million decrease in capital contributions.

#### Margin from Sales

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Margin on electric sales grew \$5.3 million, reflecting higher revenues due to the July 2014 and July 2015 rate increases.

Operating revenue decreased \$11.8 million or 2.2 percent, reflecting the net result of additional revenue from KUB's one percent electric rate increase effective July 2015 and the flow through of TVA rate adjustments, offset by the second mildest winter in the last forty years. The milder winter resulted in a 3.1 percent decline in total power sales volumes. Purchased power expense decreased \$17.2 million over last year. Power sales of 5.4 million MWh were 0.1 million MWh less than the prior fiscal year.



Residential customers represented 88 percent of total electric system customers and accounted for 44 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 16.2 percent of KUB's billed volumes. Those ten customers represent five industrial and five commercial customers, including two governmental customers. Sales to Gerdau Ameristeel, KUB's largest industrial customer, accounted for 5.7 percent of total electric system sales.

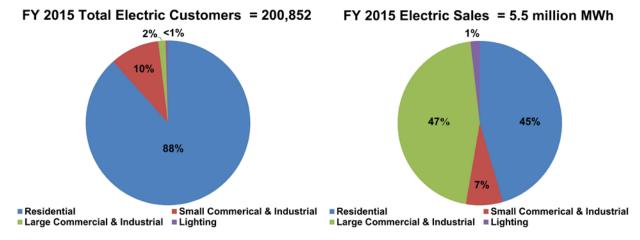
KUB has added 4,487 electric system customers over the past three years, representing annual growth of less than one percent.

Electric sales volumes have remained consistent over the past three years with fiscal year 2016 residential sales being impacted by the mild winter.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Margin on electric sales grew \$5.2 million, reflecting higher revenues due to the October 2013 and July 2014 rate increases.

Operating revenue increased \$5.4 million or 1 percent, reflecting the net result of additional revenue from KUB's one percent electric rate increase effective July 2014, and the flow through of TVA rate adjustments. Purchased power expense increased \$0.2 million over last year. Power sales of 5.5 million MWh were consistent with the prior fiscal year.



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 15.6 percent of KUB's billed volumes. Those ten customers represent five industrial and five commercial customers, including two governmental customers. Sales to Gerdau Ameristeel, KUB's largest industrial customer, were 295 MWh or 5.3 percent of total electric system sales.

Electric sales volumes in fiscal year 2015 were consistent with the previous fiscal year.

KUB has added 3,194 electric system customers over the past three years, representing annual growth of less than one percent.

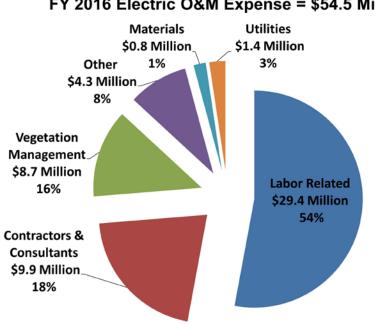
Electric sales volumes have increased 1.5 percent since fiscal year 2013. Large commercial and industrial sales have increased 0.2 percent over the same period of time.

#### **Operating Expenses**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Operating expenses (excluding purchased power expense) increased 4.1 million, or 4.2 percent, compared to fiscal year 2015. 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 \$1.3 million or 3.9 percent, primarily from reduced outside contractor and consultant use.
- Customer service expenses were consistent with the prior year.
- Administrative and general expenses increased \$1 million or 7.5 percent, primarily due to higher pension expense.



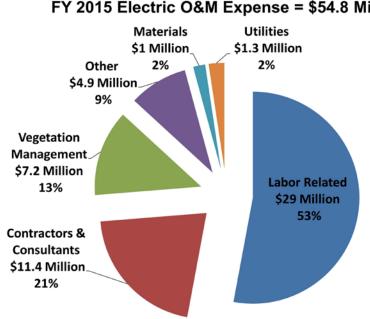
#### FY 2016 Electric O&M Expense = \$54.5 Million

- Depreciation expense for fiscal year 2016 increased \$3.6 million or 13.9 percent. This increase was primarily attributable to Century II initiatives, substation upgrades and the impairment of meters due to the Grid Modernization project that calls for accelerated depreciation of meters being replaced over the next four years as part of the project.
- Taxes and tax equivalents were \$0.7 million higher than the prior fiscal year primarily due to increased plant in service levels.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Operating expenses (excluding purchased power expense) increased \$6.8 million, or 7.6 percent, compared to fiscal year 2014. 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.

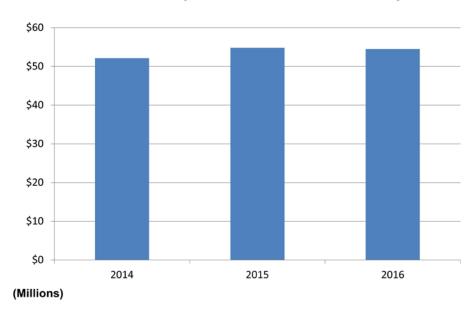
- Distribution expenses increased \$1.5 million or 4.6 percent, primarily from electric system restoration expenses related to the February 2015 ice storm.
- Customer service expenses were up \$0.7 million compared with the prior year, primarily due to increased computer software expenses and outside consultant expenses.
- Administrative and general expenses increased \$0.5 million or 3.5 percent, primarily due to an increase in the Division's portion of shared costs.



#### FY 2015 Electric O&M Expense = \$54.8 Million

- Depreciation expense for fiscal year 2015 increased \$2.7 million or 11.6 percent. This increase was primarily attributable to Grid Modernization related software, meters and meter testing equipment and substation improvements.
- Taxes and tax equivalents were \$1.4 million higher than the prior fiscal year due to an increase in tax equivalent payments to the City of Knoxville, Knox County, and other taxing jurisdictions. The City of Knoxville's property tax rate increased this year and higher plant in service levels contributed to the growth in tax equivalent payments.

#### **Electric Division Operation & Maintenance Expense**



#### Other Income and Expense

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Interest income increased \$0.2 million compared to the the prior fiscal year.

Interest expense increased \$0.7 million or 8.3 percent, primarily due to the additional interest accrued on long-term revenue bonds issued in August 2014 and April 2015.

Other income (net) decreased \$1.1 million, primarily due to the recognition of \$1.6 million in non-operating income for future reimbursement of restoration expenses related to the February 2015 ice storm in fiscal year 2015.

The Division's capital contributions increased \$0.2 million due to more donated assets compared to the prior fiscal year.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Interest income was consistent with the prior fiscal year.

Interest expense increased \$0.8 million or 10.5 percent, primarily due to the additional interest accrued on long-term revenue bonds issued in August 2014 and April 2015.

Other income (net) increased \$1.8 million, primarily due to an accrual of \$1.6 million in non-operating income for future reimbursement of restoration expenses related to the February 2015 ice storm.

The Division's capital contributions decreased \$0.3 million due to less donated assets compared to the prior fiscal year.

#### **Capital Assets**

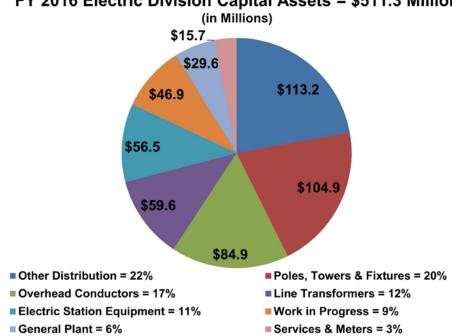
#### Capital Assets As of June 30 (Net of Depreciation)

(in thousands of dollars)

	2016		2015		2014
Distribution Plant					
Services and Meters	\$ 15,719	\$	17,964	\$	16,851
Electric Station Equipment	56,487		34,643		32,797
Poles, Towers and Fixtures	104,867		93,780		84,332
Overhead Conductors	84,937		79,199		73,663
Line Transformers	59,587		56,774		55,600
Other Accounts	113,141		108,888		106,894
Total Distribution Plant	\$ 434,738	\$	391,248	\$	370,137
General Plant	29,590		27,312		27,288
Total Plant Assets	\$ 464,328	\$	418,560	\$	397,425
Work In Progress	46,932		62,238		48,070
Total Net Plant	\$ 511,260	\$	480,798	\$	445,495

#### Fiscal Year 2016 Compared to Fiscal Year 2015

As of June 30, 2016, the Division had \$511.3 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 \$30.5 million or 6.3 percent over the end of the last fiscal year.



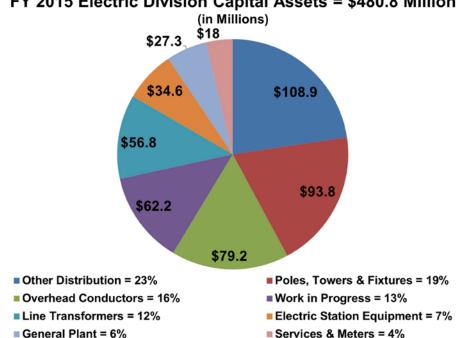
FY 2016 Electric Division Capital Assets = \$511.3 Million

Major capital asset expenditures during the year were as follows:

- \$25.1 million for electric distribution system improvements
- \$7.7 million for pole replacements
- \$7 million for installation of new electric services and the upgrade or replacement of existing services
- \$4.9 million for Grid Modernization
- \$4.1 million for upgrades to various information systems
- \$1.8 million for the replacement and relocation of electric system assets to accommodate TDOT highway improvement projects
- \$1.4 million for trucks and equipment
- \$1.4 million for street lighting improvements

#### Fiscal Year 2015 Compared to Fiscal Year 2014

As of June 30, 2015, the Division had \$480.8 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 \$35.3 million or 7.9 percent over the end of the last fiscal year.



FY 2015 Electric Division Capital Assets = \$480.8 Million

Major capital asset expenditures during the year were as follows:

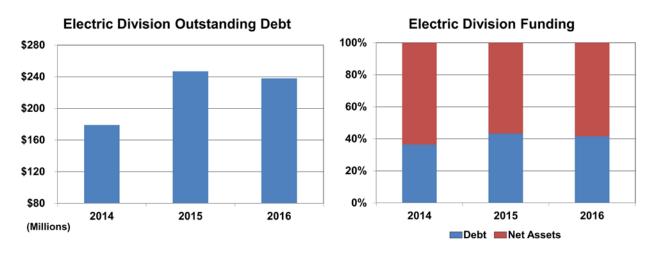
- \$28.7 million for various electric distribution improvements
- \$6 million for pole replacements
- \$5.9 million for installation of new electric services and the upgrade or replacement of existing services
- \$4.5 million for new Cherokee Trail substation
- \$4 million for information systems upgrades

#### **Debt Administration**

The Division's outstanding debt was \$238 million at June 30, 2016. The bonds are secured solely by revenues of the Electric Division. Debt as a percentage of the Division's capital structure was 41.6 percent in 2016, 43.3 percent in 2015 and 36.4 percent at the end of fiscal year 2014. 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) 20		2016		2015		2014
Revenue bonds Total outstanding debt	\$ <u>-</u>	237,985 237,985	\$ \$	247,055 247,055	\$ \$	178,940 178,940



The Division will pay \$119.2 million in principal payments over the next ten years, representing 50.1 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 2016 Compared to Fiscal Year 2015

As of June 30, 2016, the Division had \$238 million in outstanding debt (including the current portion of revenue bonds), compared to \$247.1 million last year, a decrease of \$9.1 million or 3.7 percent. The decrease is attributable to the scheduled repayment of bond debt. The Division's weighted average cost of debt at June 30, 2016 was 3.89 percent.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2016, the Division's revenue bonds were rated AA+ by Standard & Poor's and Aa2 by Moody's Investors Service.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

As of June 30, 2015, the Division had \$247.1 million in outstanding debt (including the current portion of revenue bonds), compared to \$178.9 million last year, an increase of \$68.2 million or 38.1 percent. The Division's weighted average cost of debt at June 30, 2015 was 3.89 percent.

The increase is attributable to the issuance of revenue bonds during the fiscal year of \$40 million in August 2014 and \$35 million in April 2015. The increase was partially offset by the scheduled repayment of bond debt.

In April 2015, KUB issued \$28.6 million of revenue refunding bonds. The refunding of certain bonds at lower interest rates will provide debt service savings of \$2.2 million over the life of the bonds.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2015, 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 1,300 additional electric customers in fiscal year 2017.

In June 2014, the KUB Board adopted three years of rate increases for the Electric Division to help fund the ongoing Century II infrastructure programs. The first and second rate increases were effective July 2014 and July 2015. The remaining electric rate increase will be effective July 2016. Each rate increase will provide approximately \$5.2 million in additional annual Electric Division revenue.

In April 2016, KUB management presented the fiscal year 2017 budget to the KUB Board of Commissioners that accommodates the projected level of capital investment for the fiscal year. Over the course of the next ten years KUB plans to spend approximately \$108 million dollars on Grid Modernization, of which the Division's share is approximately \$69.7 million. In July 2016, the four-year deployment of advanced meters began.

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 long-term debt includes \$23.9 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 6.8 percent. Any future actions by Congress may also affect the anticipated rebates for future fiscal years.

GASB Statement No. 82, Pension Issues – An amendment of GASB Statements No. 67, No. 68 and No. 73 is effective for fiscal years beginning after June 15, 2016. GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, and GASB No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, are effective for periods beginning after June 15, 2017. 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 2016.

#### **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, 2016 and 2015. 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, 2016 and 2015

		2016		2015
Assets and Deferred Outflows of Resources				
Current assets:  Cash and cash equivalents	\$	34,791,786	\$	44,471,851
Short-term contingency fund investments	Φ	6,950,668	Ф	2,478,572
Other current assets		374,356		1,018,522
Accrued interest receivable		23,575		28,982
Accounts receivable, less allowance of uncollectible accounts		23,373		20,902
of \$594,022 in 2016 and \$548,492 in 2015		53,968,641		58,078,711
Inventories		8,359,135		6,669,312
Prepaid expenses		684,835		649,770
Total current assets		105,152,996	,	113,395,720
Total current assets		103,132,990	•	113,393,720
Restricted assets:				
Electric bond fund		14,739,081		12,976,376
Other funds		10,281		21,071
Unused bond proceeds		-		20,519,850
Total restricted assets		14,749,362	,	33,517,297
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Electric plant in service		859,020,997		789,895,908
Less accumulated depreciation		(394,693,191)	,	(371,336,117)
D. C.		464,327,806		418,559,791
Retirement in progress		1,071,534		568,243
Construction in progress		45,860,796	,	61,669,625
Net plant in service		511,260,136	,	480,797,659
Other assets:				
Net pension asset		-		2,890,382
Long-term contingency fund investments		24,934,746		27,725,842
TVA conservation program receivable		8,153,192		10,109,135
Under recovered purchased power cost		1,379,643		, , , <u>-</u>
Other		2,640,401		2,720,927
Total other assets		37,107,982	,	43,446,286
Total assets		668,270,476	,	671,156,962
		_		
Deferred outflows of resources:				
Pension outflow		4,971,500		1,515,455
Unamortized bond refunding costs		3,572,465	,	3,895,275
Total deferred outflows of resources		8,543,965	•	5,410,730
Total assets and deferred outflows of resources	\$	676,814,441	\$	676,567,692

#### Knoxville Utilities Board Electric Division Statements of Net Position June 30, 2016 and 2015

		2016		2015
Liabilities, Deferred Inflows, and Net Position Current liabilities:				
Current portion of revenue bonds	\$	10,110,000	\$	9,070,000
Sales tax collections payable	Ψ	881,833	Ψ	910,574
Accounts payable		40,653,044		42,598,006
Accrued expenses		19,309,494		17,658,067
Customer deposits plus accrued interest		11,735,639		11,084,371
Accrued interest on revenue bonds		4,628,956		3,906,251
Total current liabilities	-	87,318,966		85,227,269
Other liabilities:				
TVA conservation program		8,412,853		10,336,682
Accrued compensated absences		4,344,437		3,922,730
Customer advances for construction		1,262,889		1,280,962
Net pension liability		2,419,277		-
Over recovered purchased power cost		-		500,522
Other		159,005		220,247
Total other liabilities	_	16,598,461	•	16,261,143
Long-term debt:				
Electric revenue bonds		227,875,000		237,985,000
Unamortized premiums/discounts	_	9,728,282		10,345,326
Total long-term debt	_	237,603,282	-	248,330,326
Total liabilities	-	341,520,709	-	349,818,738
Deferred inflows of resources:				
Pension inflow	_	725,888		3,061,589
Total deferred inflows of resources	_	725,888		3,061,589
Total liabilities and deferred inflows of resources	-	342,246,597		352,880,327
Net position				
Net investment in capital assets Restricted for:		268,462,479		228,768,196
Debt service		10,110,125		9,070,125
Other		10,281		21,070
Unrestricted		55,984,959		85,827,974
Total net position	-	334,567,844	•	323,687,365
Total liabilities, deferred inflows, and net position	\$	676,814,441	\$	676,567,692

#### Knoxville Utilities Board Electric Division Statements of Revenues, Expenses and Changes in Net Position Years Ended June 30, 2016 and 2015

		2016		2015
Operating revenues	\$	521,369,202	\$	533,205,845
Operating expenses			_	
Purchased power		402,603,523		419,773,131
Distribution		33,062,072		34,407,647
Customer service		6,589,446		6,546,034
Administrative and general		14,856,340		13,821,576
Provision for depreciation		29,490,370		25,887,777
Taxes and tax equivalents		15,794,474		15,069,402
Total operating expenses	_	502,396,225		515,505,567
Operating income		18,972,977		17,700,278
Non-operating revenues (expenses)				
Contributions in aid of construction		1,632,730		1,551,247
Interest and dividend income		549,060		322,222
Interest expense		(9,257,913)		(8,548,826)
Amortization of debt costs		143,733		72,445
Write-down of plant for costs recovered through contributions		(1,632,730)		(1,551,247)
Other		294,226	_	1,512,078
Total non-operating revenues (expenses)		(8,270,894)		(6,642,081)
Change in net position before capital contributions		10,702,083		11,058,197
Capital contributions		178,396	_	11,611
Change in net position		10,880,479		11,069,808
Net position, beginning of year, as previously reported		323,687,365		312,984,264
Change in method of accounting for pension		-		(366,707)
Net position, beginning of year, as restated	_	323,687,365		312,617,557
Net position, end of year	\$	334,567,844	\$	323,687,365

#### Knoxville Utilities Board Electric Division Statements of Cash Flows Years Ended June 30, 2016 and 2015

		2016		2015
Cash flows from operating activities:				
Cash receipts from customers	\$	518,450,827	\$	526,079,765
Cash receipts from other operations		10,049,581		8,687,968
Cash payments to suppliers of goods or services		(439,418,959)		(460,073,403)
Cash payments to employees for services		(24,308,505)		(22,949,363)
Payment in lieu of taxes		(13,900,176)		(13,309,981)
Cash receipts from collections of TVA conservation loan program participants		3,067,056		3,046,131
Cash payments for TVA conservation loan program	_	(3,034,941)	_	(3,071,013)
Net cash provided by operating activities	_	50,904,883	_	38,410,104
Cash flows from capital and related financing activities:				
Net proceeds from bond issuance		-		77,011,071
Principal paid on revenue bonds and notes payable		(9,070,000)		(7,935,000)
(Increase) decrease in unused bond proceeds		20,519,850		(20,519,850)
Interest paid on revenue bonds and notes payable		(8,535,208)		(7,849,367)
Acquisition and construction of electric plant		(62,417,653)		(63,915,204)
Changes in electric bond fund, restricted		(1,762,705)		(1,392,547)
Customer advances for construction		33,177		525,582
Proceeds received on disposal of plant		241,531		-
Cash received from developers and individuals for capital purposes		1,632,730		1,551,247
Net cash used in capital and related financing activities		(59,358,278)	_	(22,524,068)
Cash flows from investing activities:				
Changes in deposit and investment accounts:				
Purchase of investment securities		(4,019,405)		(7,518,767)
Maturities of investment securities		2,476,455		4,354,758
Interest received		554,467		304,148
Other property and investments		(238,187)		(26,575)
Net cash provided by (used in) investing activities	-	(1,226,670)	-	(2,886,436)
Net increase (decrease) in cash and cash equivalents	_	(9,680,065)	_	12,999,600
The time case (accrease) in easit and easit equivalents		(0,000,000)		12,000,000
Cash and cash equivalents, beginning of year	-	44,471,851	-	31,472,251
Cash and cash equivalents, end of year	=	34,791,786	\$	44,471,851
Reconciliation of operating income to net cash provided by operating activities				
Operating income	\$	18,972,977	\$	17,700,278
Adjustments to reconcile operating income to net cash	Ψ	10,012,011	Ψ	11,100,210
provided by operating activities:				
Depreciation expense		30,602,422		26,978,350
Changes in operating assets and liabilities:		,,		
Accounts receivable		4,191,195		602,185
Inventories		(1,689,822)		853,013
Prepaid expenses		(35,065)		20,329
TVA conservation program receivable		1,874,818		523,680
Other assets		584,979		(1,782,164)
Sales tax collections payable		(28,741)		32,501
Accounts payable and accrued expenses		(353,913)		(2,711,061)
Unrecovered purchased power cost		(1,880,165)		(3,912,247)
TVA conservation program payable		(1,923,829)		(548,563)
Customer deposits plus accrued interest		651,269		558,360
Other liabilities		(61,242)		95,443
Net cash provided by operating activities	\$	50,904,883	\$	38,410,104
Noncash capital activities:			_	
Acquisition of plant assets through developer contributions	\$	178,396	\$	11,611

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

#### Knoxville Utilities Board Electric Division Notes to Financial Statements June 30, 2016 and 2015

#### 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, 2016 and 2015, 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 will 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 February 2015, the Governmental Accounting Standards Board (GASB) issued Statement No. 72 (Statement No. 72), *Fair Value Measurement and Application*. Statement No. 72 is intended to provide guidance for determining a fair value measurement for financial reporting purposes and for applying fair value to certain investments and disclosures related to all fair value measurements.

#### Knoxville Utilities Board Electric Division Notes to Financial Statements June 30, 2016 and 2015

In June 2015, the GASB issued GASB Statement No. 73 (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 Provision of GASB Statements 67 and 68. The requirements of this Statement will improve financial reporting by establishing a single framework for the presentation of information about pensions and enhance comparability.

In June 2015, the GASB issued GASB Statement No. 76 (Statement No. 76), *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*. The objective of this Statement is to simplify the hierarchy of generally accepted accounting principles (GAAP) used to prepare financial statements of state and local governmental entities. This Statement supersedes Statement No. 55, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*, and amends Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, paragraphs 64, 74, and 82.

In December 2015, the GASB issued GASB Statement No. 79 (Statement No. 79), *Certain External Investment Pools and Pool Participants*. This statement establishes criteria for an external investment pool to qualify for making the election to measure all of its investments at amortized cost for financial reporting purposes.

Statements No. 72, 73, 76, and 79 are effective for fiscal years beginning after June 15, 2015.

#### **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 \$1,112,052 in fiscal year 2016 and \$1,090,573 in fiscal year 2015. 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 \$1,342,705 in fiscal year 2016 and \$1,987,329 in fiscal year 2015.

#### **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.

#### Knoxville Utilities Board Electric Division Notes to Financial Statements June 30, 2016 and 2015

#### **Net Position**

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

These classifications are defined as follows:

- Net investment in capital assets This component of net position consists of capital assets, including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt also should be included in this component of net position. If there are significant unspent related debt proceeds at year end, the portion of the debt attributable to the unspent proceeds are not included in the calculation of net investment in capital assets. Rather, that portion of the debt is included in the same net position component as the unspent proceeds.
- Net position-restricted This component of net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets. Generally, a liability relates to restricted assets if the asset results from a resource flow that also results in the recognition of a liability or if the liability will be liquidated with the restricted assets reported.
- Net position-unrestricted This component of net position consists of assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or the restricted component of net position.

#### **Contributions in Aid of Construction and Capital Contributions**

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

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

#### **Inventories**

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

#### **Change in Method of Accounting for Pension**

In June 2012, the Governmental Accounting Standards Board (GASB) issued Statement No. 68, Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27, which revises existing standards of financial reporting for pensions. In addition, during November 2013, GASB issued Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date, which requires deferred outflow of resources to be recognized for any contributions made subsequent to the measurement date of the beginning net pension liability. These standards were adopted by KUB in 2015 and resulted in a restatement of 2015 beginning net position of \$763.975 (Division's share \$366,707).

#### **Pension Plan**

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, 2016 and 2015 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2016 and 2015 are based on a December 31, 2015 and 2014 measurement date, respectively.

#### 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 previously reported as assets 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 previously reported as liabilities 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 differences between expected and actual experience in accordance with Statement No. 68.

#### **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, no loans were made through this program after October 31, 2015.

#### **Subsequent Events**

KUB has evaluated events and transactions through October 27, 2016, 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 July 2016 for the purpose of funding electric system capital improvements in fiscal year 2017. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.75 percent.

#### **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 Costs 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 (\$1,379,643) at June 30, 2016 and \$500,522 at June 30, 2015.

#### **Recently Issued Accounting Pronouncements**

In June 2015, the GASB issued two related Statements that affect accounting and financial reporting by state and local governments for postemployment benefits other than pensions (OPEB). GASB Statement No. 74 (Statement No. 74), *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, addresses reporting by OPEB plans that administer benefits on behalf of governments. GASB Statement No. 75 (Statement No. 75), *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, addresses reporting by governments that provide OPEB to their employees. Statement No. 74 is effective for fiscal years beginning after June 15, 2016, and Statement No. 75 is effective for fiscal years beginning after June 15, 2017.

In March 2016, the GASB issued GASB Statement No. 82 (Statement No. 82), *Pension Issues – An amendment of GASB Statements No. 67, No. 68 and No. 73.* The objective of this Statement is to address certain issues that have been raised with respect to the presentation of payroll-related measures in required supplementary information, the selection of assumptions and treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes and the classification of payments made by employers to satisfy employee contribution obligations. Statement No. 82 is effective for fiscal years beginning after June 15, 2016.

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. KUB's Agency Bond investments are rated Aaa by Moody's Investors Service.

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:

		2016	2015
Current assets			
Cash and cash equivalents	\$	34,791,786	\$ 44,471,851
Short-term contingency fund investments		6,950,668	2,478,572
Other assets			
Long-term contingency fund investments		24,844,482	27,664,712
Restricted assets			
Unused bond proceeds		-	20,519,583
Electric bond fund		14,739,081	12,976,376
Other funds		10,281	21,071
	\$ _	81,336,298	\$ 108,132,165

The above amounts do not include accrued interest of \$90,264 in fiscal year 2016 and \$61,397 in fiscal year 2015. 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, 2016:

Deposit and Investment Maturities (in Years)							
Fair	Less						
Value		Than 1	1-5				
\$ 42,414,914	\$	42,414,914 \$	-				
11,368,956		11,368,956	-				
38,688,375		6,950,668	31,737,707				
1,490,000		842,500	647,500				
\$ 93,962,245	\$	61,577,038 \$	32,385,207				
· 	Fair Value \$ 42,414,914 11,368,956 38,688,375 1,490,000	Fair Value \$ 42,414,914 \$ 11,368,956 38,688,375 1,490,000	Fair Less Value Than 1  \$ 42,414,914 \$ 42,414,914 \$ 11,368,956				

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, 2016:

- U.S. Agency bonds of \$31,737,707, which have a maturity at purchase of greater than one year, are valued using quoted market prices (Level 1 inputs)
- Certificates of deposits of \$647,500, which have a maturity at purchase of greater than one
  year, are valued at interest rates and yield curves observable at commonly quoted
  intervals (Level 2 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:

	2016	2015
Wholesale and retail customers		
Billed services	\$ 30,849,655	\$ 35,223,950
Unbilled services	20,416,060	19,677,853
Other	3,296,948	3,725,400
Allowance for uncollectible accounts	(594,022)	(548,492)
	\$ 53,968,641	\$ 58,078,711

# 5. Accounts Payable and Accruals

Accounts payable and accruals were composed of the following:

	2016	2015
Trade accounts	\$ 40,653,044	\$ 42,598,006
Salaries and wages	1,113,204	802,644
Advances on pole rental	2,135,320	1,147,346
Self-insurance liabilities	843,930	815,352
Other current liabilities	15,217,040	14,892,725
	\$ 59,962,538	\$ 60,256,073

# 6. Long-Term Obligations

Long-term debt consists of the following:

		Balance June 30, 2015	Additions		Payments	Defeased		Balance June 30, 2016	Amounts Due Within One Year
W-2005 - 3.0 - 4.5%	\$	31,350,000	\$ -	\$	1,870,000 \$	-	\$	29,480,000	\$ 1,940,000
X-2006 - 4.0 - 5.0%		1,825,000	-		1,825,000	-		-	-
Y-2009 - 2.5 - 5.0%		6,875,000	-		1,600,000	-		5,275,000	1,675,000
Z-2010 - 1.45 - 6.35%		25,205,000	-		1,285,000	-		23,920,000	1,305,000
AA-2012 - 3.0 - 5.0%		34,840,000	-		990,000	-		33,850,000	2,540,000
BB-2012 - 3.0 - 4.0%		33,875,000	-		650,000	-		33,225,000	675,000
CC-2013 - 3.0 - 4.0%		9,535,000	-		50,000	-		9,485,000	450,000
DD-2014 - 2.0 - 4.0%		40,000,000	-		675,000	-		39,325,000	700,000
EE-2015 - 2.0 - 5.0%		28,550,000	-		125,000	-		28,425,000	150,000
FF-2015 - 2.0 - 5.0%		35,000,000	-	_		-	_	35,000,000	675,000
Total bonds	\$	247,055,000	\$ -	\$	9,070,000 \$	-	\$	237,985,000	\$ 10,110,000
Unamortized Premium	_	10,345,326	=		617,044	-	-	9,728,282	-
Total long term debt	\$	257,400,326	\$ -	\$	9,687,044 \$	-	\$	247,713,282	\$ 10,110,000

										Amounts
		Balance						Balance		Due
		June 30,						June 30,		Within
		2014		Additions		Payments	Defeased	2015		One Year
W-2005 - 3.0 - 4.5%	\$	33,140,000	\$	-	\$	1,790,000 \$	-	\$ 31,350,000	\$	1,870,000
X-2006 - 4.0 - 5.0%		3,550,000		-		1,725,000	-	1,825,000		1,825,000
Y-2009 - 2.5 - 5.0%		35,900,000		-		1,525,000	27,500,000	6,875,000		1,600,000
Z-2010 - 1.45 - 6.35%		26,470,000		-		1,265,000	-	25,205,000		1,285,000
AA-2012 - 3.0 - 5.0%		35,795,000		-		955,000	-	34,840,000		990,000
BB-2012 - 3.0 - 4.0%		34,500,000		-		625,000	-	33,875,000		650,000
CC-2013 - 3.0 - 4.0%		9,585,000		-		50,000	-	9,535,000		50,000
DD-2014 - 2.0 - 4.0%		-		40,000,000		-	-	40,000,000		675,000
EE-2015 - 2.0 - 5.0%		-		28,550,000		-	-	28,550,000		125,000
FF-2015 - 2.0 - 5.0%	_	-	_	35,000,000	_			35,000,000	_	
Total bonds	\$	178,940,000	\$	103,550,000	\$	7,935,000 \$	27,500,000	\$ 247,055,000	\$	9,070,000
Unamortized Premium		5,779,555	-	5,617,592		411,968	639,853	10,345,326	_	-
Total long term debt	\$	184,719,555	\$	109,167,592	\$	8,346,968 \$	28,139,853	\$ 257,400,326	\$	9,070,000

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

Fiscal		Т		Grand	
Year		Principal	Interest		Total
2017	\$	10,110,000	\$ 9,069,156	\$	19,179,156
2018		10,515,000	8,674,203		19,189,203
2019		10,955,000	8,237,917		19,192,917
2020		11,405,000	7,785,808		19,190,808
2021		11,850,000	7,299,291		19,149,291
2022-2026		64,365,000	28,535,403		92,900,403
2027-2031		51,750,000	16,522,440		68,272,440
2032-2036		20,960,000	10,255,208		31,215,208
2037-2041		24,775,000	6,357,063		31,132,063
2042-2046	_	21,300,000	 1,722,875	_	23,022,875
Total	\$	237,985,000	\$ 104,459,364	\$	342,444,364

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, 2016, 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 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, 2015 these bonds became subject to a 6.8 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.

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, 2016, and the trust account assets are not included in the financial statements.

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Other liabilities consist of the following:

		Balance June 30, 2015		Increase		Decrease		Balance June 30, 2016
TVA conservation program Accrued compensated	\$	10,336,682	\$	1,174,926	\$	(3,098,755)	\$	8,412,853
absences		3,922,730		8,454,477		(8,032,770)		4,344,437
Customer advances								
for construction		1,280,962		844,669		(862,742)		1,262,889
Other	_	220,247	_	96,950	_	(158,192)	_	159,005
	\$	15,760,621	\$	10,571,022	\$	(12,152,459)	\$	14,179,184

### 7. Lease Commitments

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

2017	\$ 136,464
2018	129,271
2019	75,847
2020	 3,931
Total operating minimum lease payments	\$ 345,513

# 8. Capital Assets

Capital asset activity was as follows:

		Balance June 30, 2015		Increase		Decrease		Balance June 30, 2016
Distribution Plant		•						,
Services and Meters	\$	43,187,323	\$	824,211	\$	(459,676)	\$	43,551,858
Electric Station Equipment		125,338,097		27,775,476		(880,406)		152,233,167
Poles, Towers and Fixtures		134,306,063		14,897,225		(1,142,671)		148,060,617
Overhead Conductors		128,493,727		9,622,259		(1,341,285)		136,774,701
Line Transformers		92,547,983		5,192,889		(897,720)		96,843,152
Other Accounts	_	186,274,579		9,899,201	_	(749,426)	_	195,424,354
Total Distribution Plant	\$	710,147,772	\$	68,211,261	\$	(5,471,184)	\$	772,887,849
General Plant		79,748,136		7,631,550		(1,246,538)		86,133,148
Total Plant Assets	\$	789,895,908	\$	75,842,811	\$	(6,717,722)	\$	859,020,997
Less Accumulated Depreciation		(371,336,117)	_	(30,854,964)		7,497,890	_	(394,693,191)
Net Plant Assets	\$	418,559,791	\$	44,987,847	\$	780,168	\$	464,327,806
Work In Progress		62,237,868		60,847,411		(76,152,949)		46,932,330
Total Net Plant	\$	480,797,659	\$	105,835,258	\$	(75,372,781)	\$	511,260,136
Distribution Blood		Balance June 30, 2014		Increase		Decrease		Balance June 30, 2015
Distribution Plant	•	June 30, 2014	•		•		Φ.	June 30, 2015
Services and Meters	\$	June 30, 2014 41,235,171	\$	2,176,349	\$	(224,197)	\$	June 30, 2015 43,187,323
Services and Meters Electric Station Equipment	\$	June 30, 2014 41,235,171 120,964,151	\$	2,176,349 6,556,645	\$	(224,197) (2,182,699)	\$	June 30, 2015 43,187,323 125,338,097
Services and Meters Electric Station Equipment Poles, Towers and Fixtures	\$	June 30, 2014 41,235,171 120,964,151 124,328,627	\$	2,176,349 6,556,645 12,739,496	\$	(224,197) (2,182,699) (2,762,060)	\$	June 30, 2015 43,187,323 125,338,097 134,306,063
Services and Meters Electric Station Equipment Poles, Towers and Fixtures Overhead Conductors	\$	41,235,171 120,964,151 124,328,627 120,168,100	\$	2,176,349 6,556,645 12,739,496 9,163,450	\$	(224,197) (2,182,699) (2,762,060) (837,823)	\$	43,187,323 125,338,097 134,306,063 128,493,727
Services and Meters Electric Station Equipment Poles, Towers and Fixtures Overhead Conductors Line Transformers	\$	41,235,171 120,964,151 124,328,627 120,168,100 90,103,801	\$	2,176,349 6,556,645 12,739,496 9,163,450 3,298,379	\$	(224,197) (2,182,699) (2,762,060) (837,823) (854,197)	\$	43,187,323 125,338,097 134,306,063 128,493,727 92,547,983
Services and Meters Electric Station Equipment Poles, Towers and Fixtures Overhead Conductors Line Transformers Other	-	41,235,171 120,964,151 124,328,627 120,168,100 90,103,801 178,735,315		2,176,349 6,556,645 12,739,496 9,163,450 3,298,379 8,051,035	_	(224,197) (2,182,699) (2,762,060) (837,823) (854,197) (511,771)		43,187,323 125,338,097 134,306,063 128,493,727 92,547,983 186,274,579
Services and Meters Electric Station Equipment Poles, Towers and Fixtures Overhead Conductors Line Transformers	\$	41,235,171 120,964,151 124,328,627 120,168,100 90,103,801	\$	2,176,349 6,556,645 12,739,496 9,163,450 3,298,379	\$	(224,197) (2,182,699) (2,762,060) (837,823) (854,197) (511,771)	\$ \$	43,187,323 125,338,097 134,306,063 128,493,727 92,547,983
Services and Meters Electric Station Equipment Poles, Towers and Fixtures Overhead Conductors Line Transformers Other Total Distribution Plant	-	41,235,171 120,964,151 124,328,627 120,168,100 90,103,801 178,735,315 675,535,165		2,176,349 6,556,645 12,739,496 9,163,450 3,298,379 8,051,035 41,985,354	_	(224,197) (2,182,699) (2,762,060) (837,823) (854,197) (511,771) (7,372,747)		43,187,323 125,338,097 134,306,063 128,493,727 92,547,983 186,274,579 710,147,772
Services and Meters Electric Station Equipment Poles, Towers and Fixtures Overhead Conductors Line Transformers Other	-	41,235,171 120,964,151 124,328,627 120,168,100 90,103,801 178,735,315		2,176,349 6,556,645 12,739,496 9,163,450 3,298,379 8,051,035	_	(224,197) (2,182,699) (2,762,060) (837,823) (854,197) (511,771) (7,372,747)		43,187,323 125,338,097 134,306,063 128,493,727 92,547,983 186,274,579
Services and Meters Electric Station Equipment Poles, Towers and Fixtures Overhead Conductors Line Transformers Other Total Distribution Plant  General Plant	-	41,235,171 120,964,151 124,328,627 120,168,100 90,103,801 178,735,315 675,535,165	\$	2,176,349 6,556,645 12,739,496 9,163,450 3,298,379 8,051,035 41,985,354	\$	(224,197) (2,182,699) (2,762,060) (837,823) (854,197) (511,771) (7,372,747)	\$	43,187,323 125,338,097 134,306,063 128,493,727 92,547,983 186,274,579 710,147,772
Services and Meters Electric Station Equipment Poles, Towers and Fixtures Overhead Conductors Line Transformers Other Total Distribution Plant  General Plant Total Plant Assets  Less Accumulated Depreciation	\$ -	41,235,171 120,964,151 124,328,627 120,168,100 90,103,801 178,735,315 675,535,165 75,386,810 750,921,975 (353,496,822)	\$	2,176,349 6,556,645 12,739,496 9,163,450 3,298,379 8,051,035 41,985,354 5,489,993 47,475,347 (26,741,232)	\$ \$	(224,197) (2,182,699) (2,762,060) (837,823) (854,197) (511,771) (7,372,747) (1,128,667) (8,501,414) 8,901,937	\$ -	43,187,323 125,338,097 134,306,063 128,493,727 92,547,983 186,274,579 710,147,772 79,748,136 789,895,908 (371,336,117)
Services and Meters Electric Station Equipment Poles, Towers and Fixtures Overhead Conductors Line Transformers Other Total Distribution Plant  General Plant Total Plant Assets	-	41,235,171 120,964,151 124,328,627 120,168,100 90,103,801 178,735,315 675,535,165 75,386,810 750,921,975	\$	2,176,349 6,556,645 12,739,496 9,163,450 3,298,379 8,051,035 41,985,354 5,489,993 47,475,347	\$	(224,197) (2,182,699) (2,762,060) (837,823) (854,197) (511,771) (7,372,747) (1,128,667) (8,501,414) 8,901,937	\$	43,187,323 125,338,097 134,306,063 128,493,727 92,547,983 186,274,579 710,147,772 79,748,136 789,895,908
Services and Meters Electric Station Equipment Poles, Towers and Fixtures Overhead Conductors Line Transformers Other Total Distribution Plant  General Plant Total Plant Assets  Less Accumulated Depreciation	\$ -	41,235,171 120,964,151 124,328,627 120,168,100 90,103,801 178,735,315 675,535,165 75,386,810 750,921,975 (353,496,822)	\$	2,176,349 6,556,645 12,739,496 9,163,450 3,298,379 8,051,035 41,985,354 5,489,993 47,475,347 (26,741,232)	\$ \$	(224,197) (2,182,699) (2,762,060) (837,823) (854,197) (511,771) (7,372,747) (1,128,667) (8,501,414) 8,901,937	\$	43,187,323 125,338,097 134,306,063 128,493,727 92,547,983 186,274,579 710,147,772 79,748,136 789,895,908 (371,336,117)

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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, 2016 and June 30, 2015, the amount of these liabilities was \$843,930 and \$815,352, respectively, resulting from the following changes:

	2016	2015
Balance, beginning of year	\$ 815,352	\$ 738,983
Current year claims and changes in estimates	6,744,214	6,885,119
Claims payments	(6,715,636)	(6,808,750)
Balance, end of year	\$ 843,930	\$ 815,352

#### 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, 2014 to include all prior approved The Plan is a single-employer contributory, defined benefit pension plan established by Knoxville Utilities Board ("KUB") 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 KUB 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:

	2015	2014
Inactive plan members:		
Terminated vested participants	39	40
Retirees and beneficiaries	628	627
Active plan members	<u>692</u>	<u>725</u>
Total	<u>1,359</u>	1,392

#### **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 will not be 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 address the loss 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. Plan B participants may not make contributions to the Plan. 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 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 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, 2015:

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 \$5,669,380 and \$6,314,399 for 2014 and 2013, respectively, were made during KUB's fiscal years ending June 30, 2016 and 2015, respectively. Of these amounts, \$2,721,302 and \$3,030,911 are attributable to the Electric Division. The contribution was determined as part of the January 1, 2014 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. The actuarial valuation for the Plan year ending December 31, 2015 resulted in an actuarially determined contribution of \$4,816,913 for the fiscal year ending June 30, 2017, based on the Plan's current funding policy. The Electric Division's portion of this contribution is \$2,312,118.

Subsequent to June 30, 2016, the actuarial valuation for the Plan year ending December 31, 2016 was completed. The actuarial valuation resulted in an actuarially determined contribution of \$3,756,283 for the fiscal year ending June 30, 2018, based on the Plan's current funding policy. The Electric Division's portion of this contribution is \$1,803,016. For the Plan year ending December 31, 2016, the Plan's actuarial funded ratio was 103.04 percent.

The actuarial valuations for the Plan years ending December 31, 2015 and 2016, which determine the actuarially determined contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

#### Implementation of GASB 68

In fiscal year 2015, KUB adopted 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, 2016 and 2015 will be based on the December 31, 2015 and 2014 measurement date, respectively. The Division's share of the net pension liability at June 30, 2016 is \$2,419,277 and net pension asset at June 30, 2015 is \$2,890,382.

# **Knoxville Utilities Board Electric Division**

# **Notes to Financial Statements**

June 30, 2016 and 2015

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

	2015	2014
Total pension liability	\$ 204,502,350	\$ 202,773,764
Plan fiduciary net position	199,462,190	(208,795,394)
Plan's net pension liability (asset)	\$ 5,040,160	\$ (6,021,630)

Plan fiduciary net position as a percentage of the

total pension liability 97.54% 102.97%

Changes in Net Pension Liability are as follows:

	Increase					
	(Decrease)					
	Т	otal Pension	Ρ	lan Fiduciary	Net Pension Liability (a) - (b)	
		Liability	1	Net Position		
		(a)		(b)		
Balances at December 31, 2014	\$	202,773,764	\$	208,795,394	\$	(6,021,630)
Changes for the year:						
Service cost		4,157,062		-		4,157,062
Interest		14,812,784		-		14,812,784
Differences between Expected						
and Actual Experience		(1,890,334)		-		(1,890,334)
Changes of Assumptions		-		-		-
Contributions - employer		-		5,991,887		(5,991,887)
Contributions - rollovers		-		482,060		(482,060)
Contributions - member		-		5,486		(5,486)
Net investment income	- (64,551)			64,551		
Benefit payments		(15,350,926)		(15,350,926)		-
Administrative expense		-		(397,160)		397,160
Net changes		1,728,586		(9,333,204)		11,061,790
Balances at December 31, 2015	\$	204,502,350	\$	199,462,190	\$	5,040,160

#### Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of December 31, 2015 and 2014, 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 28 years remaining as of

January 1, 2013 and 27 years remaining as of January 1, 2014

Discount rate: 8% at January 1, 2013 and 7.5% at January 1, 2014

Salary increases: From 2.58% to 7.92% for January 1, 2013 and from 2.80% to

5.15% for January 1, 2014, based on years of service

Mortality: Sex distinct RP-2000 Combined Mortality projected to 2018

using Scale AA for the January 1, 2013 valuation. Sex distinct RP-2000 Combined Mortality projected to 2024 using Scale

AA for the January 1, 2014 valuation

Inflation 2.8 percent

The actuarial assumptions used in the December 31, 2015 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, 2015 and 2014 are summarized in the following table. The real rate of return reported for fixed income is for aggregate fixed income. The Plan has both aggregate and long duration fixed income.

	Long Term Expected Real Rate of Return			
Asset Class	2015	2014		
Domestic equity	7.2%	6.0%		
Non-U.S. equity	7.4%	7.0%		
Real estate equity	6.5%	5.7%		
Fixed income	3.7%	1.8%		
Cash and deposits	2.6%	0.5%		

#### Discount rate

The discount rate used to measure the total pension liability was 7.5 percent as of January 1, 2015 and 2014. 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, 2015, 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%		Current		1%
	Decrease (6.5%)				Increase (8.5%)
Plan's net pension liability	\$ 17,128,897	\$	5,040,160	\$	(5,963,331)

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

For the year ended June 30, 2015, KUB recognized pension expense of \$2,749,905 (Division's share \$1,319,954).

The impact of experience gains or losses and assumption changes on the Total Pension Liability are recognized in expense over the average expected remaining service life of all active and inactive members. As of the measurement date, this recognition period was 3.72 years. However, there were no experience gains or losses, and there were no assumption changes during the measurement year.

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 \$7,972,887. \$1,594,577 of that gain was recognized in the current year and an identical amount will be recognized in each of the next four years, resulting in a deferred inflow of resources of \$6,378,310 (Division's share \$3,061,589). The table below summarizes the current balances of deferred outflows and deferred inflows of resources along with the net recognition over the next five years. In addition, KUB recorded a deferred outflow of resources of \$3,157,199 (Division's share \$1,515,455) at June 30, 2015 for employer contributions made between December 31, 2014 and June 30, 2015.

		rred Outflows Resources	Deferred Inflows of Resources		
Differences between expected and actual					
experience	\$	-	\$	-	
Changes in assumptions		-		-	
Net difference between projected and actual					
earnings on pension plan investments		-		6,378,310	
Contributions subsequent to measurement date		3,157,199		-	
Total	\$	3,157,199	\$	6,378,310	

For the year ended June 30, 2016, KUB recognized pension expense of \$4,665,035 (Division's share \$2,239,217).

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, 2014, this average was 5.00 years. During the measurement year, there were no assumption or benefit changes. There was an experience gain of \$1,890,334 with \$378,067 of that recognized in the current year and in each of the next four years.

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 \$15,382,915. \$3,076,583 of that loss was recognized in the current year and an identical amount will be recognized in each of the next four years. Unrecognized investment gains from prior periods were \$6,378,310 of which \$1,594,577 was recognized as a reduction in pension expense in the current year.

Experience gains this year created a deferred inflow of resources of \$1,512,267 (Division's share \$725,888). The combination of unrecognized investment losses this year along with unrecognized net investment gains from prior periods results in a deferred outflow of resources as of December 31, 2015 of \$7,522,599 (Division's share \$3,610,848). The table below

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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 \$2,834,692 (Division's share \$1,360,652) at June 30, 2016 for employer contributions made between December 31, 2015 and June 30, 2016.

	Deferred Outflows of Resources		Deferred Inflows of Resources	
Differences between expected and actual				
experience	\$	-	\$	1,512,267
Changes in assumptions		-		-
Net difference between projected and actual				
earnings on pension plan investments		7,522,599		-
Contributions subsequent to measurement date		2,834,692		
Total	\$	10,357,291	\$	1,512,267

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

Year ended June 30:	
2017 \$	3,938,630
2018	1,103,939
2019	1,103,938
2020	2,698,517
Thereafter	_

# 11. 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 \$1,739,057 (Division's share \$834,747) and \$1,593,350 (Division's share \$764,808), respectively, for the years ended June 30, 2016 and 2015.

### 12. Other Post-Employment Benefits (OPEB)

The Governmental Accounting Standards Board (GASB) established standards for the measurement, recognition, and reporting of other post-employment benefits (OPEB). OPEB includes post-employment benefits other than pension, which, for KUB, is presently limited to post-employment health care. GASB Statement No. 45 (Statement No. 45) requires the recognition of the accrued OPEB liability for the respective year, plus the disclosure of the total unfunded liability.

KUB currently provides post-employment health care benefits to 585 former employees and 593 covered dependents. The cost of coverage is shared with retirees and beneficiaries. KUB recognizes its share of the cost of post-employment health care benefits as an expense as claims are paid.

KUB amended its Group Health Plan in 1999, eliminating post-employment health care benefits for all employees hired on or after July 1, 1999. As of June 30, 2016, 356 active employees were eligible for individual and dependent coverage at separation. To qualify, the employee must meet the Rule of 80 (age plus years of service) with a minimum of 20 years of service, and be enrolled in medical coverage on their last day.

In May 2006, the State of Tennessee adopted Tennessee Code Annotated, Title 8, Chapter 50, Part 12 authorizing governmental entities to establish Trusts for the purpose of pre-funding their respective OPEB liabilities.

Although Statement No. 45 does not require pre-funding of the liability, KUB has determined that it is in the long-term economic interest of KUB and its ratepayers to establish a Trust to pre-fund KUB's OPEB liability.

Knoxville Utilities Board Other Post-Employment Benefits Trust (the "Trust") is a single-employer Other Post-Employment Benefits Plan established by the Knoxville Utilities Board (KUB) 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 KUB 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.

KUB makes annual contributions to the Trust at an actuarially determined rate. 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.

An actuarial valuation of KUB's Postretirement Benefit Plan was performed for the Trust as of January 1, 2014 for fiscal year June 30, 2015 and January 1, 2015 for fiscal year June 30, 2016. The following table presents the OPEB cost for the year, the amount contributed to the Trust, and changes in the net OPEB obligation for fiscal year ending June 30:

	2016			2015	
a) Net OPEB Obligation/(Asset) at					
beginning of fiscal year	\$	(174,410)	\$	(177,322)	
b) Annual Required Contribution (ARC)		953,221		3,497,372	
c) Interest on Net OPEB Obligation/(Asset)		(13,081)		(14,186)	
d) Adjustment to ARC		(16,427)		(17,098)	
e) Annual OPEB Cost (b+c-d)		956,567		3,500,284	
f) Employer Contributions		953,221		3,497,372	
g) Net OPEB Obligation/(Asset) at					
end of fiscal year (a+e-f)	\$	(171,064)	\$	(174,410)	

KUB's annual OPEB cost, the percentage of annual OPEB cost contributed to the Trust, and the net OPEB obligation for fiscal year 2016 and the two preceding years were as follows:

### **Schedule of Employer Contributions**

Actuarial Valuation Date	Employer Fiscal Year	Annual Required Contribution	Fiscal Year Actual Contribution	Percentage Contributed	Net OPEB Obligation
1/1/2012	6/30/2014	3,327,412	4.057.091	121.93%	(177,322)
1/1/2013	6/30/2015	3,497,372	3,497,372	100.00%	(174,410)
1/1/2014	6/30/2016	953,221	953,221	100.00%	(171,064)

Total contributions to the OPEB Trust for the fiscal year ended June 30, 2016 were \$953,221 (Division's share \$457,546). The contribution to the Trust was consistent with the annual required contribution, as determined by the Postretirement Benefit Plan's actuarial valuation as of January 1, 2014, which was \$953,221 (Division's share \$457,546). As of June 30, 2016, the employer's OPEB obligation has been exceeded by \$171,064 (Division's share \$82,111).

The annual required contribution for the fiscal year ending June 30, 2017, as determined by the Plan's actuarial valuation as of January 1, 2015 is \$620,015 (Division's share \$297,607).

The actuarial valuation for the Plan as of January 1, 2016 has been completed. The valuation determined that the Plan's actuarial accrued liability was \$45,118,624 (Division's share \$21,656,940). The actuarial value of the Plan's assets was \$48,510,796 (Division's share \$23,285,182). As a result, the Plan's unfunded actuarial accrued liability was (\$3,392,172) (Division's share (\$1,628,243)). The Plan's actuarial funded ratio was 108 percent. Due to the future implementation of GASB 75, the contributions made for fiscal year ending June 30, 2018 will be the actuarially determined contribution instead of the annual required contribution and the actuarial cost method used to determine the contributions will change from the projected unit credit cost method to the entry age normal cost method. The actuarially determined contribution for fiscal year ending June 30, 2018 will be zero. See Required Supplementary Information for OPEB Schedule of Funding Progress.

The actuarial valuations dated January 1, 2015 and 2016, which determine the annual required contribution and actuarially determined contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

The required schedule of funding progress immediately following the notes to the financial statements presents multi-year trend information about whether the actuarial value of Trust assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members to that point.

Actuarial calculations reflect a long-term perspective. Consistent with that perspective, actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets.

Identification of actuarial methods and significant assumptions used to determine the annual required contribution for the fiscal year ending June 30, 2016:

<ol> <li>Actuarial cost method</li> </ol>
II. Actuarial value of assets

III. Investment return

Projected salary increases Healthcare cost Trend: Medicare

Non-Medicare

IV. Amortization method

Remaining amortization period

Projected unit credit cost method Smoothed market value with phase-in method using a smoothing period of 5 years

7.5%, based on the expected portfolio return N/A

2014 - 2030+, ranging from 4.5% to 7.45%

2014 - 2030+, ranging from 4.5% to 7.45% 2014 - 2030+, ranging from 4.5% to 8.75%

Level dollar closed (30-year)

22 years

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 Division, P.O. Box 59017, Knoxville, TN 37950-9017.

# 13. 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, 2016 and 2015 are summarized as follows:

	2016	2015
City of Knoxville		
Amounts billed by the Division for utilities and		
related services	\$ 8,675,231	\$ 8,591,649
Payments by the Division in lieu of property tax	6,979,195	6,764,881
Payments by the Division for services provided	14,497	75,417
Other divisions of KUB		
Amounts billed to other divisions for utilities		
and related services provided	5,255,288	5,530,344
Interdivisional rental expense	-	-
Interdivisional rental income	769,151	786,190
Amounts billed to the Division by other divisions		
for utilities services provided	197,577	212,051

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

	2016	2015
Accounts receivable	\$ 541,608	\$ 539,053

# 14. 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 Funding Progress June 30, 2016 (Unaudited)

# **Other Post-Employment Benefits (OPEB)**

Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Actuarial Accrued Liability (UAAL) (b-a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b)-(a)]/(c)
January 1, 2008	\$ -	\$ 108,329,141	\$ 108,329,141	0%	\$ 31,234,509	346.8%
January 1, 2009	14,593,487	100,726,738	86,133,251	14%	31,846,091	270.5%
January 1, 2010	21,275,643	58,475,364	37,199,721	36%	30,069,028	123.7%
January 1, 2011	40,749,815	64,289,254	23,539,439	63%	28,878,791	81.5%
January 1, 2012	37,907,357	61,603,466	23,696,109	62%	28,269,123	83.8%
January 1, 2013	38,571,803	63,341,531	24,769,728	61%	27,566,340	89.9%
January 1, 2014	43,409,955	46,889,808	3,479,853	93%	26,724,154	13.0%
* January 1, 2015	47,705,478	47,745,640	40,162	100%	25,816,884	0.2%
* January 1, 2016	48,510,796	45,118,624	(3,392,172)	108%	25,243,127	(13.4%)

<sup>\*</sup> The actuarial valuations dated January 1, 2015 and 2016, which determine the annual required contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

# **Knoxville Utilities Board Electric Division**

# Required Supplementary Information – Schedule of Changes in Net Pension Liability and Related Ratios

June 30, 2016 (Unaudited)

Year ended December 31				
	2015		2014	
Φ.	4 157 062	¢	4,092,808	
Φ		φ	14,698,657	
			14,090,037	
			(15,533,167)	
	,		3,258,298	
			, ,	
	202,773,764		199,515,466	
\$	204,502,350	\$	202,773,764	
\$		\$	5,908,541	
	•		475,854	
	, ,		22,292,369	
			29,733	
			(15,405,167)	
	(397,160)		(378,085)	
	(76,000)		(128,000)	
	(9,333,204)		12,795,245	
	208,795,394		196,000,149	
\$	199,462,190	\$	208,795,394	
\$	5,040,160	\$	(6,021,630)	
	97.54%		102.97%	
\$	50,679,585	\$	50,246,074	
	9.95%		(11.98%)	
	\$ \$	\$ 4,157,062 14,812,784 (1,890,334) (15,350,926) 1,728,586 202,773,764 \$ 204,502,350 \$ 5,991,887 487,546 (95,430) 30,879 (15,274,926) (397,160) (76,000) (9,333,204) 208,795,394 \$ 199,462,190 \$ 5,040,160 \$ 50,679,585	\$ 4,157,062 \$ 14,812,784 (1,890,334) (15,350,926)	

### Notes to Schedule:

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

<sup>\*\*</sup> Excludes amounts related to 401(k) matching contributions.

# **Knoxville Utilities Board Electric Division**

Required Supplementary Information – Schedule of Employer Pension Contributions
June 30, 2016

	Year end	ded De	ecember 31
	2015		2014
Annual required contribution  Contribution in relation to the annual	\$ 5,991,88	7 \$	5,908,541
required contribution	5,991,88	7	5,908,541
Contribution deficiency	\$ -	\$	-
Covered-employee payroll Contributions as a percentage of	\$ 50,679,58	5 \$	50,246,074
covered-employee payroll	11.829	%	11.76%

#### **Notes to Schedule:**

(Unaudited)

Valuation Dates: January 1, 2013 and January 1, 2014

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: Individual entry age
Asset valuation method: 5-year smoothed market

Amortization method: Level dollar closed period with 28 years remaining as of January 1, 2013

and 27 years remaining as of January 1, 2014.

Discount rate: 8% at January 1, 2013 and 7.5% at January 1, 2014

Salary increases: From 2.58% to 7.92% for January 1, 2013 and from 2.8% to 5.15% for

January 1, 2014, based on years of service

Mortality: Sex distinct RP-2000 Combined Mortality projected to 2018 using Scale AA

for the Janaury 1, 2013 valuation. Sex distinct RP-2000 Combined Mortality

projected to 2024 using Scale AA for the January 1, 2014 valuation.

Inflation: 2.8 percent

<sup>\*</sup> 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 Supplemental Information – Schedule of Expenditures of Federal Awards and State Financial Assistance June 30, 2016 Schedule 1

KUB was awarded a grant from Tennessee Emergency Management Agency (as a flow through from FEMA) for reimbursement for costs related to storms in 2015. The schedule below shows the expenditures for the current fiscal year.

	Federal/State			
Program Name	Agency	CFDA Number	Contract Number	Expenditures
J.S. Department of Homeland Security	Tennessee Emergency Management	97.036	34101-06616	\$ 1,325,524
		Total Program 9	97.036	\$ 1,325,524
		Total Federal A	Awards	\$ 1,325,524

#### 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 information in this schedule is presented in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. Therefore, some amounts presented in this schedule may differ from amounts presented in, or used in the preparation of, the basic financial statements.

# Knoxville Utilities Board Electric Division Supplemental Information – Schedule of Findings and Questioned Costs June 30, 2016 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: CFDA Name of Program

97.036 Tennessee Emergency Management

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.

See accompanying Report of Independent Auditors on Supplemental Information.

(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), and OPEB Trust funds. 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 \$400,000 per individual participant.

# Knoxville Utilities Board Electric Division Supplemental Information - Schedule of Debt Maturities by Fiscal Year June 30, 2016 (Unaudited)

Schedule 4

**Continued on Next Page** 

	W-20	005	Y-20	09		Z-2010		AA-2012			
FY	Principal	Interest	Principal	Interest	Principal	Interest	Rebate*	Principal	Interest		
16-17	1,940,000	1,218,606	1,675,000	151,625	1,305,000	1,225,919	429,072	2,540,000	1,353,963		
17-18	2,015,000	1,139,506	1,750,000	100,250	1,330,000	1,180,440	413,154	2,670,000	1,223,713		
18-19	2,095,000	1,057,306	1,850,000	37,000	1,355,000	1,128,729	395,055	2,805,000	1,086,838		
19-20	2,185,000	970,341			1,390,000	1,070,710	374,749	2,955,000	942,838		
20-21	2,275,000	878,354			1,425,000	1,007,355	352,575	3,100,000	791,463		
21-22	2,370,000	781,069			1,470,000	939,300	328,756	3,270,000	632,213		
22-23	2,470,000	678,219			1,515,000	866,145	303,151	3,415,000	482,163		
23-24	2,580,000	569,294			1,560,000	787,710	275,698	3,540,000	360,763		
24-25	2,695,000	453,903			1,615,000	703,545	246,241	3,640,000	253,063		
25-26	2,820,000	333,263			1,670,000	613,180	214,614	1,105,000	180,506		
26-27	2,950,000	205,201			1,725,000	516,395	180,739	1,140,000	144,025		
27-28	3,085,000	69,413			1,785,000	413,266	144,643	1,180,000	106,325		
28-29					1,850,000	303,738	106,308	1,225,000	65,713		
29-30					1,925,000	187,156	65,505	1,265,000	22,138		
30-31					2,000,000	63,500	22,225				
31-32											
32-33											
33-34											
34-35											
35-36											
36-37											
37-38											
38-39											
39-40											
40-41											
41-42											
42-43											
43-44											
44-45											
45-46											
Total	\$ 29,480,000 \$	8,354,475	\$ 5,275,000	288,875	\$ 23,920,000 \$	11.007.088	\$ 3,852,485	\$ 33,850,000	7,645,724		

<sup>\*</sup>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, 2015 these bonds became subject to a 6.8% 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.

# Knoxville Utilities Board Electric Division Supplemental Information - Schedule of Debt Maturities by Fiscal Year June 30, 2016 (Unaudited)

Schedule 4
Continued from Previous Page

	BB-2	2012	CC-2	2013	DD-	2014	EE-2	2015	FF-	2015	То	tal	Grand Total (P + I)
FY	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	(,
16-17	675,000	1,017,625	450,000	305,099	700,000	1,354,369	150,000	977,450	675,000	1,464,500	10,110,000	9,069,156	19,179,156
17-18	700,000	997,000	475,000	286,600	725,000	1,332,994	150,000	969,950	700,000	1,443,750	10,515,000	8,674,203	19,189,203
18-19	725,000	972,000	475,000	267,600	775,000	1,314,369	150,000	962,450	725,000	1,411,625	10,955,000	8,237,917	19,192,917
19-20	750,000	942,500	500,000	248,100	800,000	1,298,619	2,075,000	937,950	750,000	1,374,750	11,405,000	7,785,808	19,190,808
20-21	800,000	911,500	515,000	227,800	825,000	1,282,369	2,135,000	863,825	775,000	1,336,625	11,850,000	7,299,291	19,149,291
21-22	825,000	879,000	540,000	206,700	875,000	1,256,619	2,235,000	788,100	800,000	1,297,250	12,385,000	6,780,251	19,165,251
22-23	875,000	849,375	560,000	187,497	900,000	1,221,119	2,300,000	708,250	825,000	1,256,625	12,860,000	6,249,393	19,109,393
23-24	900,000	822,750	575,000	170,475	950,000	1,184,119	2,415,000	590,375	850,000	1,214,750	13,370,000	5,700,236	19,070,236
24-25	950,000	795,000	590,000	153,000	975,000	1,145,619	2,555,000	478,900	900,000	1,171,000	13,920,000	5,154,030	19,074,030
25-26	975,000	766,125	640,000	134,550	1,025,000	1,110,744	2,670,000	387,750	925,000	1,125,375	11,830,000	4,651,493	16,481,493
26-27	1,025,000	736,125	650,000	115,200	1,075,000	1,079,244	2,735,000	306,675	950,000	1,078,500	12,250,000	4,181,365	16,431,365
27-28	1,075,000	704,625	670,000	95,400	1,125,000	1,046,244	2,850,000	222,900	975,000	1,030,375	12,745,000	3,688,548	16,433,548
28-29	1,125,000	671,625	675,000	75,225	1,175,000	1,011,744	2,955,000	135,825	1,025,000	985,500	10,030,000	3,249,370	13,279,370
29-30	1,175,000	637,125	710,000	54,450	1,225,000	975,744	3,050,000	45,750	1,050,000	944,000	10,400,000	2,866,363	13,266,363
30-31	1,225,000	601,125	725,000	32,925	1,275,000	938,244			1,100,000	901,000	6,325,000	2,536,794	8,861,794
31-32	1,275,000	563,625	735,000	11,023	1,325,000	897,919			1,125,000	856,500	4,460,000	2,329,067	6,789,067
32-33	1,325,000	524,625			1,375,000	854,375			1,175,000	810,500	3,875,000	2,189,500	6,064,500
33-34	1,375,000	484,125			1,450,000	808,469			1,225,000	762,500	4,050,000	2,055,094	6,105,094
34-35	1,450,000	441,750			1,500,000	759,594			1,250,000	713,000	4,200,000	1,914,344	6,114,344
35-36	1,500,000	397,500			1,575,000	707,703			1,300,000	662,000	4,375,000	1,767,203	6,142,203
36-37	1,575,000	351,375			1,650,000	652,250			1,350,000	609,000	4,575,000	1,612,625	6,187,625
37-38	1,625,000	303,375			1,725,000	593,188			1,400,000	554,000	4,750,000	1,450,563	6,200,563
38-39	1,700,000	253,500			1,800,000	531,500			1,450,000	497,000	4,950,000	1,282,000	6,232,000
39-40	1,775,000	201,375			1,875,000	462,500			1,500,000	438,000	5,150,000	1,101,875	6,251,875
40-41	1,850,000	147,000			1,950,000	386,000			1,550,000	377,000	5,350,000	910,000	6,260,000
41-42	1,950,000	90,000			2,025,000	306,500			1,600,000	314,000	5,575,000	710,500	6,285,500
42-43	2,025,000	30,375			2,125,000	223,500			1,675,000	248,500	5,825,000	502,375	6,327,375
43-44					2,225,000	136,500			1,725,000	180,500	3,950,000	317,000	4,267,000
44-45					2,300,000	46,000			1,800,000	110,000	4,100,000	156,000	4,256,000
45-46									1,850,000	37,000	1,850,000	37,000	1,887,000
Total \$	33,225,000	16,092,125	9,485,000	2,571,644	39,325,000	\$ 24,918,158	28,425,000	8,376,150	\$ 35,000,000	\$ 25,205,125	\$ 237,985,000 \$	104,459,364	342,444,364

See accompanying Report of Independent Auditors on Supplemental Information.

**Energy Charge:** 

Rate Class		Base Charge			Customers
Residential		Customer Charge: Energy Charge:	\$16.60 per month, I Summer Period Winter Period Transition Period	ess Hydro Allocation Credit: \$1.60 per month. 8.688 cents per kWh per month. 8.647 cents per kWh per month. 8.647 cents per kWh per month.	179,100
Commercial/ Industrial	A. 1.	billing demand during th	he latest 12-month peri	effective contract demand, if any, or (ii) its highest iod is not more than 50 kWh, and (b) customer's monthly iod do not exceed 15,000 kWh: point per month.  10.112 cents per kWh. 10.071 cents per kWh. 10.071 cents per kWh.	19,454
	2.	demand during the late	st 12-month period is g ing demand is less tha eed 15,000 kWh: \$60.00 per delivery First 50 kW of billin	effective contract demand or (ii) its highest billing greater than 50 kW but not more than 1,000 kW, or n 50 kW and its energy takings for any month point per month.  g demand per month, no demand charge. of billing demand per month, at	2,799

\$13.92 per kW.

\$13.13 per kW.

\$13.13 per kW.

First 15,000 kWh per month at 11.487 cents per kWh

Additional kWh per month at 5.713 cents per kWh. First 15,000 kWh per month at 11.446 cents per kWh

Additional kWh per month at 5.713 cents per kWh.

First 15,000 kWh per month at 11.446 cents per kWh Additional kWh per month at 5.713 cents per kWh.

Summer Period

**Transition Period** 

Summer Period

Winter Period

Transition Period

Winter Period

Schedule 5

Number of

Rate Class				Number of Customers
3.	If (a) the higher of the cu during the latest 12-mont Customer Charge: Demand Charge:	•		51
		Winter Period	First 1,000 kW of billing demand per month, at \$13.47 per kW. Excess over 1,000 kW of billing demand per month, at \$14.37 per kW, plus an additional \$14.37 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.	
		Transition Period	First 1,000 kW of billing demand per month, at \$13.47 per kW. Excess over 1,000 kW of billing demand per month, at \$14.37 per kW, plus an additional \$14.37 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.	
	Energy Charge:	Summer Period Winter Period Transition Period	<ul><li>6.175 cents per kWh.</li><li>6.175 cents per kWh.</li><li>6.175 cents per kWh.</li></ul>	

Rate Class		Base Charge			Number of Customers
Commercial/ Industrial	B.	This rate shall apply to the demand is greater than a Customer Charge: Administrative Charge: Demand Charge:		oint per month.	4
		Summer Period	Onpeak Demand Maximum Demand Excess Demand	\$10.15 per kW per month of the customer's onpeak billing demand, plus \$5.56 per kW per month of the customer's maximum billing demand, plus \$15.71 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.	
		Winter Period	Onpeak Demand Maximum Demand Excess Demand	\$9.25 per kW per month of the customer's onpeak billing demand, plus \$5.56 per kW per month of the customer's maximum billing demand plus \$14.81 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.	
		Transition Period	Onpeak Demand Maximum Demand Excess Demand	\$9.25 per kW per month of the customer's onpeak billing demand, plus \$5.56 per kW per month of the customer's maximum billing demand plus \$14.81 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.	

(Unaudited) Schedule 5

Energy Charge:		
Summer Period	Onpeak	9.158 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	6.827 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.493 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	2.175 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	8.094 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	7.034 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.493 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	2.175 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	6.798 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	6.798 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.493 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	2.175 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 Peri	od, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate
	of 1.733 cents per kV	Wh per month shall be applied to the portion, if any, of the minimum offpeak energy
	takings amount that is	s greater than the metered energy.

Rate Class		Base Charge			Number of Customers	
Commercial/ Industrial	C.	demand is greater than Customer Charge: Administrative Charge:	ne firm electric power requirements where a customer's currently effective contract 15,000 kW but not more than 25,000 kW: \$1,500 per delivery point per month. \$700 per delivery point per month.			
		Demand Charge: Summer Period	Onpeak Demand Maximum Demand Excess Demand	\$10.15 per kW per month of the customer's onpeak billing demand, plus \$5.27 per kW per month of the customer's maximum billing demand, plus \$15.42 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.		
		Winter Period	Onpeak Demand Maximum Demand Excess Demand	\$9.25 per kW per month of the customer's onpeak billing demand, plus \$5.27 per kW per month of the customer's maximum billing demand plus \$14.52 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.		
		Transition Period	Onpeak Demand Maximum Demand Excess Demand	\$9.25 per kW per month of the customer's onpeak billing demand, plus \$5.27 per kW per month of the customer's maximum billing demand plus \$14.52 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.		

Block 3

Energy Charge:		
Summer Period	Onpeak	9.158 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	6.827 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.493 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	2.175 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	8.094 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	7.034 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.493 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	2.175 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	6.798 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	6.798 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.493 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak enegy to total energy, plus

of 1.733 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.

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate

2.175 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.

Rate Class		Base Charge			Number of Customers
Commercial/ Industrial	D.	This rate shall apply to the demand is greater than 2	the firm electric power requirements where a customer's currently effective contract n 25,000 kW:		1
		Customer Charge: Administrative Charge: Demand Charge:	\$1,500 per delivery point per month. Example: \$700 per delivery point per month.		
		Summer Period	Onpeak Demand Maximum Demand Excess Demand	\$10.15 per kW per month of the customer's onpeak billing demand, plus \$5.32 per kW per month of the customer's maximum billing demand, plus \$15.47 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.	
		Winter Period	Onpeak Demand Maximum Demand Excess Demand	\$9.25 per kW per month of the customer's onpeak billing demand, plus \$5.32 per kW per month of the customer's maximum billing demand plus \$14.57 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.	
		Transition Period	Onpeak Demand Maximum Demand Excess Demand	\$9.25 per kW per month of the customer's onpeak billing demand, plus \$5.32 per kW per month of the customer's maximum billing demand plus \$14.57 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	9.183 cents per kWh per month for all metered onpeak kWh, plus		
Offpeak: Block 1	6.852 cents per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to toal energy, plus		
Block 2	2.412 cents per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak enegy to total energy, plus		
Block 3	2.200 cents per kWh per month for the hours use of onpeak metered demand		
2.00.0	in excess of 400 hours multiplied by the ratio of offpeak energy to total energy.		
Onpeak	8.119 cents per kWh per month for all metered onpeak kWh, plus		
Offpeak: Block 1	7.059 cents per kWh per month for the first 200 hours use of onpeak metered		
·	demand multiplied by the ratio of offpeak energy to toal energy, plus		
Block 2	2.412 cents per kWh per month for the next 200 hours use of onpeak metered		
	demand multiplied by the ratio of offpeak enegy to total energy, plus		
Block 3	2.200 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.		
Onpeak	6.823 cents per kWh per month for all metered onpeak kWh, plus		
Offpeak: Block 1	6.823 cents per kWh per month for the first 200 hours use of onpeak metered		
	demand multiplied by the ratio of offpeak energy to toal energy, plus		
Block 2	2.412 cents per kWh per month for the next 200 hours use of onpeak metered		
	demand multiplied by the ratio of offpeak enegy to total energy, plus		
Block 3	2.200 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 1.733 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.			
	Offpeak: Block 1  Block 2  Block 3  Onpeak Offpeak: Block 1  Block 2  Block 3  Onpeak Offpeak: Block 1  Block 2  Block 3  For the Summer Peof 1.733 cents per k		

Rate Class		Base Charge			Number of Customers
Commercial/ A Industrial Time of Use		A. This rate shall apply to the demand is greater than a Customer Charge: Administrative Charge: Demand Charge:	•	point per month.	3
		Summer Period	Onpeak Demand Maximum Demand Excess Demand	\$10.21 per kW per month of the customer's onpeak billing demand, plus \$5.56 per kW per month of the customer's maximum billing demand, plus \$15.77 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.	
		Winter Period	Onpeak Demand Maximum Demand Excess Demand	\$9.31 per kW per month of the customer's onpeak billing demand, plus \$5.56 per kW per month of the customer's maximum billing demand plus \$14.87 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.	
		Transition Period	Onpeak Demand Maximum Demand Excess Demand	\$9.31 per kW per month of the customer's onpeak billing demand, plus \$5.56 per kW per month of the customer's maximum billing demand plus \$14.87 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.	

Energy Charge:		
Summer Period	Onpeak	9.474 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	6.349 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.388 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	2.104 cents per kWh per month for the hours use of onpeak metered demand
	2.00.1.0	in excess of 400 hours multiplied by the ratio of offpeak energy to total energy.
Winter Period	Onpeak	8.047 cents per kWh per month for all metered onpeak kWh, plus
Willier Felloa	Offpeak: Block 1	6.626 cents per kWh per month for the first 200 hours use of onpeak metered
	Olipeak. Block 1	demand multiplied by the ratio of offpeak energy to toal energy, plus
	Diagle 0	
	Block 2	2.388 cents per kWh per month for the next 200 hours use of onpeak metered
	<b>.</b>	demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	2.104 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	6.737 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	6.737 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.388 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	2.104 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 Pe	riod, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate
		, , , , , , , , , , , , , , , , , , , ,

of 1.733 cents per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy

Schedule 5

takings amount that is greater than the metered energy.

Rate Class		Base Charge			Number of Customers
Seasonal	B.	This rate shall apply to t demand is greater than Customer Charge: Administrative Charge: Demand Charge:	· ·	point per month.	-
			Winter Period	\$17.09 per kW per month of the customer's billing demand, plus \$17.09 per kW per month for each kW of the amount, if any, by which the customer's billing demand exceeds its contract demand.	
			Transition Period	\$14.01 per kW per month of the customer's billing demand, plus \$14.01 per kW per month for each kW of the amount, if any, by which the customer's billing demand exceeds its contract demand.	
		Energy Charge:	Summer Period Winter Period Transition Period	<ul><li>4.930 cents per kWh per month.</li><li>4.487 cents per kWh per month.</li><li>4.386 cents per kWh per month.</li></ul>	

Rate Class		Base Charge			Number of Customers
Seasonal	<b>Seasonal</b> 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:				
		Customer Charge:	\$1,500 per delivery p	point per month.	
		Administrative Charge:	\$700 per delivery po	int per month.	
		Demand Charge:	Summer Period	\$19.89 per kW per month of the customer's billing demand, plus \$19.89 per kW per month for each kW of the amount, if any, by which the customer's billing demand exceeds its contract demand.	
			Winter Period	\$16.80 per kW per month of the customer's billing demand, plus \$16.80 per kW per month for each kW of the amount, if any, by which the customer's billing demand exceeds its contract demand.	
			Transition Period	\$13.72 per kW per month of the customer's billing demand, plus \$13.72 per kW per month for each kW of the amount, if any, by which the customer's billing demand exceeds its contract demand.	
		Energy Charge:	Summer Period Winter Period Transition Period	<ul><li>4.872 cents per kWh per month.</li><li>4.418 cents per kWh per month.</li><li>4.322 cents per kWh per month.</li></ul>	

Rate Class	Base Charge			Number of Customers		
Seasonal [	This rate shall apply to demand is greater than	•	m electric power requirements where a customer's currently effective contract			
	Customer Charge:	\$1,500 per delivery	point per month.			
	Administrative Charge:	\$700 per delivery po	pint per month.			
	Demand Charge:	Summer Period	\$19.94 per kW per month of the customer's billing demand,			
			plus \$19.94 per kW per month for each kW of the amount, if any,			
			by which the customer's billing demand exceeds its contract demand.			
		Winter Period	\$16.85 per kW per month of the customer's billing demand,			
			plus \$16.85 per kW per month for each kW of the amount, if any,			
			by which the customer's billing demand exceeds its contract demand.			
		Transition Period	\$13.77 per kW per month of the customer's billing demand,			
			plus \$13.77 per kW per month for each kW of the amount, if any,			
			by which the customer's billing demand exceeds its contract demand.			
	Energy Charge:	Summer Period	4.666 cents per kWh per month.			
		Winter Period	4.271 cents per kWh per month.			
		Transition Period	4.183 cents per kWh per month.			

Rate Class		Base Charge			Number of Customers
Manufacturing	B.	demand is greater than a conducted at the deliver Classification Code betw System (NAICS) code 5 Customer Charge: Administrative Charge: Demand Charge:	5,000 kW but not more y point serving that cus veen 20 and 39, inclusi 181, or 2007 NAICS co \$1,500 per delivery poi	nt per month.	1
		Summer Period	Onpeak Demand Maximum Demand Excess Demand	\$9.55 per kW per month of the customer's onpeak billing demand, plus \$2.74 per kW per month of the customer's maximum billing demand, plus \$12.29 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.	
		Winter Period	Onpeak Demand Maximum Demand Excess Demand	\$8.65 per kW per month of the customer's onpeak billing demand, plus \$2.74 per kW per month of the customer's maximum billing demand plus \$11.39 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.	
		Transition Period	Onpeak Demand Maximum Demand Excess Demand	\$8.65 per kW per month of the customer's onpeak billing demand, plus \$2.74 per kW per month of the customer's maximum billing demand plus \$11.39 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.	

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Energy Charge:		
Summer Period	Onpeak	7.334 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	5.002 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.232 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	1.994 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	6.270 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	5.210 cents per kWh per month for the first 200 hours use of onpeak metered
	·	demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.232 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	1.994 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	5.292 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	5.292 cents per kWh per month for the first 200 hours use of onpeak metered
	'	demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.232 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	1.994 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 Pe	riod, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate
		Wh per month shall be applied to the portion, if any, of the minimum offpeak energy
		is greater than the metered energy.

Rate Class		Base Charge			Number of Customers
Manufacturing	C.	demand is greater than conducted at the deliver Classification Code betw	15,000 kW but not more y point serving that cust veen 20 and 39, inclusiv	•	2
		Winter Period  Transition Period	Onpeak Demand Maximum Demand Excess Demand Onpeak Demand	demand, whichever is higher.  \$8.65 per kW per month of the customer's onpeak billing demand, plus \$2.49 per kW per month of the customer's maximum billing demand plus \$11.14 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.  \$8.65 per kW per month of the customer's onpeak billing demand, plus	
		Hansilion Fellou	Maximum Demand Excess Demand	\$2.49 per kW per month of the customer's maximum billing demand plus \$11.14 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	7.229 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	4.897 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.365 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	2.365 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	6.165 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	5.105 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.365 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	2.365 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	5.186 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	5.186 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.365 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	2.365 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 Pe	riod, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate
	of 1.733 cents per k	Wh per month shall be applied to the portion, if any, of the minimum offpeak energy
	takings amount that	is greater than the metered energy.

Rate Class		Base Charge			Number of Customers
Manufacturing	D.	demand is greater than point serving that custor	25,000 kW and (b) the ner which are classified usive, or classified with CS codes 5182, 52232 \$1,500 per delivery point on peak Demand Maximum Demand	oint per month.  nt per month.  \$9.55 per kW per month of the customer's onpeak billing demand, plus \$2.54 per kW per month of the customer's maximum billing demand, plus	1
			Excess Demand	\$12.09 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.	
		Winter Period	Onpeak Demand Maximum Demand Excess Demand	\$8.65 per kW per month of the customer's onpeak billing demand, plus \$2.54 per kW per month of the customer's maximum billing demand plus \$11.19 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.	
		Transition Period	Onpeak Demand Maximum Demand Excess Demand	\$8.65 per kW per month of the customer's onpeak billing demand, plus \$2.54 per kW per month of the customer's maximum billing demand plus \$11.19 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.	

Schedul	e 5
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Energy Charge:		
Summer Period	Onpeak	7.042 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	4.710 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.231 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	2.178 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	5.978 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	4.918 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.231 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	2.178 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	4.999 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	4.999 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.231 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	2.178 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 Pe	riod, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate
	of 1.733 cents per k	wWh per month shall be applied to the portion, if any, of the minimum offpeak energy
	takings amount that	t is greater than the metered energy.

Rate Class		Base Charge			Number of Customers
Time of Use  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.  Customer Charge: \$1,500 per delivery point per month.  Administrative Charge: \$700 per delivery point per month.  Demand Charge:			than 5,000 kW and (b) the major use of electricity is for activities stomer which are classified with a 2-digit Standard Industrial tive, or classified with 2002 North American Industry Classification odes 5182, 522320, and 541214.	1	
		Summer Period	\$9.55 per kW per month of the customer's onpeak billing demand, plus \$3.97 per kW per month of the customer's maximum billing demand, plus \$13.52 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.		
		Winter Period	Onpeak Demand Maximum Demand Excess Demand	\$8.65 per kW per month of the customer's onpeak billing demand, plus \$3.97 per kW per month of the customer's maximum billing demand plus \$12.62 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.	
		Transition Period	Onpeak Demand Maximum Demand Excess Demand	\$8.65 per kW per month of the customer's onpeak billing demand, plus \$3.97 per kW per month of the customer's maximum billing demand plus \$12.62 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.	

Schedule 5

Energy Charge:	•	
Summer Period	Onpeak	7.122 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	4.790 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.232 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	1.994 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	6.058 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	4.998 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.232 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	1.994 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	5.080 cents per kWh per month for all metered onpeak kWh, plus
	Offpeak: Block 1	5.080 cents per kWh per month for the first 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak energy to toal energy, plus
	Block 2	2.232 cents per kWh per month for the next 200 hours use of onpeak metered
		demand multiplied by the ratio of offpeak enegy to total energy, plus
	Block 3	1.994 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 Pe	riod, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate
		Wh per month shall be applied to the portion, if any, of the minimum offpeak energy
	· · · · · · · · · · · · · · · · · · ·	is greater than the metered energy.

Number of
<b>3</b>

Schedule 5

	Number of
Manufacturing	Customers

Seasonal

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.

**Customer Charge:** \$1,500 per delivery point per month. Administrative Charge: \$700 per delivery point per month.

Demand Charge: Summer Period \$17.00 per kW per month of the customer's billing demand,

plus \$17.00 per kW per month for each kW of the amount, if any,

by which the customer's billing demand exceeds its contract demand.

Winter Period \$13.91 per kW per month of the customer's billing demand,

> plus \$13.91 per kW per month for each kW of the amount, if any, by which the customer's billing demand exceeds its contract demand.

\$10.83 per kW per month of the customer's billing demand. Transition Period

plus \$10.83 per kW per month for each kW of the amount, if any,

by which the customer's billing demand exceeds its contract demand.

**Energy Charge:** Summer Period 4.025 cents per kWh per month.

Winter Period 3.524 cents per kWh per month. Transition Period 3.406 cents per kWh per month.

Number of

Customers

Schedule 5

S	ea	8	n	n	al

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.

Customer Charge: \$1,500 per delivery point per month.

Administrative Charge: \$700 per delivery point per month.

Demand Charge: Summer Period \$16.75 per kW per month of the customer's billing demand, plus \$16.75 per kW per month for each kW of the amount, if any,

by which the customer's billing demand exceeds its contract demand.

Winter Period \$13.66 per kW per month of the customer's billing demand,

plus \$13.66 per kW per month for each kW of the amount, if any,

by which the customer's billing demand exceeds its contract demand.

Transition Period \$10.58 per kW per month of the customer's billing demand,

plus \$10.58 per kW per month for each kW of the amount, if any,

by which the customer's billing demand exceeds its contract demand.

Energy Charge: Summer Period 3.940 cents per kWh per month.

Winter Period 3.470 cents per kWh per month. Transition Period 3.357 cents per kWh per month.

\_\_\_\_\_

Schedule 5

	Number of
Manufacturing	Customers

Seasonal

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.

Customer Charge: \$1,500 per delivery point per month.

Administrative Charge: \$700 per delivery point per month.

Demand Charge: Summer Period \$19.94 per kW per month of the customer's billing demand,

plus \$19.94 per kW per month for each kW of the amount, if any,

by which the customer's billing demand exceeds its contract demand.

Winter Period \$16.85 per kW per month of the customer's billing demand,

plus \$16.85 per kW per month for each kW of the amount, if any,

by which the customer's billing demand exceeds its contract demand.

Transition Period \$13.77 per kW per month of the customer's billing demand,

plus \$13.77 per kW per month for each kW of the amount, if any,

by which the customer's billing demand exceeds its contract demand.

Energy Charge: Summer Period 3.194 cents per kWh per month.

Winter Period 2.818 cents per kWh per month. Transition Period 2.726 cents per kWh per month.

(Unaudited) Schedule 5

Rate Class	Base Charge			Number of Customers
<b>Outdoor Lighting</b>				
	Part A - Charges for Street and P	ark Lighting Systems, T	raffic Signal Systems, and Athletic Field Lighting Installations	51
	Energy Charge:	Summer Period	7.173 cents per kWh per month.	
		Winter Period	7.173 cents per kWh per month.	
		Transition Period	7.173 cents per kWh per month.	
	Facility Charge:	of the facilities devoted installed cost shall be in the facilities are made be billed to the custom system's expense, or another municipality o	arge shall be 14.64 percent of the installed cost to KUB's electric system of to street and park lighting service specified in this Part A. Such recomputed on July 1 of each year, or more often if substantial changes de. Each month, one-twelfth of the then total annual facility charge shall her. If any part of the facilities has not been provided at the electric if the installed cost of any portion thereof is reflected on the books of ragency or department, the annual facility charge shall be adjusted to maining cost to be borne by the electric system.	
	Customer Charge:	\$2.50.		

#### Part B - Charges for Outdoor Lighting for Individual Customers

1374

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	\$ 4.58	\$	9.60
		400	19,100	155	6.39		17.51
		1000**	47,500	378	10.22		37.33
	High Pressure Sodium	100	8,550	42	4.58		7.59
		250	23,000	105	5.43		12.96
		400	45,000	165	6.39		18.23
		1000**	126,000	385	10.22		37.84
	Decorative	100	8,550	42	5.21		8.22

<sup>\*</sup> Mercury Vapor and Incandescent fixtures not offered for new service.

**b.** Energy Charge: For each lamp size under **a.** above, 7.173 cents per rated kWh per month.

Additional pole charge: \$3.00 per pole.

See accompanying Report of Independent Auditors on Supplemental Information.

<sup>\*\* 1,000</sup> watt fixtures not offered for new service.

(Unaudited) Schedule 5

		NU	umber of
Rate Class	Base Charge	Cu	ustomers

#### **LED Pilot Program**

Service under the LED Pilot Program shall only be available for select outdoor (security) lighting facilities of governmental entities located in the KUB electric system service territory. Participation in the LED Pilot Program shall be on a voluntary basis.

#### **Pilot Program Charges - No Capital Contribution**

The following charges are applicable to those customers participating in the LED Pilot Program, for whom the installed cost of facilities for providing service under the program has been borne by the electric system. The following charges are per LED fixture per month.

LED Fixture Type	Facility Charge		Rated kWh		Energy Charge Per kWh		Total Charge	
LED - 150WE - Rectangular Head LED - 150WE - Cobra Head	*	12.27 11.19		38 38	\$	0.07173 0.07173	\$	15.00 13.92
LED - 250WE - Rectangular Head LED - 250WE - Cobra Head	*	14.75 13.44		57 57	\$	0.07173 0.07173	\$	18.84 17.53

#### **Pilot Program Charges - Capital Contribution**

The following charges are applicable to those customers participating in the LED Pilot Program, for whom the installed cost of facilities providing service under the program has been borne by the customer. The following charges are per LED fixture per month.

LED Fixture Type	Facility Charge		Rated kWh	Charge Per kWh		Total Charge	
LED - 150WE - Rectangular Head LED - 150WE - Cobra Head	\$	5.29 5.16	38 38	\$	0.07173 0.07173	\$	8.02 7.89
LED - 250WE - Rectangular Head LED - 250WE - Cobra Head	\$	6.15 5.98	57 57	\$	0.07173 0.07173	\$	10.24 10.07

Additional pole charge: \$3.00 per pole.

See accompanying Report of Independent Auditors on Supplemental Information.



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

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

#### **Report on the Financial Statements**

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, 2016, 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 27, 2016.

#### **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 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 that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control 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 27, 2016



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

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

#### Report on Compliance for the Major Federal Program

We have audited the Electric Division (the Division) of the Knoxville Utilities Board's, a component unit of the City of Knoxville, Tennessee, compliance with the types of compliance requirements described in the OMB Compliance Supplement that could have a direct and material effect on the Division's major federal program for the year ended June 30, 2016. 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 the terms and conditions of its federal awards applicable to its federal programs.

#### **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* 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 a 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 Electric Division of the Knoxville Utilities Board Knoxville, Tennessee

#### **Opinion on the Major Federal Program**

In our opinion, the Division complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2016.

#### **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 the major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for the major program 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, 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. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been 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 27, 2016



# **Gas Division**

# Financial Statements and Supplemental Information June 30, 2016 and 2015

# **KUB Board of Commissioners**

Nikitia Thompson - Chair

Sara Hedstrom Pinnell - Vice Chair

Dr. Jerry W. Askew

Kathy Hamilton

Celeste Herbert

**Eston Williams** 

John Worden

# Management

#### Mintha Roach

President and
Chief Executive Officer

#### **Bill Elmore**

Executive Vice President and Chief Operating Officer

#### **Mark Walker**

Senior Vice President and Chief Financial Officer

#### **Susan Edwards**

Senior Vice President and Chief Administrative Officer

#### **Eddie Black**

Senior Vice President

## Mike Bolin

Vice President

#### **Julie Childers**

Vice President

#### **Derwin Hagood**

Vice President

#### **Dawn Mosteit**

Vice President

#### **Paul Randolph**

Vice President

#### **Dennis Upton**

Vice President

# **Knoxville Utilities Board Gas Division Index**

June 30, 2016 and 2015

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#### Report of Independent Auditors

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, 2016 and 2015, 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

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, 2016 and 2015, 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.



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 23 and the required supplementary information on pages 52 through 54 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.

#### Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated October 27, 2016, 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 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 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 27, 2016

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, 2016 and 2015, 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, 2016 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 99,808 customers, and its service territory covers 284 square miles. KUB maintains 2,316 miles of service mains to provide 11.4 million dekatherms of natural gas to its customers annually.

KUB's natural gas system service territory experienced the second mildest winter in the last forty years. As a result, natural gas sales were 10.2 percent less than the previous fiscal year. Gas Division margin (operating revenue less purchased gas cost) was \$3.2 million lower in fiscal year 2016, reflecting a decrease in sales volumes from a mild winter and additional revenue from gas system rate increases which were effective in October 2014 and October 2015.

The natural gas system's peak demand occurred February 2015 at 136,356 dekatherms. The previous natural gas system peak was 133,366 dekatherms in January 2014.

The typical residential gas customer's average monthly gas bill was \$52.51 for the twelve months ending June 30, 2016, representing a decrease of \$4.64 compared to last year based on normalized sales.

The natural gas system has added approximately 1,583 customers over the past three years representing annual growth of less than one percent.

## **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 includes 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 the proposed three annual rate increases for the Gas Division. Each gas rate increase will generate \$1.8 million in additional annual Gas Division revenue.

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.

KUB replaced 4.2 miles of cast iron/ductile iron gas main during fiscal year 2016, which was less than originally forecast due to a shift in focus to other gas system improvements.

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.

#### **Financial Highlights**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

The Division's net position increased \$7.6 million in fiscal year 2016. This increase was \$4.5 million less than the prior year's change in net position. A restatement to the fiscal year 2014's net position based on a change in method of accounting for the pension reduced the total net position by \$0.1 million during fiscal year 2015.

Operating revenue decreased \$25.7 million or 22.5 percent. The decrease is attributable to a decrease of 10.2 percent in billed sales volumes and lower wholesale gas costs, which were directly flowed through to KUB's natural gas rates through the Purchased Gas Adjustment mechanism. Purchased gas expense was \$22.5 million or 35.3 percent lower due to reduced customer demand from the mild winter and lower natural gas commodity prices. Margin on gas sales (operating revenue less purchased gas expense) decreased \$3.2 million or 6.4 percent, reflecting the decrease in gas sales volumes partially offset by additional revenue from the rate increases.

Operating expenses (excluding purchased gas expense) increased \$1.8 million or 5.4 percent. Taxes and tax equivalents increased \$0.7 million and depreciation expense was \$0.6 million higher than the prior year. Operating and maintenance (O&M) expenses were \$0.5 million more than the prior fiscal year.

Wholesale purchased gas expense represented forty seven percent of natural gas sales revenue for the fiscal year ended June 30, 2016.

Interest income was consistent with the prior fiscal year. Interest expense decreased \$0.5 million, the result of lower interest costs from the refinancing of certain outstanding bonds in April 2015.

Total plant assets (net) increased \$15.5 million or 6.2 percent reflecting capital investment associated with the replacement of key gas system assets and other major system projects, including the South Loop.

Long-term debt represented 34.5 percent of the Division's capital structure as of June 30, 2016, as compared to 36.6 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 3.13. Maximum debt service coverage was 3.16.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

The Division's net position increased \$12.1 million in fiscal year 2015. This increase was \$1.5 million greater than the prior year's change in net position. A restatement to the prior fiscal year's net position based on a change in method of accounting for the pension reduced the total net position by \$0.1 million during fiscal year 2015. This change resulted in a net increase of \$12 million or 6.9 percent in the Division's net position.

Operating revenue decreased \$3 million or 2.5 percent. A modest increase of approximately one percent in sales volumes was offset by lower wholesale gas costs, which were directly flowed through to KUB's natural gas rates through the Purchased Gas Adjustment mechanism. Purchased gas expense was \$5.6 million or 8.1 percent lower due to reduced natural gas commodity prices. Margin on gas sales (operating revenue less purchased gas expense) increased \$2.6 million or 5.5 percent, reflecting the modest increase in gas sales volumes and additional revenue from the rate increases.

Operating expenses (excluding purchased gas expense) increased \$1.3 million or 3.9 percent. Depreciation expense was \$1.2 million higher than the prior year. Operating and maintenance (O&M) expenses were \$0.2 million less than the prior fiscal year while taxes and tax equivalents increased \$0.3 million.

Wholesale purchased gas expense represented 57 percent of natural gas sales revenue for the fiscal year ended June 30, 2015.

Interest income was consistent with the prior fiscal year. Interest expense decreased \$0.1 million, the result of lower interest costs from the refinancing of certain outstanding bonds in April 2015.

Total plant assets (net) increased \$26.7 million or 12 percent over the end of the last fiscal year reflecting capital investment associated with the replacement of key gas system assets and other major system projects, including the South Loop.

Long-term debt represented 36.6 percent of the Division's capital structure as of June 30, 2015, as compared to 39.2 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 3.52. Maximum debt service coverage was 3.53.

#### **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.

#### **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 year and the year preceding the prior year.

# Statements of Net Position As of June 30

(in thousands of dollars)		2016		2015		2014
Current, restricted and other assets Capital assets, net Deferred outflows of resources Total assets and deferred outflows of resources	\$	47,676 263,531 3,005 314,212	\$	63,520 248,032 1,925 313,477	\$ 	85,266 221,372 512 307,150
Current and other liabilities Long-term debt outstanding Deferred inflows of resources Total liabilities and deferred inflows of resources	_	19,875 100,164 257 120,296	-	20,070 105,919 1,148 127,137	_	22,182 110,650 - 132,832
Net position Net investment in capital assets Restricted Unrestricted Total net position	\$ <u>_</u>	159,696 1,820 32,400 193,916	\$ ]	138,973 1,801 45,566 186,340	\$ =	107,234 1,725 65,359 174,318

# **Normal Impacts on Statement of Net Position**

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

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

#### **Impacts and Analysis**

#### **Current, Restricted and Other Assets**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Current, restricted and other assets decreased \$15.8 million or 24.9 percent. General fund cash and investments decreased \$15.2 million primarily to fund capital expenditures. Operating contingency reserves increased \$1.2 million. Accounts receivable decreased \$1.5 million compared to June 2015.

KUB under recovered its wholesale gas costs by \$2.2 million in fiscal year 2016 compared to a \$1.1 million over recovery in fiscal year 2015. 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 \$1.4 million, reflecting lower commodity prices for natural gas for slightly higher storage volumes compared to the prior fiscal year.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Current, restricted and other assets decreased \$21.7 million or 25.5 percent. General fund cash and investments decreased \$17.8 million in order to fund capital expenditures. Operating contingency reserves increased \$1 million. Accounts receivable decreased \$2.3 million compared to June 2014. Gas storage decreased \$0.8 million, reflecting lower commodity prices for natural gas which offset the impact of higher storage volumes.

## **Capital Assets**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Capital assets increased \$15.5 million or 6.2 percent. Major capital expenditures during the year included \$15.1 million for the construction of mains and service extensions, \$3.9 million for gas main replacement, \$2.5 million for the replacement and relocation of gas system assets to accommodate Tennessee Department of Transportation (TDOT) highway improvement projects, and \$1.4 million for upgrades to various information systems.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Capital assets increased \$26.7 million or 12 percent. Major capital expenditures during the year included \$24.2 million for the construction of mains and service extensions and \$6 million for gas main replacement. The Division also retired \$1.8 million of assets during the year.

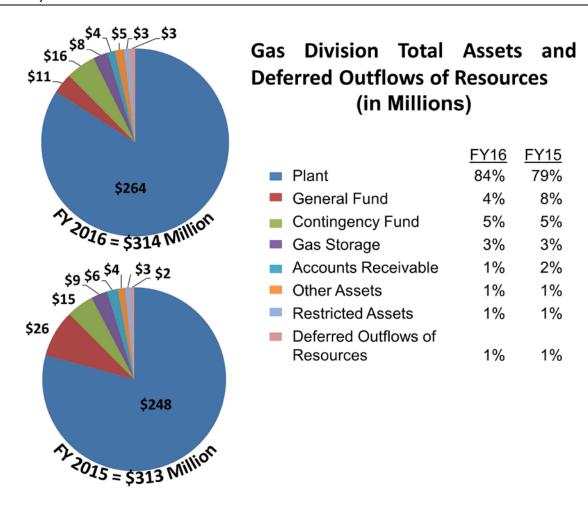
#### **Deferred Outflows of Resources**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Deferred outflows of resources increased \$1.1 million compared to the prior fiscal year. This increase is attributable to a \$1.2 million increase in pension outflow and a \$0.1 million decrease in unamortized bond refunding costs.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Deferred outflows of resources increased \$1.4 million compared to the prior fiscal year. This increase is attributable to a \$0.8 million increase in unamortized bond refunding costs and a \$0.6 million increase in pension outflow.



#### **Current and Other Liabilities**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Current and other liabilities decreased \$0.2 million or 1 percent. Accounts payable decreased \$0.4 million compared to the prior fiscal year. This was offset by an actuarially determined net pension obligation of \$0.9 million recognized during fiscal year 2016.

KUB over recovered \$1.1 million in wholesale gas costs of from its customers in fiscal year 2015 as compared to a \$2.2 million under recovery in fiscal year 2016. The over recovery of costs was flowed back to KUB's gas customers during fiscal year 2016 through adjustments to rates via the Purchased Gas Adjustment.

# Fiscal Year 2015 Compared to Fiscal Year 2014

Current and other liabilities decreased \$2.1 million or 9.5 percent. The Division over recovered \$1.1 million in wholesale gas costs from its customers in fiscal year 2015, as compared to \$1.3 million over recovered in fiscal year 2014. This over recovery of costs will be flowed back to KUB's gas customers next fiscal year through adjustments to rates via the Purchased Gas Adjustment. Accounts payable

decreased \$1 million compared to the prior fiscal year. Current payables for bond debt increased \$0.3 million and accrued interest on bonds decreased \$0.1 million.

### **Long-Term Debt**

### Fiscal Year 2016 Compared to Fiscal Year 2015

Long-term debt was \$5.8 million or 5.4 percent lower than the prior year, primarily due to \$5.5 million of long-term bond debt that shifted to current liabilities as payable within the next year.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Long-term debt was \$4.7 million or 4.3 percent lower than the prior year, primarily the result of the scheduled repayment of bond debt during the fiscal year.

#### **Deferred Inflows of Resources**

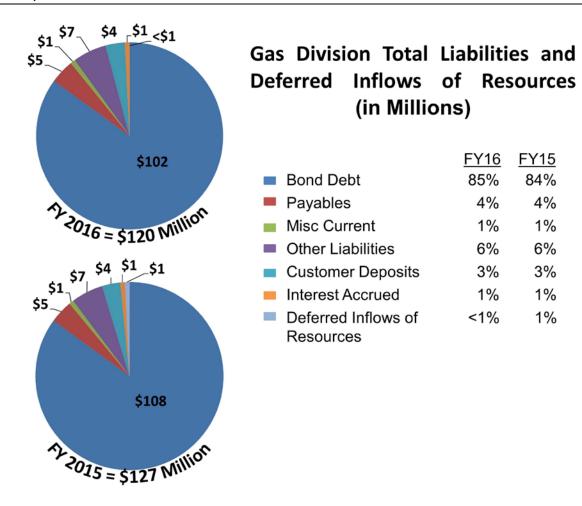
#### Fiscal Year 2016 Compared to Fiscal Year 2015

Deferred inflows of resources decreased \$0.9 million compared to the prior fiscal year due to differences in pension inflows.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Deferred inflows of resources increased \$1.1 million due to the addition of pension inflow.

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#### **Net Position**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Net investment in capital assets, net of debt increased \$20.7 million or 14.9 percent, primarily from an increase in net plant in service of \$15.5 million and a decrease of \$5.8 million in long term debt. Restricted net position was consistent with the prior fiscal year. Unrestricted net position decreased \$13.2 million primarily due to a \$15.2 million decrease in general fund cash compared to June of the prior year.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Net investment in capital assets, net of debt increased \$31.7 million or 29.6 percent, primarily from an increase in net plant in service of \$26.7 million offset by a decrease of \$4.7 million in long term debt. Restricted net position increased \$0.1 million compared to the prior fiscal year. Unrestricted net position decreased \$19.8 million primarily due to a \$17.8 million decrease in general fund cash compared to June of the prior year.

#### 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 year and the year preceding the prior year.

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

(in thousands of dollars)		2016		2015	2014
Operating revenues	\$	88,441	\$	114,169	\$ 117,146
Less: Purchased gas expense		41,212		63,735	69,351
Margin from sales		47,229		50,434	47,795
Operating expenses			_		
Distribution		8,305		7,922	7,617
Customer service		2,676		2,688	2,626
Administrative and general		5,984		5,843	6,460
Depreciation		11,481		10,895	9,675
Taxes and tax equivalents		7,391	_	6,657	 6,336
Total operating expenses		35,837	_	34,005	32,714
Operating income		11,392	_	16,429	15,081
Interest income		183	-	159	 144
Interest expense		(4,033)		(4,537)	(4,772)
Other income/(expense)	_	34	_	105	 175
Change in net position before capital contributions		7,576		12,156	10,628
Capital contributions				4	
Change in net position	\$ _	7,576	\$	12,160	\$ 10,628

## 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.

- 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 2016 Compared to Fiscal Year 2015

The Division's net position increased \$7.6 million. This increase was \$4.5 million lower than the prior year's change in net position. A restatement to fiscal year 2014's net position based on a change in method of accounting for the pension reduced the total net position by \$0.1 million during fiscal year 2015. Lower earnings were primarily attributable to decreased margin on gas sales.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

The Division's net position increased \$12.1 million. This increase was \$1.5 million greater than the prior year's change in net position. A restatement to the prior fiscal year's net position based on a change in method of accounting for the pension reduced the total net position by \$0.1 million during fiscal year 2015. This change resulted in a net increase of \$12 million or 6.9 percent in the Division's net position. Higher earnings were primarily attributable to increased margin on gas sales.

#### **Margin from Sales**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Margin on gas sales (operating revenue less purchased gas expense) decreased \$3.2 million or 6.4 percent due to a 10.2 percent decrease in billed sales volumes offset by revenue from rate increases that were effective October 2014 and October 2015.

Operating revenue decreased \$25.7 million or 22.5 percent for the fiscal year ending June 30, 2016. The gas system service territory experienced the second mildest winter in the last forty years. Billed sales were down 10.2 percent due to the warmer winter, and purchased gas commodity prices flowed through to customer rates were lower. However, additional revenue was generated from the rate increases.

Purchased gas expense decreased \$22.5 million or 35.3 percent, due to lower customer demand and reduced commodity prices for natural gas during the fiscal year. KUB purchased 15.5 percent less gas from its suppliers during the fiscal year to meet customer demand and maintain gas storage levels. The net result was a 14.6 percent decrease in total volumes delivered to KUB's gas distribution system. The Division's weighted average cost of gas purchased for fiscal year 2016 was \$2.49 per dekatherm, as compared to \$3.62 per dekatherm last year.

Residential customers, whose natural gas is primarily used as a heat source during winter months, accounted for 91 percent of customers billed and 39 percent of total volumes sold during the year.

Commercial and industrial sales volumes (including transportation customers) increased 3.3 percent. KUB's ten largest gas customers accounted for 28.1 percent of KUB's billed gas volumes. Those ten customers represent five industrial and five commercial customers, including one governmental customer.

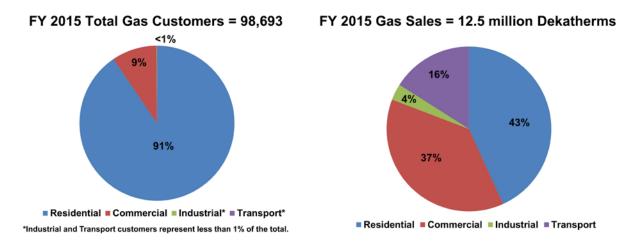
KUB also has 18 transport customers who purchase gas directly from a supplier other than KUB. KUB provides transportation service on its gas distribution system to those customers.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Margin on gas sales (operating revenue less purchased gas expense) increased \$2.6 million or 5.5 percent due to a 0.7 percent increase in billed sales volumes as well as revenue from rate increases that were effective October 2013 and October 2014.

Operating revenue decreased \$3 million or 2.5 percent for the fiscal year ending June 30, 2015, the net result of lower purchased gas commodity prices flowed through to customer rates and additional revenue from the rate increases.

Purchased gas expense decreased \$5.6 million or 8.1 percent, due to reduced commodity prices for natural gas during the fiscal year. KUB purchased 2.3 percent more gas from its suppliers during the fiscal year to meet a modest increase in customer demand and maintain gas storage levels. The net result was a 0.9 percent increase in total volumes delivered to KUB's gas distribution system. The Division's weighted average cost of gas purchased for fiscal year 2015 was \$3.62 per dekatherm, as compared to \$4.08 per dekatherm last year.



Residential customers, whose natural gas is primarily used as a heat source during winter months, accounted for 91 percent of customers billed and 43 percent of total volumes sold during the year.

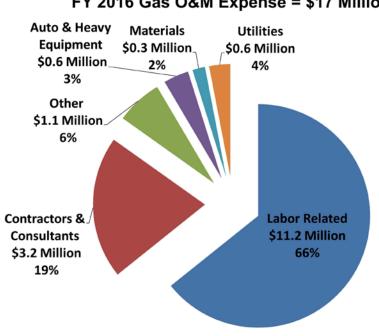
Commercial and industrial sales volumes (including transportation customers) decreased 2.9 percent. KUB's ten largest gas customers accounted for 23.3 percent of KUB's billed gas volumes. Those ten customers represent five industrial and five commercial customers, including one governmental customer. KUB also has 14 transport customers who purchase gas directly from a supplier other than KUB. KUB provides transportation service on its gas distribution system to those customers.

#### **Operating Expenses**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Operating expenses (excluding purchased gas expense) increased \$1.8 million or 5.4 percent compared to fiscal year 2015. 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 \$0.4 million higher than the prior fiscal year, due to an increase in labor related expenses.
- Customer service expenses were consistent with the prior fiscal year.
- Administrative and general expenses increased \$0.1 million or 2.4 percent.



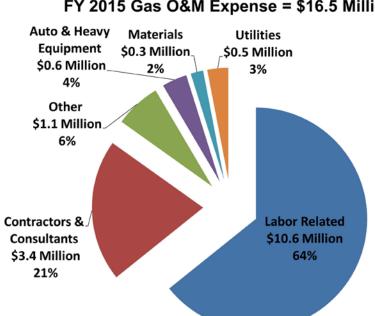
## FY 2016 Gas O&M Expense = \$17 Million

- Depreciation expense was \$0.6 million higher than the prior year, primarily due to the increased depreciation on mains due to Century II replacement programs and the completion of the South Loop project.
- Taxes and tax equivalents were \$0.7 million higher than the prior fiscal year due increased plant in service levels.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Operating expenses (excluding purchased gas expense) increased \$1.3 million or 3.9 percent compared to fiscal year 2014. 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.

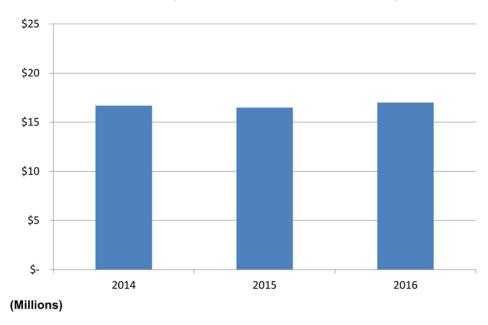
- Distribution system operating and maintenance expenses were \$0.3 million higher than the prior fiscal year, due to an increase in labor related expenses.
- Customer service expenses increased \$0.1 million compared to last fiscal year.
- Administrative and general expenses decreased \$0.6 million or 9.6 percent primarily due to a decrease in pension expense.



### FY 2015 Gas O&M Expense = \$16.5 Million

- Depreciation expense was \$1.2 million higher than the prior year, the result of a full year of depreciation for \$23.4 million of assets added to plant in service in fiscal year 2014 and a partial year of depreciation for \$17.6 million of assets added to plant in service in fiscal year 2015. In addition, \$1.8 million in assets were retired during the fiscal year.
- Taxes and tax equivalents were \$0.3 million higher than the prior fiscal year due to an increase in tax equivalent payments to the City of Knoxville, Knox County, and other taxing jurisdictions. The City of Knoxville's property tax rate increased this year and higher plant in service levels contributed to the growth in tax equivalent payments.

## Gas Division Operation & Maintenance Expense



#### Other Income and Expense

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Contributions in aid of construction increased \$6.6 million compared to the prior fiscal year. This was primarily due to a \$4 million contribution from the University of Tennessee, representing the remaining portion of the University's contribution for the South Loop project.

Interest income was consistent with the prior fiscal year.

Interest expense decreased \$0.5 million compared with the prior year, reflecting interest savings from the bond refunding in April 2015.

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

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Contributions in aid of construction decreased \$3.9 million. This was due to a \$3.9 million contribution from the University of Tennessee during fiscal year 2014, representing a portion of the University's contribution for the South Loop project.

Interest income was consistent with the prior fiscal year.

Interest expense decreased \$0.1 million compared with the prior year, reflecting interest savings from the bond refunding in April 2015 in addition to previous bond refundings.

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

## **Capital Assets**

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

(in thousands of dollars)

	2016		2015	2014
Distribution Plant				
Mains	\$ 176,253		149,720	144,218
Services and Meters/Regulators	57,053		52,580	50,238
Other Accounts	 845	_	766	901
Total Distribution Plant	 234,151	\$	203,066	\$ 195,357
Total General Plant	\$ 8,549	_	7,688	8,551
Total Plant Assets	 242,700	\$	210,754	\$ 203,908
Work In Progress	 20,831	_	37,278	 17,464
Total Net Plant	\$ 263,531	\$	248,032	\$ 221,372

#### Fiscal Year 2016 Compared to Fiscal Year 2015

As of June 30, 2016, the Division had \$263.5 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 \$15.5 million or 6.2 percent over the end of last fiscal year.

Services & Meters = 22%

Work in Progress = 8%

Services & Meters = 22%

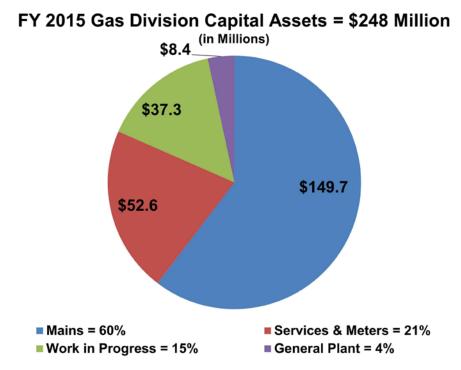
General Plant = 3%

Major capital asset expenditures during the year were as follows:

- \$15.1 million for installation of new main and service extensions
  - \$7.6 million for the South Loop project
- \$3.9 million for main replacement
- \$2.5 million for replacement and relocation of gas system assets to accommodate TDOT highway improvement projects
- \$1.4 million for upgrades to various information systems

### Fiscal Year 2015 Compared to Fiscal Year 2014

As of June 30, 2015, the Division had \$248 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 \$26.7 million or 12 percent over the end of last fiscal year.



Major capital asset expenditures during the year were as follows:

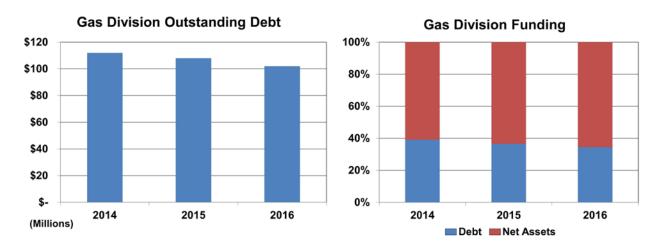
- \$24.2 million for installation of new main and service extensions
- \$6 million for main replacement
- \$1.5 million for information systems upgrades

#### **Debt Administration**

As of June 30, 2016 the Gas Division had \$102.1 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 34.5 percent in 2016, 36.6 percent in 2015, and 39.2 percent at the end of fiscal year 2014. 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)	2016	2015	2014
Revenue bonds	\$ 102,125	\$ 107,545	\$ 112,365
Total outstanding debt	\$ 102,125	\$ 107,545	\$ 112,365



The Division will pay \$61.9 million in principal payments over the next ten years, representing 60.6 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 2016 Compared to Fiscal Year 2015

As of June 30, 2016, the Division had \$102.1 million in outstanding debt (including current portions of revenue bonds), compared to \$107.5 million last year, representing a decrease of \$5.4 million or 5 percent. The decrease is attributable to the scheduled repayment of bond debt. The Division's weighted average cost of debt as of June 30, 2016 was 3.9 percent.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2016, the Division's revenue bonds were rated AA by Standard & Poor's and Aa2 by Moody's Investors Service.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

As of June 30, 2015, the Division had \$107.5 million in outstanding debt (including current portions of revenue bonds), compared to \$112.4 million last year, representing a decrease of \$4.9 million or 4.3 percent. The Division's weighted average cost of debt as of June 30, 2015 was 3.86 percent.

In April 2015, the Division issued \$11.8 million in gas system revenue refunding bonds to refinance certain outstanding bonds at lower interest rates. The refunding of certain bonds at lower interest rates will provide debt service savings of \$1.2 million over the life of the bonds.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2015, 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 900 new gas customers during the course of the next fiscal year.

In June 2014, the KUB Board adopted three years of rate increases for all four Divisions to help fund the ongoing Century II infrastructure programs for each system. The first and second of three rate increases were effective October 2014 and October 2015. The remaining natural gas rate increase will be effective October 2016. Each rate increase will result in \$1.8 million in additional annual gas system revenue.

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

KUB long-term debt includes \$12 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 6.8 percent. Any future actions by Congress may also affect the anticipated rebates for future fiscal years.

In April 2016, KUB management presented the fiscal year 2017 budget to the KUB Board of Commissioners that accommodates the projected level of capital investment for the fiscal year. Over the course of the next ten years KUB plans to spend approximately \$108 million dollars on Grid Modernization, of which the Division's share is \$14.2 million. In July 2016, the four-year deployment of advanced meters began.

GASB Statement No. 82, Pension Issues – An amendment of GASB Statements No. 67, No. 68 and No. 73 is effective for fiscal years beginning after June 15, 2016. GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, and GASB No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, are effective for periods beginning after June 15, 2017. 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 2016.

#### **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, 2016 and 2015. 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, 2016 and 2015

		2016		2015
Assets and Deferred Outflows of Resources				
Current assets:	\$	11,036,149	\$	26 262 010
Cash and cash equivalents Short-term contingency fund investments	Φ	3,597,830	Φ	26,262,919 2,950,146
Other current assets		240,425		375,832
Accrued interest receivable		2,595		1,108
Accounts receivable, less allowance of uncollectible accounts		2,333		1,100
of \$46,630 in 2016 and \$34,907 in 2015		4,440,145		5,930,278
Inventories		630,535		465,596
Gas storage		8,010,091		9,447,403
Prepaid expenses		66,013		55,502
Total current assets	1	28,023,783	•	45,488,784
	•		-	
Restricted assets:				
Gas bond fund		3,145,854		3,111,502
Other funds		3,641		7,901
Total restricted assets	,	3,149,495	-	3,119,403
Can plant in convice		364,632,055		224 150 122
Gas plant in service Less accumulated depreciation		(121,932,008)		324,150,132
Less accumulated depreciation	,	242,700,047	-	(113,395,656) 210,754,476
Retirement in progress		54,370		89,960
Construction in progress		20,777,003		37,187,771
Net plant in service	,	263,531,420	-	248,032,207
Net plant in service	,	203,331,420	•	240,032,207
Other assets:				
Net pension asset		-		1,083,893
Long-term contingency fund investments		12,754,872		12,186,218
Under recovered purchased gas costs		2,178,653		-
Other		1,569,632		1,641,273
Total other assets		16,503,157		14,911,384
Total assets	,	311,207,855	-	311,551,778
Deferred outflows of resources:				
Pension outflow		1,760,739		568,296
Unamortized bond refunding costs		1,243,933		1,357,050
Total deferred outflows of resources	•	3,004,672	-	1,925,346
Total assets and deferred outflows of resources	\$	314,212,527	\$	313,477,124
	•		•	· · ·

## Knoxville Utilities Board Gas Division Statements of Net Position June 30, 2016 and 2015

		2016		2015
Liabilities, Deferred Inflows, and Net Position Current liabilities:				
Current portion of revenue bonds	\$	5,450,000	\$	5,420,000
Sales tax collections payable	·	72,463	•	74,674
Accounts payable		4,930,035		5,321,481
Accrued expenses		1,004,924		1,005,599
Customer deposits plus accrued interest		3,677,724		3,576,615
Accrued interest on revenue bonds		1,329,087		1,318,069
Total current liabilities	-	16,464,233	_	16,716,438
Other liabilities:				
Accrued compensated absences		1,531,331		1,507,803
Customer advances for construction		984,710		718,096
Net pension liability		856,827		-
Over recovered purchased gas costs		-		1,063,761
Other	_	37,751	_	63,182
Total other liabilities	-	3,410,619	_	3,352,842
Long-term debt:				
Gas revenue bonds		96,675,000		102,125,000
Unamortized premiums/discounts	_	3,488,853	_	3,794,404
Total long-term debt		100,163,853		105,919,404
Total liabilities	-	120,038,705	_	125,988,684
Deferred inflows of resources:				
Pension inflow	_	257,085	_	1,148,096
Total deferred inflows of resources	-	257,085		1,148,096
Total liabilities and deferred inflows of resources	-	120,295,790	_	127,136,780
Net position				
Net investment in capital assets		159,696,458		138,973,111
Restricted for:		4 040 707		4 700 400
Debt service		1,816,767		1,793,433
Other		3,641		7,901
Unrestricted		32,399,871	_	45,565,899
Total net position	ф <sup>-</sup>	193,916,737	ф <b>-</b>	186,340,344
Total liabilities, deferred inflows, and net position	\$	314,212,527	\$ =	313,477,124

## Knoxville Utilities Board Gas Division Statements of Revenues, Expenses and Changes in Net Position Years Ended June 30, 2016 and 2015

		2016	2015
Operating revenues	\$	88,441,144	\$ 114,168,784
Operating expenses	•		
Purchased gas		41,212,470	63,735,433
Distribution		8,304,516	7,922,463
Customer service		2,676,224	2,687,961
Administrative and general		5,983,853	5,842,471
Provision for depreciation		11,481,432	10,894,826
Taxes and tax equivalents	_	7,390,744	6,657,038
Total operating expenses		77,049,239	97,740,192
Operating income	_	11,391,905	16,428,592
Non-operating revenues (expenses)			
Contributions in aid of construction		7,078,153	450,281
Interest and dividend income		183,418	158,779
Interest expense		(4,104,192)	(4,642,526)
Amortization of debt costs		70,748	106,159
Write-down of plant for costs recovered through contributions		(7,078,153)	(450,281)
Other		34,514	104,921
Total non-operating revenues (expenses)	_	(3,815,512)	(4,272,667)
Change in net position before capital contributions		7,576,393	12,155,925
Capital contributions	_	_	4,353
Change in net position		7,576,393	12,160,278
Net position, beginning of year, as previously reported		186,340,344	174,317,582
Change in method of accounting for pension	-	-	(137,516)
Net position, beginning of year, as restated	_	186,340,344	174,180,066
Net position, end of year	\$	193,916,737	\$ 186,340,344

# **Knoxville Utilities Board Gas Division Statements of Cash Flows June 30, 2016 and 2015**

		2016		2015
Cash flows from operating activities:				
Cash receipts from customers	\$	89,485,188	\$	115,921,501
Cash (payments to) receipts from other operations		999,976		1,047,805
Cash payments to suppliers of goods or services		(52,432,985)		(73,855,383)
Cash payments to employees for services		(8,871,606)		(8,047,999)
Payment in lieu of taxes	_	(6,737,649)	_	(6,081,256)
Net cash provided by operating activities	_	22,442,924	_	28,984,668
Cash flows from capital and related financing activities:				
Principal paid on revenue bonds and notes payable		(5,420,000)		(5,150,000)
(Increase) decrease in unused bond proceeds		-		1,055,410
Interest paid on revenue bonds and notes payable		(4,093,173)		(4,435,230)
Acquisition and construction of gas plant		(34,428,703)		(38,191,918)
Changes in gas bond fund, restricted		(34,352)		69,391
Customer advances for construction		267,894		178,113
Proceeds received on disposal of plant		1,028		-
Cash received from developers and individuals for capital purposes	_	7,078,153	_	450,281
Net cash used in capital and related financing activities	_	(36,629,153)	_	(46,023,953)
Cash flows from investing activities:				
Changes in deposit and investment accounts:				
Purchase of investment securities		(4,099,811)		(3,282,494)
Maturities of investment securities		2,949,225		2,277,167
Interest received		181,931		159,691
Other property and investments	_	(71,886)	_	133,629
Net cash provided by (used in) investing activities	_	(1,040,541)	_	(712,007)
Net increase (decrease) in cash and cash equivalents		(15,226,770)		(17,751,292)
Cash and cash equivalents, beginning of year	_	26,262,919	_	44,014,211
Cash and cash equivalents, end of year	\$ _	11,036,149	\$	26,262,919
Reconciliation of operating income to net cash provided by operating activities				
Operating income	\$	11,391,905	\$	16,428,592
Adjustments to reconcile operating income to net cash				
provided by operating activities:				
Depreciation expense		11,709,804		11,083,056
Changes in operating assets and liabilities:				
Accounts receivable		1,490,134		2,315,045
Inventories		(164,939)		(90,138)
Prepaid expenses		1,426,802		844,387
Other assets		89,621		(145,258)
Sales tax collections payable		(2,211)		(8,986)
Accounts payable and accrued expenses		(331,456)		(1,396,187)
Underrecovered gas costs		(3,242,414)		(214,383)
Customer deposits plus accrued interest		101,109		120,482
Other liabilities		(25,431)		48,058
Net cash provided by operating activities	\$	22,442,924	\$	28,984,668
Noncash capital activities:				
Acquisition of plant assets through developer contributions	\$	-	\$	4,353

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

### 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 sevenmember 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, 2016 and 2015, 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 will 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 February 2015, the Governmental Accounting Standards Board (GASB) issued Statement No. 72 (Statement No. 72), *Fair Value Measurement and Application*. Statement No. 72 is intended to provide guidance for determining a fair value measurement for financial reporting purposes and for applying fair value to certain investments and disclosures related to all fair value measurements.

In June 2015, the GASB issued GASB Statement No. 73 (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 Provision of GASB Statements 67 and 68. The requirements of this Statement will improve financial reporting by establishing a single framework for the presentation of information about pensions and enhance comparability.

In June 2015, the GASB issued GASB Statement No. 76 (Statement No. 76), *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*. The objective of this Statement is to simplify the hierarchy of generally accepted accounting principles (GAAP) used to prepare financial statements of state and local governmental entities. This Statement supersedes Statement No. 55, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*, and amends Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, paragraphs 64, 74, and 82.

In December 2015, the GASB issued GASB Statement No. 79 (Statement No. 79), *Certain External Investment Pools and Pool Participants*. This statement establishes criteria for an external investment pool to qualify for making the election to measure all of its investments at amortized cost for financial reporting purposes.

Statements No. 72, 73, 76, and 79 are effective for fiscal years beginning after June 15, 2015.

#### **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 \$228,372 in fiscal year 2016 and \$188,229 in fiscal year 2015. 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 \$87,712 in fiscal year 2016 and \$134,460 in fiscal year 2015.

#### **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, 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 Pension**

In June 2012, the Governmental Accounting Standards Board (GASB) issued Statement No. 68, Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27, which revises existing standards of financial reporting for pensions. In addition, during November 2013, GASB issued Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date, which requires deferred outflow of resources to be recognized for any contributions made subsequent to the measurement date of the beginning net pension liability. These standards were adopted by KUB in 2015 and resulted in a restatement of 2015 beginning net position of \$763,975 (Division's share \$137,516).

#### **Pension Plan**

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, 2016 and 2015 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2016 and 2015 are based on a December 31, 2015 and 2014 measurement date, respectively.

#### 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 previously reported as assets 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 previously reported as liabilities 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 differences between expected and actual experience in accordance with Statement No. 68.

#### **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 27, 2016, the date these financial statements were issued, for items that should potentially be recognized or disclosed. KUB sold \$12 million in natural gas system revenue bonds in July 2016 for the purpose of funding natural gas system capital improvements in fiscal year 2017. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.78 percent.

#### **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 assure 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 assure 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 Costs accounts. These accounts are rolled into the PGA rate adjustment on June 30 of each year thereby assuring that any over/(under) recovered amounts are passed on to KUB's gas system customers. The amount of over/(under) recovered cost was (\$2,178,653) at June 30, 2016 and \$1,063,761 at June 30, 2015.

#### **Recently Issued Accounting Pronouncements**

In June 2015, the GASB issued two related Statements that affect accounting and financial reporting by state and local governments for postemployment benefits other than pensions (OPEB). GASB Statement No. 74 (Statement No. 74), *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, addresses reporting by OPEB plans that administer benefits on behalf

of governments. GASB Statement No. 75 (Statement No. 75), *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions,* addresses reporting by governments that provide OPEB to their employees. Statement No. 74 is effective for fiscal years beginning after June 15, 2016, and Statement No. 75 is effective for fiscal years beginning after June 15, 2017.

In March 2016, the GASB issued GASB Statement No. 82 (Statement No. 82), *Pension Issues – An amendment of GASB Statements No. 67, No. 68 and No. 73.* The objective of this Statement is to address certain issues that have been raised with respect to the presentation of payroll-related measures in required supplementary information, the selection of assumptions and treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes and the classification of payments made by employers to satisfy employee contribution obligations. Statement No. 82 is effective for fiscal years beginning after June 15, 2016.

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. KUB's Agency Bond investments are rated Aaa by Moody's Investors Service.

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:

	2016		2015
Current assets			
Cash and cash equivalents	\$ 11,036,149	\$	26,262,919
Short-term contingency fund investments	3,597,830		2,950,146
Other assets			
Long-term contingency fund investments	12,712,792		12,150,457
Restricted assets			
Gas bond fund	3,145,854		3,111,502
Other funds	3,641	_	7,901
	\$ 30,496,266	\$	44,482,925

The above amounts do not include accrued interest of \$42,080 in fiscal year 2016 and \$35,761 in fiscal year 2015. 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, 2016:

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		Deposit and Investment Maturities (in Years)											
		Fair		Less									
		Value		Than 1		1-5							
Supersweep NOW and Other Deposits	\$	17,314,876	\$	17,314,876	\$	-							
State Treasurer's Investment Pool		1,118,710		1,118,710		-							
Agency Bonds		15,863,747		3,597,830		12,265,917							
Certificates of Deposits		2,473,919		2,027,044	_	446,875							
	\$	36,771,252	\$	24,058,460	\$	12,712,792							
	_		_		-								

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, 2016:

- U.S. Agency bonds of \$12,265,917, which have a maturity at purchase of greater than one year, are valued using quoted market prices (Level 1 inputs)
- Certificates of deposits of \$446,875, which have a maturity at purchase of greater than one
  year, are valued at interest rates and yield curves observable at commonly quoted
  intervals (Level 2 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:

	2016	2015
Wholesale and retail customers		
Billed services	\$ 3,122,483	\$ 4,610,243
Unbilled services	1,113,275	1,121,876
Other	251,017	233,066
Allowance for uncollectible accounts	(46,630)	(34,907)
	\$ 4,440,145	\$ 5,930,278

## 5. Accounts Payable and Accruals

Accounts payable and accruals were composed of the following:

	2016	2015
Trade accounts	\$ 4,930,035	\$ 5,321,481
Salaries and wages	334,914	219,134
Self-insurance liabilities	300,161	306,714
Other current liabilities	369,849	479,751
	\$ 5,934,959	\$ 6,327,080

## 6. Long-Term Obligations

Long-term debt consists of the following:

		Balance June 30, 2015		Additions		Payments		Defeased		Balance June 30, 2016		Amounts Due Within One Year
L-2005 - 3.0 - 4.75%	\$	10,715,000	\$	-	\$	695,000	\$	-	\$	10,020,000	\$	725,000
N-2007 - 4.0 - 5.0%		550,000		-		-		-		550,000		550,000
O-2010 - 2.0 - 3.0%		3,475,000		-		3,475,000		-		-		-
P-2010 - 3.3 - 6.2%		12,000,000		-		-		-		12,000,000		540,000
Q-2012 - 2.0 - 4.0%		23,345,000		-		700,000		-		22,645,000		2,065,000
R-2012 - 2.0 - 4.0%		9,600,000		-		200,000		-		9,400,000		400,000
S-2013 - 2.0 - 4.0%		11,480,000		-		50,000		-		11,430,000		570,000
T-2013 - 2.0 - 4.6%		24,600,000		-		200,000		-		24,400,000		500,000
U-2015 - 2.0 - 3.5%		11,780,000	_		_	100,000	_	-	_	11,680,000	_	100,000
Total bonds	\$	107,545,000	\$		\$	5,420,000	\$	-	\$	102,125,000	\$	5,450,000
Unamortized Premium	1	3,794,404	_	-	-	305,551		-	_	3,488,853	_	-
Total long term debt	\$	111,339,404	\$	-	\$	5,725,551	\$	-	\$	105,613,853	\$	5,450,000

	Balance June 30, 2014		Additions		Payments		Defeased		Balance June 30, 2015		Amounts Due Within One Year
L-2005 - 3.0 - 4.75% \$	11,380,000	\$	-	\$	665,000	\$	-	\$	10,715,000	\$	695,000
N-2007 - 4.0 - 5.0%	12,000,000		-		-		11,450,000		550,000		-
O-2010 - 2.0 - 3.0%	6,825,000		-		3,350,000		-		3,475,000		3,475,000
P-2010 - 3.3 - 6.2%	12,000,000		-		-		-		12,000,000		-
Q-2012 - 2.0 - 4.0%	24,030,000		-		685,000		-		23,345,000		700,000
R-2012 - 2.0 - 4.0%	9,800,000		-		200,000		-		9,600,000		200,000
S-2013 - 2.0 - 4.0%	11,530,000		-		50,000		-		11,480,000		50,000
T-2013 - 2.0 - 4.6%	24,800,000		-		200,000		-		24,600,000		200,000
U-2015 - 2.0 - 3.5%	-		11,780,000		-		-	_	11,780,000	_	100,000
Total bonds \$_	112,365,000	\$_	11,780,000	\$	5,150,000	\$	11,450,000	\$	107,545,000	\$_	5,420,000
Unamortized Premium	3,434,514	_	701,501	=	296,934	_	44,677	=	3,794,404	_	-
Total long term debt \$	115,799,514	\$	12,481,501	\$	5,446,934	\$	11,494,677	\$	111,339,404	\$	5,420,000

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

Fiscal	Т	Grand	
Year	Principal	Interest	Total
2017	\$ 5,450,000	\$ 3,987,262	\$ 9,437,262
2018	5,590,000	3,793,753	9,383,753
2019	5,780,000	3,599,143	9,379,143
2020	5,985,000	3,390,981	9,375,981
2021	6,240,000	3,137,531	9,377,531
2022 - 2026	32,840,000	11,816,353	44,656,353
2027 - 2031	29,565,000	5,769,511	35,334,511
2032 - 2036	 10,675,000	1,074,950	11,749,950
Total	\$ 102,125,000	\$ 36,569,484	\$ 138,694,484

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, 2016, these bond covenant requirements had been satisfied.

During fiscal year 2006, KUB's Gas Division issued Series L 2005 bonds to retire certain existing debt and fund gas system capital improvements. Concurrent with the issuance of these bonds, KUB transferred funds to an irrevocable trust to pay a portion of the Series J 2001 bonds, as such amounts mature.

During fiscal year 2008, KUB's Gas Division issued Series N 2007 bonds to fund gas system capital improvements.

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, 2015 these bonds became subject to a 6.8 percent reduction in rebate payment amounts due to the United States Government sequestration. The sequestration is effective until intervening Congressional action, at which time the sequestration rate is subject to change.

During fiscal year 2012, KUB's Gas Division issued Series Q 2012 bonds to retire Series K 2004 bonds.

During fiscal year 2013, KUB's Gas Division issued Series R 2012 bonds to fund gas system capital improvements. KUB's Gas Division also issued Series S 2013 bonds to retire Series M 2006 outstanding bonds.

During fiscal year 2014, KUB's Gas Division issued Series T 2013 to fund gas system capital improvements.

During fiscal year 2015, KUB's Gas Division issued Series U 2015 bonds to retire a portion of Series N 2007 outstanding bonds.

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, \$11.5 million at June 30, 2016, and the trust account assets are not included in the financial statements.

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Other liabilities consist of the following:

	Balance June 30, 2015	Increase	Decrease		Balance June 30, 2016
Accrued compensated absences Customer advances	\$ 1,507,803	\$ 2,799,906	\$ (2,776,378)	\$	1,531,331
for construction	718,096	655,313	(388,699)		984,710
Other	 63,182	 53,012	 (78,443)	_	37,751
	\$ 2,289,081	\$ 3,508,231	\$ (3,243,520)	\$	2,553,792

#### 7. Lease Commitments

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

2017	\$ 52,460
2018	49,913
2019	29,271
2020	1,392
Total operating minimum lease payments	\$ 133,036

## 8. Capital Assets

Capital asset activity was as follows:

		Balance June 30, 2015		Increase	Decrease	Balance June 30, 2016
Production Plant Distribution Plant	\$	14,640	\$	-	\$ - \$	14,640
Mains		215,234,641		33,590,164	(922,731)	247,902,074
Services and Meters/Regulators		82,397,049		6,978,966	(1,893,978)	87,482,037
Other Accounts		1,330,905		103,742	(6,000)	1,428,647
Total Distribution Plant	\$	298,962,595	\$	40,672,872	\$ (2,822,709) \$	336,812,758
Total General Plant	_	25,172,897		2,899,368	(267,608)	27,804,657
Total Plant Assets	\$	324,150,132	\$	43,572,240	\$ (3,090,317) \$	364,632,055
Less Accumulated Depreciation	_	(113,395,656)	_	(11,798,907)	 3,262,555	(121,932,008)
Net Plant Assets	\$	210,754,476	\$	31,773,333	\$ 172,238 \$	242,700,047
Work In Progress		37,277,731		29,759,691	(46,206,049)	20,831,373
Total Net Plant	\$	248,032,207	\$	61,533,024	\$ (46,033,811) \$	263,531,420

	Balance June 30, 2014	Increase		Decrease	Balance June 30, 2015
Production Plant \$	14,640	\$ -	\$	- \$	14,640
Distribution Plant Mains	203,808,024	11,750,358		(323,741)	215,234,641
Services and Meters/Regulators Other	79,129,896 1,493,396	4,351,598 2,585		(1,084,445) (165,076)	82,397,049 1,330,905
Total Distribution Plant \$	284,431,316	\$ 16,104,541	\$	(1,573,262) \$	298,962,595
Total General Plant	23,929,959	 1,450,671		(207,733)	25,172,897
Total Plant Assets \$	308,375,915	\$ 17,555,212	\$	(1,780,995) \$	324,150,132
Less Accumulated Depreciation	(104,468,506)	 (11,064,683)	_	2,137,533	(113,395,656)
Net Plant Assets \$	203,907,409	\$ 6,490,529	\$	356,538 \$	210,754,476
Work In Progress Total Net Plant \$	17,464,141 221,371,550	\$ 36,852,089 43,342,618	-	(17,038,499) (16,681,961) \$	37,277,731 248,032,207

#### 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, 2016 and 2015, the amount of these liabilities was \$300,161 and \$306,714, respectively, resulting from the following changes:

	2016	2015
Balance, beginning of year	\$ 306,714	\$ 298,833
Current year claims and changes in estimates	2,369,808	2,525,126
Claims payments	(2,376,361)	(2,517,245)
Balance, end of year	\$ 300,161	\$ 306,714

#### 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, 2014 to include all prior approved amendments. The Plan is a single-employer contributory, defined benefit pension plan established by Knoxville Utilities Board ("KUB") 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 KUB 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:

	2015	2014
Inactive plan members:		
Terminated vested participants	39	40
Retirees and beneficiaries	628	627
Active plan members	<u>692</u>	<u>725</u>
Total	<u>1,359</u>	<u>1,392</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 will not be 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 address the loss 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. Plan B participants may not make contributions to the Plan. 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 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 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, 2015:

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 \$5,669,380 and \$6,314,399 for 2014 and 2013, respectively, were made during KUB's fiscal years ending June 30, 2016 and 2015, respectively. Of these amounts, \$963,795 and \$1,136,592 are attributable to the Gas Division. The contribution was determined as part of the January 1, 2014 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. The actuarial valuation for the Plan year ending December 31, 2015 resulted in an actuarially determined contribution of \$4,816,913 for the fiscal year ending June 30, 2017, based on the Plan's current funding policy. The Gas Division's portion of this contribution is \$818,875.

Subsequent to June 30, 2016, the actuarial valuation for the Plan year ending December 31, 2016 was completed. The actuarial valuation resulted in an actuarially determined contribution of \$3,756,283 for the fiscal year ending June 30, 2018, based on the Plan's current funding policy. The Gas Division's portion of this contribution is \$638,568. For the Plan year ending December 31, 2016, the Plan's actuarial funded ratio was 103.04 percent.

The actuarial valuations for the Plan years ending December 31, 2015 and 2016, which determine the actuarially determined contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

#### Implementation of GASB 68

In fiscal year 2015, KUB adopted 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, 2016 and 2015 will be based on the December 31, 2015 and 2014 measurement date, respectively. The Division's share of the net pension liability at June 30, 2016 is \$856,827 and the net pension asset at June 30, 2015 is \$1,083,893.

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

		2015	2014
Total pension liability	\$	204,502,350 \$	202,773,764
Plan fiduciary net position		199,462,190	(208,795,394)
Plan's net pension liability (asset)	\$	5,040,160 \$	(6,021,630)
	_		
Plan fiduciary net position as a percentage of the total pension liability		97.54%	102.97%

Changes in Net Pension Liability are as follows:

				Increase	
	Total Pension Liability (a)		(Decrease) Plan Fiduciary Net Position (b)		Net Pension ability (a) - (b)
Balances at December 31, 2014	\$	202,773,764	\$	208,795,394	\$ (6,021,630)
Changes for the year:					
Service cost		4,157,062		-	4,157,062
Interest		14,812,784		-	14,812,784
Differences between Expected					
and Actual Experience		(1,890,334)		-	(1,890,334)
Changes of Assumptions		-		-	-
Contributions - employer		-		5,991,887	(5,991,887)
Contributions - rollovers		-		482,060	(482,060)
Contributions - member		-		5,486	(5,486)
Net investment income		-		(64,551)	64,551
Benefit payments		(15,350,926)		(15,350,926)	-
Administrative expense		-		(397,160)	397,160
Net changes		1,728,586		(9,333,204)	11,061,790
Balances at December 31, 2015	\$	204,502,350	\$	199,462,190	\$ 5,040,160
		·			

#### Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of December 31, 2015 and 2014, 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 28 years remaining as of

January 1, 2013 and 27 years remaining as of January 1, 2014

Discount rate: 8% at January 1, 2013 and 7.5% at January 1, 2014

Salary increases: From 2.58% to 7.92% for January 1, 2013 and from 2.80% to

5.15% for January 1, 2014, based on years of service

Mortality: Sex distinct RP-2000 Combined Mortality projected to 2018

using Scale AA for the January 1, 2013 valuation. Sex distinct RP-2000 Combined Mortality projected to 2024 using Scale

AA for the January 1, 2014 valuation

Inflation 2.8 percent

The actuarial assumptions used in the December 31, 2015 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

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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, 2015 and 2015 are summarized in the following table. The real rate of return reported for fixed income is for aggregate fixed income. The Plan has both aggregate and long duration fixed income.

	Long Term Expected Real Rate of Return					
Asset Class	2015 201					
Domestic equity	7.2%	6.0%				
Non-U.S. equity	7.4%	7.0%				
Real estate equity	6.5%	5.7%				
Fixed income	3.7%	1.8%				
Cash and deposits	2.6%	0.5%				

#### Discount rate

The discount rate used to measure the total pension liability was 7.5 percent as of January 1, 2015 and 2014. 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, 2015, 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	\$	17,128,897	\$	5,040,160	\$	(5,963,331)	

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

For the year ended June 30, 2015, KUB recognized pension expense of \$2,749,905 (Division's share \$494,983).

The impact of experience gains or losses and assumption changes on the Total Pension Liability are recognized in expense over the average expected remaining service life of all active and inactive members. As of the measurement date, this recognition period was 3.72 years. However, there were no experience gains or losses, and there were no assumption changes during the measurement year.

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 \$7,972,887. \$1,594,577 of that gain was recognized in the current year and an identical amount will be recognized in each of the next four years, resulting in a deferred inflow of resources of \$6,378,310 (Division's share \$1,148,096). The table below summarizes the current balances of deferred outflows and deferred inflows of resources along with the net recognition over the next five years. In addition, KUB recorded a deferred outflow of resources of \$3,157,199 (Division's share \$568,296) at June 30, 2015 for employer contributions made between December 31, 2014 and June 30, 2015.

	Deferred Outflows of Resources		Deferred Inflows of Resources	
Differences between expected and actual				
experience	\$	-	\$	-
Changes in assumptions		-		-
Net difference between projected and actual				
earnings on pension plan investments		-		6,378,310
Contributions subsequent to measurement date		3,157,199		
Total	\$	3,157,199	\$	6,378,310

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For the year ended June 30, 2016, KUB recognized pension expense of \$4,665,035 (Division's share \$793,056).

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, 2014, this average was 5.00 years. During the measurement year, there were no assumption or benefit changes. There was an experience gain of \$1,890,334 with \$378,067 of that recognized in the current year and in each of the next four years.

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 \$15,382,915. \$3,076,583 of that loss was recognized in the current year and an identical amount will be recognized in each of the next four years. Unrecognized investment gains from prior periods were \$6,378,310 of which \$1,594,577 was recognized as a reduction in pension expense in the current year.

Experience gains this year created a deferred inflow of resources of \$1,512,267 (Division's share \$257,085). The combination of unrecognized investment losses this year along with unrecognized net investment gains from prior periods results in a deferred outflow of resources as of December 31, 2015 of \$7,522,599 (Division's share \$1,278,842). The table below 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 \$2,834,692 (Division's share \$481,897) at June 30, 2016 for employer contributions made between December 31, 2015 and June 30, 2016.

	Deferred Outflows of Resources		Deferred Inflows of Resources	
Differences between expected and actual	_		_	
experience	\$	-	\$	1,512,267
Changes in assumptions		-		-
Net difference between projected and actual				
earnings on pension plan investments		7,522,599		-
Contributions subsequent to measurement date		2,834,692		
Total	\$	10,357,291	\$	1,512,267

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

Year ended June 30:	
2017 \$	3,938,630
2018	1,103,939
2019	1,103,938
2020	2,698,517
Thereafter	-

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#### 11. 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 \$1,739,057 (Division's share \$295,640) and \$1,593,350 (Division's share \$286,803), respectively, for the years ended June 30, 2016 and 2015.

#### 12. Other Post-Employment Benefits (OPEB)

The Governmental Accounting Standards Board (GASB) established standards for the measurement, recognition, and reporting of other post-employment benefits (OPEB). OPEB includes post-employment benefits other than pension, which, for KUB, is presently limited to post-employment health care. GASB Statement No. 45 (Statement No. 45) requires the recognition of the accrued OPEB liability for the respective year, plus the disclosure of the total unfunded liability.

KUB currently provides post-employment health care benefits to 585 former employees and 593 covered dependents. The cost of coverage is shared with retirees and beneficiaries. KUB recognizes its share of the cost of post-employment health care benefits as an expense as claims are paid.

KUB amended its Group Health Plan in 1999, eliminating post-employment health care benefits for all employees hired on or after July 1, 1999. As of June 30, 2016, 356 active employees were eligible for individual and dependent coverage at separation. To qualify, the employee must meet the Rule of 80 (age plus years of service) with a minimum of 20 years of service, and be enrolled in medical coverage on their last day.

In May 2006, the State of Tennessee adopted Tennessee Code Annotated, Title 8, Chapter 50, Part 12 authorizing governmental entities to establish Trusts for the purpose of pre-funding their respective OPEB liabilities.

Although Statement No. 45 does not require pre-funding of the liability, KUB has determined that it is in the long-term economic interest of KUB and its ratepayers to establish a Trust to pre-fund KUB's OPEB liability.

Knoxville Utilities Board Other Post-Employment Benefits Trust (the "Trust") is a single-employer Other Post-Employment Benefits Plan established by the Knoxville Utilities Board (KUB) Board of Commissioners through Resolution No. 1168, as amended, dated October 18, 2007. The

# Knoxville Utilities Board Gas Division Notes to Financial Statements June 30, 2016 and 2015

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 KUB 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.

KUB makes annual contributions to the Trust at an actuarially determined rate. 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.

An actuarial valuation of KUB's Postretirement Benefit Plan was performed for the Trust as of January 1, 2014 for fiscal year June 30, 2015 and January 1, 2015 for fiscal year June 30, 2016. The following table presents the OPEB cost for the year, the amount contributed to the Trust, and changes in the net OPEB obligation for fiscal year ending June 30:

	2016	2015
a) Net OPEB Obligation/(Asset) at		
beginning of fiscal year	\$ (174,410)	\$ (177,322)
<b>b)</b> Annual Required Contribution (ARC)	953,221	3,497,372
c) Interest on Net OPEB Obligation/(Asset)	(13,081)	(14,186)
d) Adjustment to ARC	(16,427)	(17,098)
e) Annual OPEB Cost (b+c-d)	956,567	3,500,284
f) Employer Contributions	953,221	3,497,372
g) Net OPEB Obligation/(Asset) at		
end of fiscal year (a+e-f)	\$ (171,064)	\$ (174,410)

KUB's annual OPEB cost, the percentage of annual OPEB cost contributed to the Trust, and the net OPEB obligation for fiscal year 2016 and the two preceding years were as follows:

#### Schedule of Employer Contributions

Actuarial Valuation Date	Employer Fiscal Year	Annual Required Contribution	Fiscal Year Actual Contribution	Percentage Contributed	Net OPEB Obligation	
1/1/2012	6/30/2014	3,327,412	4,057,091	121.93%	(177,322)	
1/1/2013	6/30/2015	3,497,372	3,497,372	100.00%	(174,410)	
1/1/2014	6/30/2016	953,221	953,221	100.00%	(171,064)	

Total contributions to the OPEB Trust for the fiscal year ended June 30, 2016 were \$953,221 (Division's share \$162,048). The contribution to the Trust was consistent with the annual required contribution, as determined by the Postretirement Benefit Plan's actuarial valuation as of January 1,

# Knoxville Utilities Board Gas Division Notes to Financial Statements June 30, 2016 and 2015

2014, which was \$953,221 (Division's share \$162,048). As of June 30, 2016, the employer's OPEB obligation has been exceeded by \$171,064 (Division's share \$29,081).

The annual required contribution for the fiscal year ending June 30, 2017, as determined by the Plan's actuarial valuation as of January 1, 2015 is \$620,015 (Division's share \$105,403).

The actuarial valuation for the Plan as of January 1, 2016 has been completed. The valuation determined that the Plan's actuarial accrued liability was \$45,118,624 (Division's share \$7,670,166). The actuarial value of the Plan's assets was \$48,510,796 (Division's share \$8,246,835). As a result, the Plan's unfunded actuarial accrued liability was (\$3,392,172) (Division's share (\$576,669)). The Plan's actuarial funded ratio was 108 percent. Due to the future implementation of GASB 75, the contributions made for fiscal year ending June 30, 2018 will be the actuarially determined contribution instead of the annual required contribution and the actuarial cost method used to determine the contributions will change from the projected unit credit cost method to the entry age normal cost method. The actuarially determined contribution for fiscal year ending June 30, 2018 will be zero. See Required Supplementary Information for OPEB Schedule of Funding Progress.

The actuarial valuations dated January 1, 2015 and 2016, which determine the annual required contribution and actuarially determined contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

The required schedule of funding progress immediately following the notes to the financial statements presents multi-year trend information about whether the actuarial value of Trust assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members to that point.

Actuarial calculations reflect a long-term perspective. Consistent with that perspective, actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets.

Identification of actuarial methods and significant assumptions used to determine the annual required contribution for the fiscal year ending June 30, 2016:

I. Actuarial cost methodII. Actuarial value of assets

III. Investment return
Projected salary increases
Healthcare cost Trend:
Medicare
Non-Medicare
IV. Amortization method

Remaining amortization period

Projected unit credit cost method Smoothed market value with phase-in method using a smoothing period of 5 years 7.5%, based on the expected portfolio return N/A

2014 - 2030+, ranging from 4.5% to 7.45% 2014 - 2030+, ranging from 4.5% to 8.75% Level dollar closed (30-year) 22 years

# Knoxville Utilities Board Gas Division Notes to Financial Statements June 30, 2016 and 2015

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.

# 13. 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, 2016 and 2015 are summarized as follows:

	2016	2015
City of Knoxville		
Amounts billed by the Division for utilities and		
related services	\$ 590,941	\$ 750,765
Payments by the Division in lieu of property tax	3,682,642	3,251,836
Payments by the Division for services provided	94,019	74,607
Other divisions of KUB		
Amounts billed to other divisions for utilities		
and related services provided	246,060	321,789
Interdivisional rental expense	496,916	453,442
Amounts billed to the Division by other divisions		
for utilities services provided	268,957	286,315

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

	2016	2015	
Accounts receivable	\$ 6,644	\$ 5,902	

# 14. Natural Gas Supply Contract Commitments

For fiscal year 2016, the Gas Division hedged 67 percent of its total gas purchases via gas supply contracts. As of June 30, 2016, the Gas Division had hedged the price on approximately 20 percent of its anticipated gas purchases for fiscal year 2017.

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

		2017	2018		2019		2020		2021
Transportation									
Transportation									
Tennessee Gas Pipeline	\$	3,269,844	\$ 3,269,844	\$	3,269,844	\$	1,089,948	\$	-
East Tennessee Natural Gas	;	10,066,388	10,066,388		10,066,388		2,748,496		-
Storage									
Tennessee Gas Pipeline		1,787,976	1,787,976		1,787,976		595,992		-
East Tennessee Natural Gas	;	757,460	757,460		757,460		-		-
Saltville Natural Gas	_	1,870,560	1,548,030	_	580,440	_	435,330	_	-
Demand Total	\$	17,752,228	\$ 17,429,698	\$	16,462,108	\$	4,869,766	\$	-

Firm obligations related to purchased gas - commodity

		2017		2018		2019		2020		2021
Baseload										
Conoco	\$	5,719,700	\$	-	\$	-	\$	-	\$	-
Shell Energy		739,680		-		-		-		-
BP		6,104,693		6,181,363		5,874,650		1,801,950		-
CNX	_	1,709,713	_	1,648,048	_		_		_	
Commodity Total	\$	14,273,786	\$	7,829,411	\$	5,874,650	\$	1,801,950	\$	-

The total commodity values presented here are based upon firm supply obligations with each individual natural gas supplier. The firm obligations values for Conoco, Shell Energy, and BP are based upon firm supply obligations and locked prices with those suppliers. The firm obligations value for CNX is based upon firm supply obligations and the applicable four month NYMEX strip prices on June 30, 2016.

# 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 Gas Division Required Supplemental Information - Schedule of Funding Progress June 30, 2016 (Unaudited)

# **Other Post-Employment Benefits (OPEB)**

Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Actuarial Accrued Liability (UAAL) (b-a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b)-(a)]/(c)
\$ -	\$ 108,329,141	\$ 108,329,141	0%	\$ 31,234,509	346.8%
14,593,487	100,726,738	86,133,251	14%	31,846,091	270.5%
21,275,643	58,475,364	37,199,721	36%	30,069,028	123.7%
40,749,815	64,289,254	23,539,439	63%	28,878,791	81.5%
37,907,357	61,603,466	23,696,109	62%	28,269,123	83.8%
38,571,803	63,341,531	24,769,728	61%	27,566,340	89.9%
43,409,955	46,889,808	3,479,853	93%	26,724,154	13.0%
47,705,478	47,745,640	40,162	100%	25,816,884	0.2%
48,510,796	45,118,624	(3,392,172)	108%	25,243,127	(13.4%)
	Value of Assets (a) \$ - 14,593,487 21,275,643 40,749,815 37,907,357 38,571,803 43,409,955 47,705,478	Actuarial Value of Liability Assets (AAL) (a) \$108,329,141 14,593,487 100,726,738 21,275,643 58,475,364 40,749,815 64,289,254 37,907,357 61,603,466 38,571,803 63,341,531 43,409,955 46,889,808 47,705,478 47,745,640	Actuarial Value of Assets (a)Actuarial Liability (b)Accrued Liability (UAAL) (b-a)\$ - 14,593,487 21,275,643 21,275,643 37,907,357 38,571,803 43,409,955 43,409,955 47,705,478\$ 108,329,141 400,726,738 58,475,364 40,289,254 40,3466 38,571,803 46,889,808 47,745,640\$ 108,329,141 400,726,738 36,133,251 37,199,721 43,539,439 37,907,357 46,889,808 47,745,640	Actuarial Value of Assets (a)         Actuarial Liability (b)         Accrued Liability (UAAL) (b-a)         Funded Ratio (a)/(b)           \$ - 14,593,487         \$ 108,329,141         \$ 108,329,141         0%           \$ 1,275,643         58,475,364         37,199,721         36%           40,749,815         64,289,254         23,539,439         63%           37,907,357         61,603,466         23,696,109         62%           38,571,803         63,341,531         24,769,728         61%           43,409,955         46,889,808         3,479,853         93%           47,705,478         47,745,640         40,162         100%	Actuarial Value of Assets (a)         Liability (b)         Liability (b)         Funded (a)         Covered Payroll (a)           \$ - \$108,329,141         \$108,329,141         \$0%         \$31,234,509           \$14,593,487         \$100,726,738         \$6,133,251         \$14%         \$31,846,091           \$21,275,643         \$58,475,364         \$37,199,721         \$6%         \$30,069,028           \$40,749,815         \$64,289,254         \$23,539,439         \$63%         \$28,878,791           \$37,907,357         \$61,603,466         \$23,696,109         \$62%         \$28,269,123           \$38,571,803         \$63,341,531         \$24,769,728         \$61%         \$27,566,340           \$43,409,955         \$46,889,808         \$3,479,853         \$93%         \$26,724,154           \$47,705,478         \$47,745,640         \$40,162         \$100%         \$25,816,884

<sup>\*</sup> The actuarial valuations dated January 1, 2015 and 2016, which determine the annual required contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

# **Knoxville Utilities Board Gas Division**

Required Supplemental Information - Schedule of Changes in Net Pension Liability and Related Ratios June 30, 2016

(Unaudited)

		Year ended I 2015	Dece	mber 31 2014
Total pension liability				
Service cost	\$	4,157,062	\$	4,092,808
Interest		14,812,784		14,698,657
Differences between expected and actual experience		(1,890,334)		-
Benefit payments, including refunds of member contributions		(15,350,926)		(15,533,167)
Net change in total pension liability		1,728,586		3,258,298
Total pension liability - beginning		202,773,764		199,515,466
Total pension liability - ending (a)	\$	204,502,350	\$	202,773,764
Plan fiduciary net position				
Contributions - employer	\$	5,991,887	\$	5,908,541
Contributions - participants	*	487,546	,	475,854
Net investment income		(95,430)		22,292,369
Other additions		30,879		29,733
Benefit payments, including refunds of member contributions		(15,274,926)		(15,405,167)
Administrative expense		(397,160)		(378,085)
Death benefits		(76,000)		(128,000)
Net change in plan fiduciary net position**		(9,333,204)		12,795,245
Plan fiduciary net position - beginning**		208,795,394		196,000,149
Plan fiduciary net position - ending (b)**	\$	199,462,190	\$	208,795,394
Plan's net pension liability - ending (a) - (b)	\$	5,040,160	\$	(6,021,630)
Plan fiduciary net position as a percentage of the total				_
pension liability		97.54%		102.97%
Covered-employee payroll	\$	50,679,585	\$	50,246,074
Plan's net pension liability as a percentage of				
covered-employee payroll		9.95%		(11.98%)

## **Notes to Schedule:**

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

<sup>\*\*</sup> Excludes amounts related to 401(k) matching contributions.

# **Knoxville Utilities Board Gas Division**

Required Supplemental Information - Schedule of Employer Pension Contributions
June 30, 2016
(Unaudited)

	 Year ende 2015	d Dec	ember 31 2014
Annual required contribution Contribution in relation to the annual	\$ 5,991,887	\$	5,908,541
required contribution	5,991,887		5,908,541
Contribution deficiency	\$ -	\$	-
Covered-employee payroll Contributions as a percentage of	\$ 50,679,585	\$	50,246,074
covered-employee payroll	11.82%		11.76%

## Notes to Schedule:

Valuation Dates: January 1, 2013 and January 1, 2014

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: Individual entry age
Asset valuation method: 5-year smoothed market

Amortization method: Level dollar closed period with 28 years remaining as of January 1, 2013

and 27 years remaining as of January 1, 2014.

Discount rate: 8% at January 1, 2013 and 7.5% at January 1, 2014

Salary increases: From 2.58% to 7.92% for January 1, 2013 and from 2.8% to 5.15% for

January 1, 2014, based on years of service

Mortality: Sex distinct RP-2000 Combined Mortality projected to 2018 using Scale AA

for the Janaury 1, 2013 valuation. Sex distinct RP-2000 Combined Mortality

projected to 2024 using Scale AA for the January 1, 2014 valuation.

Inflation: 2.8 percent

<sup>\*</sup> 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 Supplemental Information - Schedule of Insurance in Force June 30, 2016

(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), and OPEB Trust funds. 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 \$400,000 per individual participant.

# Knoxville Utilities Board Gas Division Supplemental Information - Schedule of Debt Maturities by Fiscal Year June 30, 2016 (Unaudited)

Schedule 2

**Continued on Next Page** 

	L-2	005	N-2	2007	P-2010			Q-2	012
FY	Principal	Interest	Principal	Interest	Principal	Interest	Rebate*	Principal	Interest
16-17	725,000	441,278	550,000	27,500	540,000	645,843	226,045	2,065,000	806,548
17-18	760,000	406,840			570,000	628,023	219,808	2,125,000	744,598
18-19	795,000	372,640			595,000	606,363	212,227	2,190,000	680,848
19-20	830,000	336,865			620,000	581,075	203,376	2,260,000	615,148
20-21	865,000	299,515			645,000	553,175	193,611	2,350,000	524,748
21-22	910,000	260,590			670,000	521,731	182,606	2,445,000	430,748
22-23	945,000	223,053			695,000	488,231	170,881	2,540,000	332,948
23-24	980,000	182,890			725,000	453,481	158,718	2,645,000	231,348
24-25	1,025,000	141,240			750,000	413,606	144,762	760,000	125,548
25-26	1,065,000	96,140			785,000	372,358	130,325	780,000	102,748
26-27	1,120,000	49,280			815,000	328,200	114,870	800,000	79,348
27-28					845,000	279,300	97,755	830,000	54,348
28-29					880,000	228,600	80,010	855,000	27,788
29-30					915,000	175,800	61,530		
30-31					950,000	120,900	42,315		
31-32					1,000,000	62,000	21,700		
32-33									
33-34									
34-35									
Total \$	10,020,000 \$	2,810,331 \$	550,000 \$	27,500	\$ 12,000,000	6,458,686 \$	2,260,539	\$ 22,645,000	\$ 4,756,714

<sup>\*</sup>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, 2015 these bonds became subject to a 6.8% 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.

# Knoxville Utilities Board Gas Division Supplemental Information - Schedule of Debt Maturities by Fiscal Year June 30, 2016 (Unaudited)

Schedule 2

# **Continued from Previous Page**

											Grand Total	Grand Total
	R-20	012	S-20	13	T-20	013	U-2	015	Tota	ls	(P + I)	(Less Rebate)
FY	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest		
16-17	400,000	282,530	570,000	374,100	500,000	1,011,825	100,000	397,638	5,450,000	3,987,262	9,437,262	9,211,217
17-18	425,000	270,530	595,000	351,300	500,000	996,825	615,000	395,637	5,590,000	3,793,753	9,383,753	9,163,945
18-19	425,000	257,780	615,000	327,500	500,000	976,825	660,000	377,187	5,780,000	3,599,143	9,379,143	9,166,916
19-20	450,000	240,781	645,000	302,900	500,000	956,825	680,000	357,387	5,985,000	3,390,981	9,375,981	9,172,605
20-21	475,000	222,781	695,000	277,100	500,000	936,825	710,000	323,387	6,240,000	3,137,531	9,377,531	9,183,920
21-22	475,000	203,781	715,000	249,300	500,000	916,825	740,000	287,887	6,455,000	2,870,862	9,325,862	9,143,256
22-23	500,000	184,781	730,000	227,850	500,000	901,825	795,000	250,888	6,705,000	2,609,576	9,314,576	9,143,695
23-24	525,000	169,781	745,000	205,950	500,000	886,200	805,000	233,000	6,925,000	2,362,650	9,287,650	9,128,932
24-25	550,000	159,281	790,000	183,600	1,550,000	869,950	845,000	208,850	6,270,000	2,102,075	8,372,075	8,227,313
25-26	575,000	142,781	800,000	159,900	1,600,000	813,763	880,000	183,500	6,485,000	1,871,190	8,356,190	8,225,865
26-27	575,000	130,560	840,000	135,900	1,650,000	749,763	895,000	154,900	6,695,000	1,627,951	8,322,951	8,208,081
27-28	600,000	117,625	875,000	110,700	1,700,000	683,763	985,000	123,573	5,835,000	1,369,309	7,204,309	7,106,554
28-29	625,000	99,625	905,000	84,450	1,750,000	615,763	975,000	89,100	5,990,000	1,145,326	7,135,326	7,055,316
29-30	650,000	84,000	940,000	57,300	1,950,000	543,575	955,000	59,850	5,410,000	920,525	6,330,525	6,268,995
30-31	675,000	64,500	970,000	29,100	2,000,000	460,700	1,040,000	31,200	5,635,000	706,400	6,341,400	6,299,085
31-32	725,000	44,250			2,000,000	373,200			3,725,000	479,450	4,204,450	4,182,750
32-33	750,000	22,500			2,000,000	283,200			2,750,000	305,700	3,055,700	3,055,700
33-34					2,100,000	193,200			2,100,000	193,200	2,293,200	2,293,200
34-35					2,100,000	96,600			2,100,000	96,600	2,196,600	2,196,600
Total \$	9,400,000 \$	2,697,867	11,430,000 \$	3,076,950	24,400,000 \$	13,267,452	11,680,000	\$ 3,473,984 \$	102,125,000 \$	36,569,484	\$ 138,694,484 \$	136,433,945

Rate Class	Base Charge	Number of Customers
Residential (G-2)	For the regular monthly billing period for the months of November to April, inclusive:  Customer charge per month \$7.65  First 30 therms per month at \$0.9670 per therm  Excess over 30 therms per month at \$0.7548 per therm  For the regular monthly billing periods for the months of May to October, inclusive:  Customer charge per month \$7.65  First 50 therms per month \$0.7883 per therm  Excess over 50 therms per month at \$0.6697 per therm	90,395
Commercial (G-4)	Available to any commercial or industrial customer: Customer charge per month \$16.00 First 250 therms per month at \$0.8923 per therm Excess over 250 therms per month at \$0.7784 per therm	9,122
Commercial (G-6)	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.  The net rate is the sum of the following demand and commodity charges:  Customer charge: \$130.00 per month  Demand charge: \$1.90 per therm of demand  Commodity charge: First 30,000 therms per month at \$0.5230 per therm  Excess over 30,000 therms per month at \$0.4319 per therm	260
Industrial (G-7)	<ul> <li>Service under Rate Schedule G-7 shall be available to any customer who meets the following conditions:</li> <li>(a) Customer's annual Interruptible Gas use, on an actual or projected basis, shall not be less than 25,000 dekatherms;</li> <li>(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;</li> <li>(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</li> <li>(d) KUB must determine that its existing distribution system facilities are adequate and available for the requested service.</li> </ul>	13

Schedule 3

See accompanying Report of Independent Auditors on Supplemental Information.

Number of Customers

Schedule 3

#### Rate Class Base Charge

The net rate is the sum of the following demand and commodity charges:

Customer charge: \$300.00 per month

Demand charge: \$19.00 per month per dekatherm of demand Commodity charge: (a) Firm Gas - \$4.319 per dekatherm

(b) Interruptible Gas - (i) First 3,000 dekatherms per month at \$4.026 per dekatherm; excess of 3,000 to 20,000 dekatherms per month at \$3.445 per dekatherm; plus excess over 20,000 to 50,000 dekatherms per month at \$2.671 per dekatherm; excess over 50,000 dekatherms per month at \$2.460 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: \$1.996 per dekatherm for the first 3,000 dekatherms of gas Redelivered

plus Unauthorized Gas; plus \$1.415 per dekatherm for each dekatherm from

3,000 to and including 20,000 dekatherms of gas Redelivered plus Unauthorized Gas;

plus \$.641 per dekatherm for each dekatherm from 20,000 to and including 50,000 dekatherms of gas Redelivered plus Unauthorized Gas; plus \$.430 per

\$15.00 per dekatherm of Unauthorized Gas as a penalty, plus the total of: (a) the

dekatherm for the excess over 50,000 dekatherms of gas Redelivered plus Unauthorized Gas.

Unauthorized

Gas charge: 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 *Gas Daily* or, if *Gas Daily* 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 *Inside FERC*, or if *Inside FERC* 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.

Number of Customers

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Schedule 3

G-11

**Rate Class** 

Base Charge

- Service under Rate Schedule G-11 shall be available to any customer who meets the following conditions:
  - (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.

The net rate is the sum of the following charges:

Customer charge: \$400.00

Demand charge: \$19.00 per dekatherm of demand

Firm Gas charge: \$4.319 per dekatherm

Transportation charge: \$1.996 per dekatherm for the first 3,000 dekatherms of non-Firm gas

delivered to Customer; plus \$1.415 per dekatherm for each dekatherm from 3,000 to and including 20,000 dekatherms of non-Firm gas delivered to Customer; plus \$.641 per dekatherm for each dekatherm from 20,000 to and including 50,000 dekatherms of non-Firm gas delivered to Customer; plus \$.430 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.

See accompanying Report of Independent Auditors on Supplemental Information.

Transportation charge:

Number of Customers

4

Schedule 3

Rate Class	Base Charge	
	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.
	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.
G-12	<ul> <li>(a) Customer's annual gas</li> <li>(b) KUB must determine the requested service;</li> <li>(c) Customer must execute</li> <li>(d) Customer's use under any other class of KUB affect KUB's gas purch</li> </ul>	G-12 shall be available to any customer when the following conditions are met: so usage, on an actual or projected basis, shall not be less than 12,500 dekatherms; that its existing distribution system facilities are adequate and available for the see a Transportation Service Agreement for firm transportation gas service; and this rate shall not work a hardship on any other customers of KUB, nor adversely affect 8's customers and further provided the Customer's use under this rate shall not adversely mase plans and/or effective utilization of the daily demands under KUB's gas purchase liers, as solely determined by KUB.
	The net rate is the sum of t Customer charge: Demand charge:	he following charges: \$400.00 \$6.20 per dekatherm of demand

See accompanying Report of Independent Auditors on Supplemental Information.

gas delivered to Customer.

\$2.256 per dekatherm for the first 3,000 dekatherms of gas delivered to Customer; plus \$1.532 per dekatherm for each dekatherm from 3,000 to and including 20,000 dekatherms of gas delivered to Customer; plus \$.731 per dekatherm for each dekatherm from 20,000 to and including 50,000 dekatherms of gas delivered to Customer; plus \$.575 per dekatherm for the excess over 50,000 dekatherms of

Number of

Schedule 3

Rate Class	Base Charge		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:  Other charges:	\$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.  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.	



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

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

# **Report on the Financial Statements**

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, 2016, 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 27, 2016.

## **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 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 that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control 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 27, 2016



# **Water Division**

# Financial Statements and Supplemental Information June 30, 2016 and 2015

# **KUB Board of Commissioners**

Nikitia Thompson - Chair

Sara Hedstrom Pinnell - Vice Chair

Dr. Jerry W. Askew

Kathy Hamilton

Celeste Herbert

**Eston Williams** 

John Worden

# Management

## Mintha Roach

President and
Chief Executive Officer

#### **Bill Elmore**

Executive Vice President and Chief Operating Officer

#### **Mark Walker**

Senior Vice President and Chief Financial Officer

#### **Susan Edwards**

Senior Vice President and Chief Administrative Officer

#### **Eddie Black**

Senior Vice President

# Mike Bolin

Vice President

## **Julie Childers**

Vice President

## **Derwin Hagood**

Vice President

#### **Dawn Mosteit**

Vice President

## **Paul Randolph**

Vice President

## **Dennis Upton**

Vice President

# **Knoxville Utilities Board Water Division**

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June 30, 2016 and 2015

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# Report of Independent Auditors

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, 2016 and 2015, 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

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, 2016 and 2015, 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.



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 24 and the required supplementary information on pages 51 through 53 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.

#### Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated October 27, 2016, 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 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 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 27, 2016

# Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2016 and 2015

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, 2016 and 2015, 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, 2016 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 78,980 water system customers over a 188 square mile service area. KUB maintains 1,411 miles of service mains, 28 storage facilities, 24 booster pump stations, and one treatment plant, which provided 12 billion gallons of water to KUB's water customers in fiscal year 2016. The average daily flow for fiscal year 2016 was 32.9 million gallons.

The water system has added approximately 715 customers over the past three years representing annual growth of less than one percent.

The Division generated \$2 million of additional revenue during the fiscal year as a result of the July 2015 water rate increase, adopted by the KUB Board of Commissioners to help fund the Division's Century II infrastructure program.

The typical residential water customer's average monthly bill was \$22.45 as of June 30, 2016 (based on monthly use of 500 cubic feet or 3,740 gallons). The monthly bill increased \$1 compared to the prior fiscal year, the result of the July 2015 water rate increase.

Water sales volumes have been impacted by the use of more efficient appliances and the conservation efforts of customers. As a result, water sales volumes have declined 7 percent in the past decade.

# **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, 2016 and 2015

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 of Commissioners 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 July 2014 and July 2015 rate increases generated \$3.6 million and \$2 million of additional annual Water Division revenue, respectively, while the July 2016 rate increase will result in additional annual Water Division revenue of \$2 million.

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.

KUB is in the process of implementing a 15-year initiative to ensure KUB will continue to provide high-quality, reliable water service to its 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 \$120 million in various redundant facilities at its existing Mark B. Whitaker Water Treatment Plant over the next 11 years.

KUB remains on track with its Century II water system infrastructure program. In fiscal year 2016, KUB replaced 14.3 miles of galvanized water main and 7.2 miles of cast iron main. Other notable Century II water system improvements projects included replacing water main on Cumberland Avenue to accommodate the City of Knoxville's Cumberland Avenue Streetscape project and the Downtown Century II project.

# **Financial Highlights**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

The Division's net position during the year increased \$6 million compared to a \$5 million increase last fiscal year. A restatement to the fiscal year 2014's net position based on a change in method of accounting for pension expense reduced the total net position by \$0.1 million during fiscal year 2015.

Operating revenue increased \$3.3 million or 7.4 percent, the result of additional revenue from the water rate increase effective July 2015 and a 0.8 percent increase in water sales volumes.

Operating expenses increased \$2 million or 5.9 percent. Operating and maintenance expenses (O&M) increased \$0.6 million compared to the prior year. Depreciation expense increased \$1.3 million or 16.2 percent. Taxes and tax equivalents increased \$0.1 million from the prior year.

# Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2016 and 2015

Interest income was up \$0.1 million from the prior fiscal year. Interest expense was \$0.2 million higher than the prior year, due to additional interest expense from bonds sold in the August 2014 and April 2015.

Capital contributions were \$0.1 million higher than the prior fiscal year, the result of increased contributed assets from developers.

Total plant assets (net) increased \$23.2 million or 9 percent due to water main replacement, treatment plant improvements and upgrades to various information systems.

Long-term debt represented 46.9 percent of the Division's capital structure as of June 30, 2016, as compared to 48.6 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 2.41. Maximum debt service coverage was 2.32

# Fiscal Year 2015 Compared to Fiscal Year 2014

The Division's net position during the year increased \$5 million compared to a \$1.5 million increase last fiscal year. A restatement to the prior fiscal year's net position based on a change in method of accounting for pension expense reduced the total net position by \$0.1 million during fiscal year 2015. This change resulted in a net increase of \$4.9 million or 3.2 percent in the Division's net position.

Operating revenue increased \$4.8 million or 12.2 percent, the net result of additional revenue from the Century II water rate increases, which were effective January and July 2014, and a 1.6 percent increase in water sales volumes.

Operating expenses increased \$1.3 million or 3.8 percent. Operating and maintenance expenses (O&M) decreased \$0.2 million compared to the prior year. Depreciation expense increased \$0.9 million or 12.4 percent. Taxes and tax equivalents increased \$0.6 million from the prior year.

Interest income was consistent with the prior fiscal year. However, interest expense was \$0.2 million higher than the prior year, due to additional interest expense from bonds sold in the August 2014 and April 2015.

Capital contributions were \$0.1 million higher than the prior fiscal year, the result of increased contributed assets from developers.

Total plant assets (net) increased \$18.4 million or 7.7 percent due to main replacement, treatment plant improvements and information system upgrades.

KUB sold two series of water system revenue bonds during fiscal year 2015 for the purpose of funding water system capital improvements totaling \$28 million. The \$20 million bond issue in April 2015 was accelerated to take advantage of the low interest rate environment which impacted the Division's debt rate and debt service coverage levels for fiscal year 2015. Long-term debt represented 48.6 percent of the Division's capital structure as of June 30, 2015, as compared to 44.8 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 2.06.

# Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2016 and 2015

#### **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 are 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.

#### **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 year and the year preceding the prior year.

# Statements of Net Position As of June 30

(in thousands of dollars)		2016		2015		2014
Current, restricted and other assets	\$	33,888	\$	55,083	\$	43,995
Capital assets, net		281,258		258,139		239,706
Deferred outflows of resources		3,273		2,459		260
Total assets and deferred outflows of resources	_	318,419		315,681	_	283,961
Current and other liabilities		13,097		10,996		10,584
Long-term debt outstanding		142,132		146,857		121,264
Deferred inflows of resources		197		829		-
Total liabilities and deferred inflows of resources		155,426	_	158,682	_	131,848
Net position						
Net investment in capital assets		138,069		110,579		116,197
Restricted		1,523		1,375		1,219
Unrestricted	_	23,401		45,045		34,697
Total net position	\$	162,993	\$	156,999	\$	152,113

# **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, 2016 and 2015

# **Impacts and Analysis**

# **Current, Restricted and Other Assets**

# Fiscal Year 2016 Compared to Fiscal Year 2015

Current, restricted and other assets decreased \$21.2 million or 38.5 percent. The decrease reflects the utilization of \$9.9 million in bond proceeds and an \$11.9 million decrease in the Division's general fund cash (consisting of cash and cash equivalents, short-term investments, and long-term investments). These decreases were offset by a \$0.5 million increase in operating contingency reserves.

## Fiscal Year 2015 Compared to Fiscal Year 2014

Current, restricted and other assets increased \$11.1 million or 25.2 percent. The increase reflects a higher level of unused bond proceeds of \$9.9 million and a \$1.2 million increase in operating contingency reserves. These increases were offset by a \$0.9 million decrease in the Division's general fund cash (consisting of cash and cash equivalents, short-term investments, and long-term investments).

# **Capital Assets**

# Fiscal Year 2016 Compared to Fiscal Year 2015

Capital assets, net of depreciation, increased \$23.2 million or 9 percent. Capital expenditures included \$13.5 million for water main replacement, \$7.5 million for treatment plant and system improvements, \$2.8 million for the replacement and relocation of water system assets to accommodate Tennessee Department of Transportation (TDOT) highway improvement projects and \$1.1 million for upgrades to various information systems. \$4.9 million of water system assets were retired during the fiscal year.

## Fiscal Year 2015 Compared to Fiscal Year 2014

Capital assets, net of depreciation, increased \$18.4 million or 7.7 percent. Capital expenditures included \$12.5 million for water main replacement, \$7.8 million for treatment plant and system improvements and \$1.1 million for information system upgrades. \$2 million of water system assets were retired during the fiscal year.

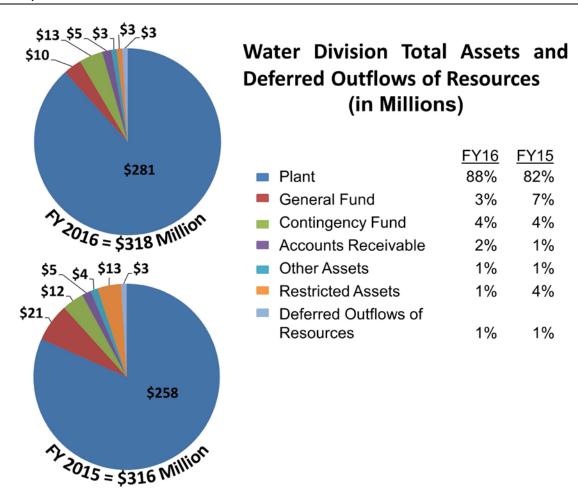
# **Deferred Outflows of Resources**

## Fiscal Year 2016 Compared to Fiscal Year 2015

Deferred outflows of resources increased \$0.8 million compared to the prior fiscal year. This increase was the net effect of an increase in pension outflow of \$0.9 million and a decrease of unamortized bond refunding costs of \$0.1 million.

# Fiscal Year 2015 Compared to Fiscal Year 2014

Deferred outflows of resources increased \$2.2 million compared to the prior fiscal year. The unamortized bond refunding costs increased \$1.8 million due to the April 2015 issuance of \$23 million in revenue refunding bonds.



## **Current and Other Liabilities**

# Fiscal Year 2016 Compared to Fiscal Year 2015

Current and other liabilities increased \$2.1 million over the prior fiscal year. Accounts payable at year end were \$0.9 million higher and the actuarially determined net pension obligation of \$0.7 million was recognized in fiscal year 2016.

# Fiscal Year 2015 Compared to Fiscal Year 2014

Current and other liabilities increased \$0.4 million over the prior fiscal year due to a \$0.8 million increase in the current portion of revenue bonds and a \$0.3 million increase in accounts payable.

# Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2016 and 2015

# **Long-Term Debt**

# Fiscal Year 2016 Compared to Fiscal Year 2015

Long-term debt decreased \$4.7 million or 3.2 percent primarily due to \$4.6 million of long-term bond debt that shifted to current liabilities as payable within the next year.

# Fiscal Year 2015 Compared to Fiscal Year 2014

Long-term debt increased \$25.6 million or 21.1 percent, the combined result of additional revenue bonds of \$8 million issued in August 2014 and \$20 million issued April 2015. The increase was partially offset by the scheduled repayment of bond debt.

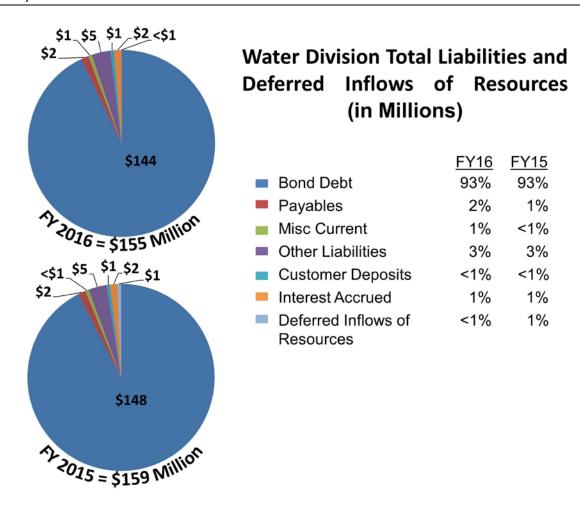
## **Deferred Inflows of Resources**

## Fiscal Year 2016 Compared to Fiscal Year 2015

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

# Fiscal Year 2015 Compared to Fiscal Year 2014

Deferred inflows of resources were \$0.8 million due to the addition of pension inflow.



## **Net Position**

# Fiscal Year 2016 Compared to Fiscal Year 2015

Net position increased \$6 million this fiscal year. Net investment in capital assets increased \$27.5 million, due to an increase to net plant in service of \$23.2 million. Unrestricted net position decreased \$21.6 million, primarily due to an \$11.9 million decrease in general fund cash and a \$9.9 decrease in unused bond proceeds compared to June of the prior year. Restricted assets increased \$0.1 million, due to additional funds restricted for debt service.

# Fiscal Year 2015 Compared to Fiscal Year 2014

Net position increased \$4.9 million this fiscal year. Net investment in capital assets decreased \$5.6 million, due to the net effect of an increase to net plant in service of \$18.4 million and additional debt of \$28 million. Unrestricted net position increased \$10.3 million, primarily due to unused bond proceeds for capital improvements in the general fund. Restricted assets increased \$0.2 million, due to additional funds restricted for debt service.

# 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 year and the year preceding the prior year.

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

(in thousands of dollars)		2016		2015		2014
Operating revenues	\$	47,453	\$	44,173	\$	39,374
Operating expenses						
Treatment		4,186		3,789		3,355
Distribution		12,645		13,046		13,635
Customer service		1,666		1,653		1,517
Administrative and general		4,838		4,206		4,364
Depreciation		9,055		7,795		6,934
Taxes and tax equivalents		3,717		3,622	_	3,042
Total operating expenses		36,107		34,111	_	32,847
Operating income		11,346		10,062		6,527
Interest income		194		135	· <u>-</u>	126
Interest expense		(5,612)		(5,421)		(5,258)
Other income/(expense)	_	(235)	_	(23)	_	(73)
Change in net position before capital contributions		5,693		4,753	_	1,322
Capital Contributions		301		233	_	158
Change in net position	\$	5,994	\$	4,986	\$	1,480

# 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, 2016 and 2015

- 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 2016 Compared to Fiscal Year 2015

The Division's net position during the year increased \$6 million compared to a \$5 million increase last fiscal year. A restatement to fiscal year 2014's net position based on a change in method of accounting for the pension reduced the total net position by \$0.1 million.

## Fiscal Year 2015 Compared to Fiscal Year 2014

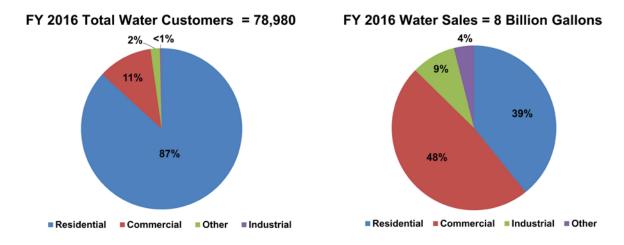
The Division's net position during the year increased \$5 million compared to a \$1.5 million increase last fiscal year. A restatement to the prior fiscal year's net position based on a change in method of accounting for the pension reduced the total net position by \$0.1 million. This change resulted in a net increase of \$4.9 million or 3.2 percent in the Division's net position.

# Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2016 and 2015

# **Margin from Sales**

# Fiscal Year 2016 Compared to Fiscal Year 2015

Operating revenues increased \$3.3 million or 7.4 percent, reflecting additional revenue from the July 2015 water rate increase and a one percent increase in sales volumes. Operating expenses rose \$2 million and interest expense increased \$0.2 million.



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 (57 percent) of total sales volumes during the year.

KUB's ten largest water customers accounted for 11.9 percent of KUB's billed water volumes. Those ten customers represent five industrial and five commercial customers, including three governmental customers.

Residential water sales volumes were 1.6 percent lower than the prior fiscal year. Residential sales were lower throughout the majority of the year, due to higher precipitation levels during the fiscal year.

Commercial sales volumes increased 0.4 percent compared to the prior year. Industrial sales volumes increased 2.8 percent compared to the prior year.

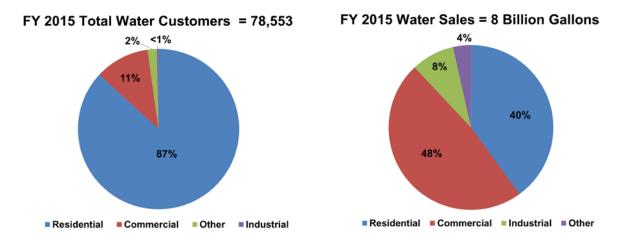
KUB has added 715 water customers over the past three years, representing annual growth of less than one percent. Water system growth has slowed in recent years, in large part due to the slowdown of new housing construction.

Fiscal year 2016 water sales volumes were slightly higher than the prior fiscal year, reflecting higher water sales for commercial and industrial customers. Sales volumes have remained relatively consistent by customer class over the last three years.

# Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2016 and 2015

# Fiscal Year 2015 Compared to Fiscal Year 2014

Operating revenues increased \$4.8 million or 12.2 percent, reflecting additional revenue from the January and July 2014 water rate increases. Operating expenses rose \$1.3 million, interest expense increased \$0.2 million, and capital contributions from developers increased \$0.1 million.



Residential customers represented 87 percent of water customers and accounted for 40 percent of water sales volumes for the year. Commercial and industrial customers accounted for the largest portion (56 percent) of total sales volumes during the year.

KUB's ten largest water customers accounted for 11.1 percent of KUB's billed water volumes. Those ten customers represent five industrial and five commercial customers, including three governmental customers.

Residential water sales volumes were 0.8 percent higher than the prior fiscal year. Residential sales were higher throughout the majority of the year, due to lower precipitation levels during the fiscal year.

Commercial sales volumes increased 1.9 percent compared to the prior year. Industrial sales volumes decreased 1.3 percent compared to the prior year.

KUB has added 568 water customers over the past three years, representing annual growth of less than one percent. Water system growth has slowed in recent years, in large part due to the slowdown of new housing construction.

Fiscal year 2015 water sales volumes were higher than the prior fiscal year, reflecting higher water sales for residential and commercial customers. Sales volumes have remained relatively consistent by customer class over the last three years.

# **Operating Expenses**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Operating expenses increased \$2 million or 5.9 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 \$0.4 million or 10.5 percent, primarily reflecting higher labor related expenses.
- Distribution expenses were \$0.4 million or 3.1 percent lower than the prior fiscal year, due to a
  decline in outside contractor costs.
- Customer service expenses were consistent with the prior fiscal year.
- Administrative and general expenses increased \$0.6 million due to higher pension expenses.

# FY 2016 Water O&M Expense = \$23.3 Million Other **Street Cuts** \$1.5 Million \$1.3 Million 6% 6% Materials & Chemicals \$1.9 Million 8% **Labor Related** Contractors & \$12.1 Million Consultants **52**% \$3.3 Million\_ 14% Utilities \$3.2 Million 14%

- Depreciation expense was up \$1.3 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 Grid Modernization project. In addition, \$4.9 million of assets were retired during fiscal year 2016.
- Taxes and tax equivalents increased \$0.1 million from prior fiscal year due to increased plant in service levels.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

fiscal year 2015.

Operating expenses increased \$1.3 million or 3.8 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 \$0.4 million or 12.9 percent, primarily reflecting higher outside consultant expenses associated with a coagulation optimization study for the water treatment plant.
- Distribution expenses were \$0.6 million or 4.3 percent lower than the prior fiscal year, due to a
  decline in outside contractor costs and street cut expenses.
- Customer service expenses increased \$0.1 million or 9 percent.
- Administrative and general expenses decreased \$0.1 million or 3.6 percent.

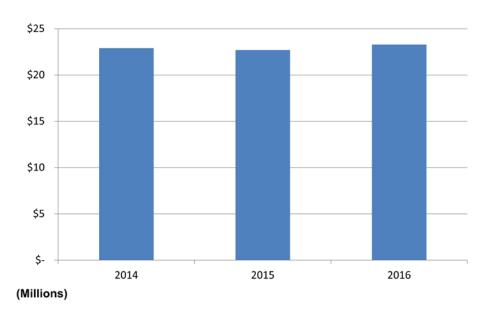
# FY 2015 Water O&M Expense = \$22.7 Million Other Street Cuts \$1.5 Million \$1.3 Million 7% 6% Materials & Chemicals \$1.6 Million 7% **Labor Related** Contractors & \$11.2 Million Consultants\_ 49% \$4 Million 17% **Utilities** \$3.1 Million 14%

# Depreciation expense was up \$0.9 million reflecting a full year of depreciation on \$23.9 million of water system assets added the previous fiscal year and a partial year of depreciation on \$14.2

million of assets added in fiscal year 2015. In addition, \$2.1 million of assets were retired during

Taxes and tax equivalents increased \$0.6 million from prior fiscal year due to an increase in tax equivalent payments to the City of Knoxville. The City of Knoxville's property tax rate increased this year and higher plant in service levels contributed to the growth in tax equivalent payments.

# **Water Division Operation & Maintenance Expense**



# Other Income and Expense

# Fiscal Year 2016 Compared to Fiscal Year 2015

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

Interest expense increased \$0.2 million, reflecting additional interest expense from revenue bonds sold in fiscal year 2015.

Other income (net) decreased \$0.2 million compared to the prior fiscal year.

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

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Interest income was consistent with the prior fiscal year.

Interest expense increased \$0.2 million, reflecting interest expense from the \$28 million in revenue bonds sold in fiscal year 2015.

Other income (net) was increased \$0.1 million compared to the prior fiscal year.

Capital contributions by developers were \$0.1 million higher than fiscal year 2014.

# **Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2016 and 2015**

# **Capital Assets**

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

(in thousands of dollars)

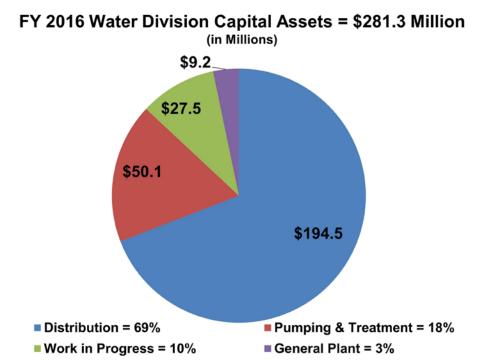
	2016	2015	2014
Production Plant	\$ 58	\$ 62	\$ 76
Pumping & Treatment Plant	50,067	39,411	41,201
Distribution Plant			
Distribution Mains	\$ 141,200	126,124	117,714
Transmission Mains	22,295	19,182	19,506
Services & Meters	19,349	18,541	18,561
Other Accounts	 11,620	 11,057	10,891
Total Distribution Plant	194,464	\$ 174,904	\$ 166,672
Total General Plant	\$ 9,172	 8,133	8,240
Total Water Plant	253,761	\$ 222,510	\$ 216,189
Work In Progress	 27,497	 35,629	23,517
Total Net Plant	\$ 281,258	\$ 258,139	\$ 239,706

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# Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2016 and 2015

#### Fiscal Year 2016 Compared to Fiscal Year 2015

As of June 30, 2016, the Division had \$281.3 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 \$23.2 million or 9 percent over the end of the last fiscal year.



Major capital asset expenditures during the year were as follows:

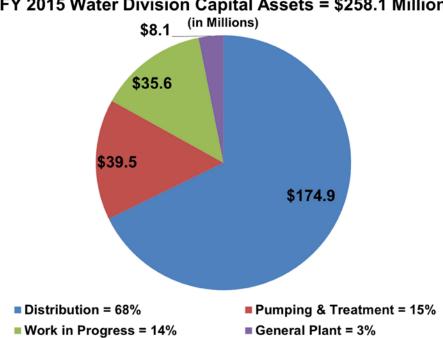
- \$13.5 million for galvanized and cast iron water main replacement
- \$7.5 million for major plant and system improvements
- \$2.8 million for replacement and relocation of water system assets to accommodate TDOT highway improvement projects
- \$1.1 million for upgrades to various information systems

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# **Knoxville Utilities Board Water Division Management's Discussion and Analysis** June 30, 2016 and 2015

# Fiscal Year 2015 Compared to Fiscal Year 2014

As of June 30, 2015, the Division had \$258.1 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 \$18.4 million or 7.7 percent over the end of the last fiscal year.



FY 2015 Water Division Capital Assets = \$258.1 Million

Major capital asset expenditures during the year were as follows:

- \$12.5 million for galvanized and cast iron water main replacement
- \$7.8 million for major plant and system improvements
- \$1.1 million for information system upgrades

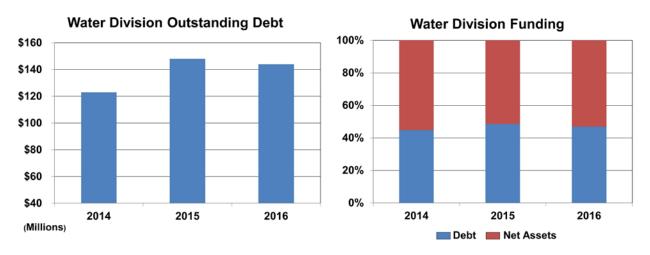
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#### **Debt Administration**

As of June 30, 2016 the Water Division had \$144 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 46.9 percent in 2016, 48.6 percent in 2015, and 44.8 percent at the end of fiscal year 2014. KUB's Debt Management Policy limits the Division's debt ratio to 60 percent or less.

# As of June 30 (in thousands of dollars) 2016 2015 2014 Revenue bonds Total outstanding debt \$ 143,990 \$ 148,400 \$ 123,385 \ 143,990 \$ 148,400 \$ 123,385

**Outstanding Debt** 



The Division will pay \$54.1 million in principal payments over the next ten years, representing 37.6 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 2016 Compared to Fiscal Year 2015

As of June 30, 2016, the Division had \$144 million in outstanding debt (including the current portion of revenue bonds), compared to \$148.4 million last year, a decrease of \$4.4 million or 3 percent. The decrease is attributable to the scheduled repayment of bond debt. The Division's weighted average cost of debt as of June 30, 2016 was 3.82 percent.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2016, the Division's revenue bonds were rated AAA by Standard & Poor's and Aa2 by Moody's Investors Service. The Standard and Poor's water rating represented the highest credit rating available from Standard and Poor's.

# Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2016 and 2015

#### Fiscal Year 2015 Compared to Fiscal Year 2014

As of June 30, 2015, the Division had \$148.4 million in outstanding debt (including the current portion of revenue bonds), compared to \$123.4 million last year, an increase of \$25 million or 20.3 percent. The Division's weighted average cost of debt as of June 30, 2015 was 3.82 percent.

The increase is attributable to the issuance of revenue bonds during the fiscal year of \$8 million in August 2014 and \$20 million in April 2015. The increase was partially offset by the scheduled repayment of bond debt.

In April 2015, KUB issued \$23 million of revenue refunding bonds. The refunding of certain bonds at lower interest rates will provide debt service savings of \$2.4 million over the life of the bonds.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2015, the Division's revenue bonds were rated AAA by Standard & Poor's and Aa2 by Moody's Investors Service. The Standard and Poor's water rating represented an upgrade for water system bonds and the highest credit rating available from Standard and Poor's. In the rating report on the water system bonds, Standard & Poor's stated "the upgrade is based on the water system's extremely strong financial risk profile, which we view as sustainable over time after reviewing management's long-term financial forecast."

### Impacts on Future Financial Position

KUB anticipates adding 100 additional water system customers during fiscal year 2017.

In June 2014, the KUB Board adopted three years of rate increases for all four Divisions to help fund the ongoing Century II infrastructure programs for each system. The first and second rate increases were effective July 2014 and July 2015. The remaining water rate increase will be effective July 2016. The July 2016 rate increase will result in additional annual water system revenue of \$2 million.

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.

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 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."

In April 2016, KUB management presented the fiscal year 2017 budget to the KUB Board of Commissioners that accommodates the projected level of capital investment for the fiscal year. Over the course of the next ten years, KUB plans to spend approximately \$108 million dollars on Grid Modernization, of which the Division's share is \$24.1 million. In July 2016, the four-year deployment of advanced meters began.

# Knoxville Utilities Board Water Division Management's Discussion and Analysis June 30, 2016 and 2015

GASB Statement No. 82, Pension Issues – An amendment of GASB Statements No. 67, No. 68 and No. 73 is effective for fiscal years beginning after June 15, 2016. GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, and GASB No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, are effective for periods beginning after June 15, 2017. 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 2016.

#### **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, 2016 and 2015. 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, 2016 and 2015

		2016		2015
Assets and Deferred Outflows of Resources				
Current assets:  Cash and cash equivalents	\$	9,392,817	\$	21,304,494
Short-term contingency fund investments	Φ	4,293,789	φ	411,198
Other current assets		199,139		198,678
Accrued interest receivable		6,896		5,985
Accounts receivable, less allowance of uncollectible accounts		0,000		0,000
of \$58,504 in 2016 and \$49,412 in 2015		5,360,089		4,987,019
Inventories		1,221,125		1,037,326
Prepaid expenses		50,480		39,980
Total current assets		20,524,335	•	27,984,680
		, ,	,	, ,
Restricted assets:				
Water bond fund		3,354,126		2,969,210
Other funds		2,784		5,707
Unused bond proceeds			,	9,928,179
Total restricted assets		3,356,910	,	12,903,096
Water plant in service		361,343,360		325,586,934
Less accumulated depreciation		(107,582,378)	,	(103,077,327)
D. C. C.		253,760,982		222,509,607
Retirement in progress		16,582		94,481
Construction in progress		27,480,060	,	35,534,671
Net plant in service		281,257,624	,	258,138,759
Other assets:				
Net pension asset		_		782,812
Long-term contingency fund investments		8,384,342		11,751,074
Other		1,623,210		1,661,676
Total other assets		10,007,552	•	14,195,562
Total assets		315,146,421	•	313,222,097
			•	
Deferred outflows of resources:				
Pension outflow		1,346,448		410,436
Unamortized bond refunding costs		1,926,554	,	2,048,783
Total deferred outflows of resources	_	3,273,002		2,459,219
Total assets and deferred outflows of resources	\$	318,419,423	\$	315,681,316

# **Knoxville Utilities Board Water Division Statements of Net Position June 30, 2016 and 2015**

		2016		2015
Liabilities, Deferred Inflows, and Net Position				
Current liabilities:				
Current portion of revenue bonds	\$	4,560,000	\$	4,410,000
Sales tax collections payable		284,220		265,897
Accounts payable		2,739,011		1,832,317
Accrued expenses		579,507		486,462
Customer deposits plus accrued interest		804,794		767,050
Accrued interest on revenue bonds		1,834,026		1,599,555
Total current liabilities	-	10,801,558		9,361,281
Other liabilities:				
Accrued compensated absences		1,601,156		1,524,489
Net pension liability		655,221		-
Other		39,036		110,299
Total other liabilities	-	2,295,413	•	1,634,788
	•	, , , , , , , , , , , , , , , , , , ,	•	· · · · · ·
Long-term debt:				
Water revenue bonds		139,430,000		143,990,000
Unamortized premiums/discounts	_	2,702,182		2,866,890
Total long-term debt	_	142,132,182		146,856,890
Total liabilities	-	155,229,153	-	157,852,959
Deferred inflows of resources:				
Pension inflow		196,595		829,180
Total deferred inflows of resources	-	196,595	•	829,180
Total liabilities and deferred inflows of resources	-	155,425,748	•	158,682,139
Not recition	_			
Net position		120 000 205		110 E70 10E
Net investment in capital assets		138,069,365		110,579,425
Restricted for:		4 500 400		4 200 055
Debt service		1,520,100		1,369,655
Other		2,784		5,707
Unrestricted	-	23,401,426		45,044,390
Total net position	œ -	162,993,675	\$	156,999,177
Total liabilities, deferred inflows, and net position	Φ =	318,419,423	Φ.	315,681,316

# Knoxville Utilities Board Water Division Statements of Revenues, Expenses and Changes in Net Position Years Ended June 30, 2016 and 2015

		2016	2015
Operating revenues	\$	47,453,401	\$ 44,173,190
Operating expenses		_	
Treatment		4,186,197	3,789,101
Distribution		12,644,428	13,045,508
Customer service		1,666,099	1,653,476
Administrative and general		4,838,122	4,206,064
Provision for depreciation		9,055,221	7,794,763
Taxes and tax equivalents		3,717,163	3,621,768
Total operating expenses		36,107,230	34,110,680
Operating income	_	11,346,171	10,062,510
Non-operating revenues (expenses)			
Contributions in aid of construction		895,530	475,386
Interest and dividend income		194,146	134,691
Interest expense		(5,611,878)	(5,421,300)
Amortization of debt costs		(38,926)	1,262
Write-down of plant for costs recovered through contributions		(895,530)	(475,386)
Other	_	(196,211)	(23,992)
Total non-operating revenues (expenses)	_	(5,652,869)	(5,309,339)
Change in net position before capital contributions		5,693,302	4,753,171
Capital contributions	_	301,196	232,696
Change in net position		5,994,498	4,985,867
Net position, beginning of year, as previously reported		156,999,177	152,112,627
Change in method of accounting for pension	_		(99,317)
Net position, beginning of year, as restated	_	156,999,177	152,013,310
Net position, end of year	\$_	162,993,675	\$ 156,999,177

# Knoxville Utilities Board Water Division Statements of Cash Flows Years Ended June 30, 2016 and 2015

		2016		2015
Cash flows from operating activities:	•	40 570 700	Φ.	40.050.007
Cash receipts from customers	\$	46,572,780	\$	43,258,927
Cash receipts from other operations		1,132,220		585,142
Cash payments to suppliers of goods or services		(13,130,199)		(14,012,339)
Cash payments to employees for services		(10,805,634)		(9,284,435)
Payment in lieu of taxes  Net cash provided by operating activities	-	(2,976,406)	_	(2,943,719) 17,603,576
Net cash provided by operating activities	•	20,792,701	_	17,003,370
Cash flows from capital and related financing activities:				
Net proceeds from bond issuance		=		27,817,078
Principal paid on revenue bonds and notes payable		(4,410,000)		(3,765,000)
Decrease (increase) in unused bond proceeds		9,928,179		(9,928,179)
Interest paid on revenue bonds and notes payable		(5,377,407)		(5,212,045)
Acquisition and construction of water plant		(32,992,061)		(26,693,360)
Changes in water bond fund, restricted		(384,915)		(86,174)
Proceeds received on disposal of plant		9,435		=
Cash received from developers and individuals for capital purposes		895,530		475,386
Net cash used in capital and related financing activities		(32,331,239)	_	(17,392,294)
Cash flows from investing activities:				
Purchase of investment securities		(882,048)		(2,243,833)
Maturities of investment securities		410,830		8,053,080
Interest received		193,235		142,666
Other property and investments		(95,216)		(37,162)
Net cash provided by (used in) investing activities	•	(373,199)	_	5,914,751
Not oddin provided by (doed in) investing delivities	•	(070,100)	_	0,014,701
Net increase (decrease) in cash and cash equivalents		(11,911,677)		6,126,033
Cash and cash equivalents, beginning of year		21,304,494	_	15,178,461
Cash and cash equivalents, end of year	\$	9,392,817	\$	21,304,494
Reconciliation of operating income to net cash provided by operating activities				
Operating income	\$	11,346,171	\$	10,062,510
Adjustments to reconcile operating income to net cash	•	,,	Ť	-,,
provided by operating activities:				
Depreciation expense		9,331,667		8,008,940
Changes in operating assets and liabilities:		-,,		-,,-
Accounts receivable		(373,069)		(421,148)
Inventories		(183,799)		(45,461)
Prepaid expenses		(10,500)		5,317
Other assets		(40,478)		(455,412)
Sales tax collections payable		18,323		28,506
Accounts payable and accrued expenses		737,964		308,054
Customer deposits plus accrued interest		37,744		34,791
Other liabilities		(71,262)		77,479
Net cash provided by operating activities	\$	20,792,761	\$	17,603,576
Nancach capital activities:	-		_	
Noncash capital activities:	φ	204 400	¢	000 600
Acquisition of plant assets through developer contributions	\$	301,196	\$	232,696

# 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, 2016 and 2015, 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 will 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 February 2015, the Governmental Accounting Standards Board (GASB) issued Statement No. 72 (Statement No. 72), *Fair Value Measurement and Application*. Statement No. 72 is intended to provide guidance for determining a fair value measurement for financial reporting purposes and for applying fair value to certain investments and disclosures related to all fair value measurements.

In June 2015, the GASB issued GASB Statement No. 73 (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 Provision of GASB Statements 67 and 68. The requirements of this Statement will improve financial reporting by establishing a single framework for the presentation of information about pensions and enhance comparability.

In June 2015, the GASB issued GASB Statement No. 76 (Statement No. 76), *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*. The objective of this Statement is to simplify the hierarchy of generally accepted accounting principles (GAAP) used to prepare financial statements of state and local governmental entities. This Statement supersedes Statement No. 55, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*, and amends Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, paragraphs 64, 74, and 82.

In December 2015, the GASB issued GASB Statement No. 79 (Statement No. 79), *Certain External Investment Pools and Pool Participants*. This statement establishes criteria for an external investment pool to qualify for making the election to measure all of its investments at amortized cost for financial reporting purposes.

Statements No. 72, 73, 76, and 79 are effective for fiscal years beginning after June 15, 2015.

#### **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 \$276,446 in fiscal year 2016 and \$214,178 in fiscal year 2015. 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 \$140,244 in fiscal year 2016 and \$169,110 in fiscal year 2015.

#### 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, 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 Pension

In June 2012, the Governmental Accounting Standards Board (GASB) issued Statement No. 68, Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27, which revises existing standards of financial reporting for pensions. In addition, during November 2013, GASB issued Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date, which requires deferred outflow of resources to be recognized for any contributions made subsequent to the measurement date of the beginning net pension liability. These standards were adopted by KUB in 2015 and resulted in a restatement of 2015 beginning net position of \$763,975 (Division's share \$99,317).

#### **Pension Plan**

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, 2016 and 2015 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2016 and 2015 are based on a December 31, 2015 and 2014 measurement date, respectively.

#### 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 previously reported as assets 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 previously reported as liabilities 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 differences between expected and actual experience in accordance with Statement No. 68.

#### **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 27, 2016, the date these financial statements were issued, for items that should potentially be recognized or disclosed. KUB sold \$25 million in water system revenue bonds in July 2016 for the purpose of funding water system capital improvements in fiscal year 2017. 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 with an average interest rate of 2.5 percent to advance refund \$19.9 million of outstanding bonds with an average interest rate of 4.18 percent. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.07 percent. The net proceeds of \$22 million (after payment of \$0.3 million in underwriting fees and other issuance costs plus premium of \$1 million and an additional issuer equity contribution of \$0.4 million) were used to purchase U.S. government securities. Those securities were deposited in an irrevocable trust with an escrow agent to provide for all future debt service payments on the bonds. As a result, the bonds will be considered defeased and the liability for those bonds will be removed from the financial statements. This refunding decreases total debt service payments over the next 17 years by \$2.5 million resulting in an economic gain (difference between the present values of the debt service payments on the old and new debt) of \$2.2 million.

#### **Recently Issued Accounting Pronouncements**

In June 2015, the GASB issued two related Statements that affect accounting and financial reporting by state and local governments for postemployment benefits other than pensions (OPEB). GASB Statement No. 74 (Statement No. 74), *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, addresses reporting by OPEB plans that administer benefits on behalf of governments. GASB Statement No. 75 (Statement No. 75), *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, addresses reporting by governments that provide OPEB to their employees. Statement No. 74 is effective for fiscal years beginning after June 15, 2016, and Statement No. 75 is effective for fiscal years beginning after June 15, 2017.

In March 2016, the GASB issued GASB Statement No. 82 (Statement No. 82), *Pension Issues – An amendment of GASB Statements No. 67, No. 68 and No. 73.* The objective of this Statement is to address certain issues that have been raised with respect to the presentation of payroll-related measures in required supplementary information, the selection of assumptions and treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes

and the classification of payments made by employers to satisfy employee contribution obligations. Statement No. 82 is effective for fiscal years beginning after June 15, 2016.

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. KUB's Agency Bond investments are rated Aaa by Moody's Investors Service.

Custodial Credit Risk. KUB's investment policy limits exposure to custodial credit risk by restricting 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:

	2016		2015
\$	9,392,817	\$	21,304,494
	4,293,789		411,198
	8,350,127		11,726,424
	-		9,927,990
	3,354,126		2,969,210
	2,784		5,707
\$ _	25,393,643	\$	46,345,023
	<u> </u>	\$ 9,392,817 4,293,789 8,350,127 - 3,354,126 2,784	\$ 9,392,817 \$ 4,293,789 8,350,127 - 3,354,126 2,784

The above amounts do not include accrued interest of \$34,215 in fiscal year 2016 and \$24,839 in fiscal year 2015. 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, 2016:

	Deposit and	l Inv	estment Matu	rities	s (in Years)
	Fair		Less		
	Value		Than 1		1-5
Supersweep NOW and Other Deposits	\$ 10,647,281	\$	10,647,281	\$	-
State Treasurer's Investment Pool	1,297,013		1,297,013		-
Agency Bonds	14,914,916		4,293,789		10,621,127
Certificates of deposits	2,305,263	_	2,057,013		248,250
	\$ 29,164,473	\$	18,295,096	\$	10,869,377

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, 2016:

- U.S. Agency bonds of \$10,621,127, which have a maturity at purchase of greater than one year, are valued using quoted market prices (Level 1 inputs)
- Certificates of deposits of \$248,250, which have a maturity at purchase of greater than one year, are valued at interest rates and yield curves observable at commonly quoted intervals (Level 2 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:

	2016	2015
Wholesale and retail customers		
Billed services	\$ 3,386,932	\$ 3,275,895
Unbilled services	1,846,174	1,596,039
Other	185,487	164,497
Allowance for uncollectible accounts	(58,504)	(49,412)
	\$ 5,360,089	\$ 4,987,019

# 5. Accounts Payable and Accruals

Accounts payable and accruals were composed of the following:

	2016	2015
Trade accounts	\$ 2,739,011	\$ 1,832,317
Salaries and wages	350,902	265,669
Self-insurance liabilities	 228,605	 220,793
	\$ 3,318,518	\$ 2,318,779

# 6. Long-Term Obligations

Long-term debt consists of the following:

		Balance June 30, 2015	Additions	Payments	Defeased	Balance June 30, 2016		Amounts Due Within One Year
S-2005 - 3.5 - 5.0%	\$	6,735,000	\$ -	\$ 440,000	\$ -	\$ 6,295,000	\$	465,000
T-2007 - 4.0 - 5.5%		1,450,000	-	700,000	-	750,000		750,000
U-2009 - 3.0 - 4.5%		23,450,000	-	825,000	-	22,625,000		875,000
W-2011 - 2.0 - 4.0%		23,350,000	-	550,000	-	22,800,000		550,000
X-2012 - 3.0 - 5.0%		9,150,000	-	485,000	-	8,665,000		515,000
Y-2013 - 3.0 - 4.0%		9,235,000	-	265,000	-	8,970,000		280,000
Z-2013 - 2.0 - 5.0%		24,150,000	-	475,000	-	23,675,000		500,000
AA-2014 - 2.0 - 4.0%		7,875,000	-	150,000	-	7,725,000		150,000
BB-2015 - 2.0 - 5.0%		23,005,000	-	170,000	-	22,835,000		100,000
CC-2015 - 2.0 - 4.0%	_	20,000,000	-	350,000	 -	 19,650,000		375,000
Total bonds	\$_	148,400,000	\$ -	\$ 4,410,000	\$ -	\$ 143,990,000	\$	4,560,000
Unamortized Premium		2,866,890	-	164,708	=	2,702,182	_	-
Total long term debt	\$	151,266,890	\$ -	\$ 4,574,708	\$ -	\$ 146,692,182	\$	4,560,000

	Balance June 30, 2014		Additions		Payments	Defeased		Balance June 30, 2015		Amounts Due Within One Year
R-2005 - 3.5 - 5.0%	\$ 255,000	\$	-	\$	255,000	\$ -	\$	-	\$	-
S-2005 - 3.5 - 5.0%	7,160,000		-		425,000	-		6,735,000		440,000
T-2007 - 4.0 - 5.5%	24,350,000		-		675,000	22,225,000		1,450,000		700,000
U-2009 - 3.0 - 4.5%	24,250,000		-		800,000	-		23,450,000		825,000
W-2011 - 2.0 - 4.0%	23,900,000		-		550,000	-		23,350,000		550,000
X-2012 - 3.0 - 5.0%	9,610,000		-		460,000	-		9,150,000		485,000
Y-2013 - 3.0 - 4.0%	9,260,000		-		25,000	-		9,235,000		265,000
Z-2013 - 2.0 - 5.0%	24,600,000		-		450,000	-		24,150,000		475,000
AA-2014 - 2.0 - 4.0%	=		8,000,000		125,000	-		7,875,000		150,000
BB-2015 - 2.0 - 5.0%	-		23,005,000		-	-		23,005,000		170,000
CC-2015 - 2.0 - 4.0%	=	_	20,000,000	_	-	 -		20,000,000		350,000
Total bonds	\$ 123,385,000	\$	51,005,000	\$	3,765,000	\$ 22,225,000	\$	148,400,000	\$	4,410,000
<b>Unamortized Premium</b>	1,518,734	-	1,493,612		102,471	 42,985	_	2,866,890	_	-
Total long term debt	\$ 124,903,734	\$	52,498,612	\$	3,867,471	\$ 22,267,985	\$	151,266,890	\$	4,410,000

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

Fiscal		To	Grand						
Year		Principal		Interest	Interest				
2017	\$	4,560,000	\$	5,502,077	\$	10,062,077			
2018		4,710,000		5,308,927		10,018,927			
2019		4,870,000		5,127,527		9,997,527			
2020		5,100,000		4,923,477		10,023,477			
2021		5,280,000		4,746,427		10,026,427			
2022 - 2026		29,580,000		20,683,800		50,263,800			
2027 - 2031		34,690,000		14,947,082		49,637,082			
2032 - 2036		26,225,000		8,892,033		35,117,033			
2037 - 2041		19,725,000		4,382,187		24,107,187			
2042 - 2045	_	9,250,000	_	901,469		10,151,469			
Total	\$	143,990,000	\$ _	75,415,006	\$	219,405,006			

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, 2016, these bond covenants had been satisfied.

During fiscal year 2006, KUB's Water Division issued Series S 2005 bonds to retire certain existing debt and fund water system capital improvements. Concurrent with the issuance of these bonds, KUB transferred funds to an irrevocable trust to pay a portion of the Series P 2001 bonds, as such amounts mature.

During fiscal year 2008, KUB's Water Division issued Series T 2007 bonds to fund water 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.

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, \$22.2 million at June 30, 2016, and the trust account assets are not included in the financial statements.

Other liabilities consist of the following:

Balance June 30, 2015		Increase		Decrease		Balance June 30, 2016
\$ 1,524,489	\$	2,496,404	\$	(2,419,737)	\$	1,601,156
 110,299	_	117,737		(189,000)	_	39,036
\$ 1,634,788	\$	2,614,141	\$	(2,608,737)	\$	1,640,192
· _	June 30, 2015 \$ 1,524,489 110,299	June 30, 2015 \$ 1,524,489 \$ 110,299	June 30, 2015 Increase \$ 1,524,489 \$ 2,496,404 110,299 117,737	June 30, 2015 Increase \$ 1,524,489 \$ 2,496,404 \$ 110,299 117,737	June 30, 2015 Increase Decrease \$ 1,524,489 \$ 2,496,404 \$ (2,419,737) 110,299 117,737 (189,000)	June 30, 2015 Increase Decrease \$ 1,524,489 \$ 2,496,404 \$ (2,419,737) \$ 110,299 117,737 (189,000)

#### 7. Lease Commitments

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

2017	\$	59,805
2018		57,857
2019		33,869
2020	_	1,065
Total operating minimum lease payments	\$	152,596

# 8. Capital Assets

Capital asset activity was as follows:

		Balance June 30, 2015		Increase		Decrease		Balance June 30, 2016
Production Plant Pumping & Treatment Plant	\$	727,863 65,525,607	\$	- 12,961,992	\$	- (280,318)	\$	727,863 78,207,281
Distribution Plant Distribution Mains Transmission Mains Services & Meters Other Accounts Total Distribution Plant  Total General Plant Total Water Plant Less Accumulated Depreciation Net Plant Assets	\$ \$ \$	156,114,567 27,338,065 29,722,371 22,220,382 235,395,385 23,938,079 325,586,934 (103,077,327) 222,509,607	\$ \$	17,443,111 3,580,781 2,759,765 1,321,165 25,104,822 2,603,382 40,670,196 (9,373,580) 31,296,616	\$ \$	(798,145) (471,020) (2,537,255) (370,155) (4,176,575) (456,877) (4,913,770) 4,868,529 (45,241)	\$ \$	172,759,533 30,447,826 29,944,881 23,171,392 256,323,632 26,084,584 361,343,360 (107,582,378) 253,760,982
Work In Progress Total Net Plant	\$	35,629,152 258,138,759	\$	32,415,132 63,711,748	\$	(40,547,642) (40,592,883)	\$	27,496,642 281,257,624
	,	Balance June 30, 2014		Increase		Decrease		Balance June 30, 2015
Production Plant Pumping & Treatment Plant	\$		\$	Increase - 229,177	\$		\$	
		June <b>30, 2014</b> 727,863	\$	-	\$	-	\$	June 30, 2015 727,863
Pumping & Treatment Plant  Distribution Plant Distribution Mains Transmission Mains Services & Meters Other		727,863 65,538,290 145,877,358 27,261,415 29,841,733 21,679,780		229,177 10,657,161 84,477 882,602 690,660		(241,860) (419,952) (7,827) (1,001,964) (150,058)		727,863 65,525,607 156,114,567 27,338,065 29,722,371 22,220,382
Pumping & Treatment Plant  Distribution Plant   Distribution Mains   Transmission Mains   Services & Meters   Other   Total Distribution Plant  Total General Plant	\$	727,863 65,538,290 145,877,358 27,261,415 29,841,733 21,679,780 224,660,286 22,552,206	\$	229,177 10,657,161 84,477 882,602 690,660 12,314,900 1,612,164	\$	(241,860) (419,952) (7,827) (1,001,964) (150,058) (1,579,801) (226,291)	\$	727,863 65,525,607 156,114,567 27,338,065 29,722,371 22,220,382 235,395,385 23,938,079

# 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, 2016 and 2015, the amount of these liabilities was \$228,605 and \$220,793, respectively, resulting from the following changes:

	2016	2015
Balance, beginning of year	\$ 220,793	\$ 204,465
Current year claims and changes in estimates	1,825,029	1,840,260
Claims payments	(1,817,217)	(1,823,932)
Balance, end of year	\$ 228,605	\$ 220,793

#### 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, 2014 to include all prior approved amendments. The Plan is a single-employer contributory, defined benefit pension plan established by Knoxville Utilities Board ("KUB") 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 KUB 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:

	2015	2014
Inactive plan members:		
Terminated vested participants	39	40
Retirees and beneficiaries	628	627
Active plan members	<u>692</u>	<u>725</u>
Total	<u>1,359</u>	<u>1,392</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 will not be 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 address the loss 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. Plan B participants may not make contributions to the Plan. 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 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 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, 2015:

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 \$5,669,380 and \$6,314,399 for 2014 and 2013, respectively, were made during KUB's fiscal years ending June 30, 2016 and 2015, respectively. Of these amounts, \$737,019 and \$820,872 are attributable to the Water Division. The contribution was determined as part of the January 1, 2014 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. The actuarial valuation for the Plan year ending December 31, 2015 resulted in an actuarially determined contribution of \$4,816,913 for the fiscal year ending June 30, 2017, based on the Plan's current funding policy. The Water Division's portion of this contribution is \$626,199.

Subsequent to June 30, 2016, the actuarial valuation for the Plan year ending December 31, 2016 was completed. The actuarial valuation resulted in an actuarially determined contribution of \$3,756,283 for the fiscal year ending June 30, 2018, based on the Plan's current funding policy. The Water Division's portion of this contribution is \$488,317. For the Plan year ending December 31, 2016, the Plan's actuarial funded ratio was 103.04 percent.

The actuarial valuations for the Plan years ending December 31, 2015 and 2016, which determine the actuarially determined contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

#### Implementation of GASB 68

In fiscal year 2015, KUB adopted 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, 2016 and 2015 will be based on the December 31, 2015 and 2014 measurement date, respectively. The Division's share of the net pension liability at June 30, 2016 is \$655,221 and the net pension asset at June 30, 2015 is \$782,812.

# **Knoxville Utilities Board Water Division**

### **Notes to Financial Statements**

June 30, 2016 and 2015

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

	2015	2014
Total pension liability	\$ 204,502,350	\$ 202,773,764
Plan fiduciary net position	199,462,190	(208,795,394)
Plan's net pension liability (asset)	\$ 5,040,160	\$ (6,021,630)

Plan fiduciary net position as a percentage of the total pension liability

97.54% 102.97%

Changes in Net Pension Liability are as follows:

			Increase (Decrease)	
	Т	otal Pension Liability (a)	Plan Fiduciary Net Position (b)	let Pension ability (a) - (b)
		( )	( )	
Balances at December 31, 2014	\$	202,773,764	\$ 208,795,394	\$ (6,021,630)
Changes for the year:				
Service cost		4,157,062	-	4,157,062
Interest		14,812,784	-	14,812,784
Differences between Expected				
and Actual Experience		(1,890,334)	-	(1,890,334)
Changes of Assumptions		-	-	-
Contributions - employer		-	5,991,887	(5,991,887)
Contributions - rollovers		-	482,060	(482,060)
Contributions - member		-	5,486	(5,486)
Net investment income		-	(64,551)	64,551
Benefit payments		(15,350,926)	(15,350,926)	-
Administrative expense		-	(397,160)	397,160
Net changes		1,728,586	(9,333,204)	11,061,790
Balances at December 31, 2015	\$	204,502,350	\$ 199,462,190	\$ 5,040,160

#### Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of December 31, 2015 and 2014, 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 28 years remaining as of

January 1, 2013 and 27 years remaining as of January 1, 2014

Discount rate: 8% at January 1, 2013 and 7.5% at January 1, 2014

Salary increases: From 2.58% to 7.92% for January 1, 2013 and from 2.80% to

5.15% for January 1, 2014, based on years of service

Mortality: Sex distinct RP-2000 Combined Mortality projected to 2018

using Scale AA for the January 1, 2013 valuation. Sex distinct RP-2000 Combined Mortality projected to 2024 using Scale

AA for the January 1, 2014 valuation

Inflation 2.8 percent

The actuarial assumptions used in the December 31, 2015 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, 2015 and 2014 are summarized in the following table. The real rate of return reported for fixed income is for aggregate fixed income. The Plan has both aggregate and long duration fixed income.

	Long Term Expecte Real Rate of Return				
Asset Class	2015	2014			
Domestic equity	7.2%	6.0%			
Non-U.S. equity	7.4%	7.0%			
Real estate equity	6.5%	5.7%			
Fixed income	3.7%	1.8%			
Cash and deposits	2.6%	0.5%			

#### Discount rate

The discount rate used to measure the total pension liability was 7.5 percent as of January 1, 2015 and 2014. 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, 2015, 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%		Current	1%		
	 Decrease (6.5%)	Discount Rate (7.5%)			Increase (8.5%)	
Plan's net pension liability	\$ 17,128,897	\$	5,040,160	\$	(5,963,331)	

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

For the year ended June 30, 2015, KUB recognized pension expense of \$2,749,905 (Division's share \$357,488).

The impact of experience gains or losses and assumption changes on the Total Pension Liability are recognized in expense over the average expected remaining service life of all active and inactive members. As of the measurement date, this recognition period was 3.72 years. However, there were no experience gains or losses, and there were no assumption changes during the measurement year.

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 \$7,972,887. \$1,594,577 of that gain was recognized in the current year and an identical amount will be recognized in each of the next four years, resulting in a deferred inflow of resources of \$6,378,310 (Division's share \$829,180). The table below summarizes the current balances of deferred outflows and deferred inflows of resources along with the net recognition over the next five years. In addition, KUB recorded a deferred outflow of resources of \$3,157,199 (Division's share \$410,436) at June 30, 2015 for employer contributions made between December 31, 2014 and June 30, 2015.

	 rred Outflows Resources	Deferred Inflows of Resources		
Differences between expected and actual				
experience	\$ -	\$	-	
Changes in assumptions	-		-	
Net difference between projected and actual				
earnings on pension plan investments	-		6,378,310	
Contributions subsequent to measurement date	 3,157,199		-	
Total	\$ 3,157,199	\$	6,378,310	

For the year ended June 30, 2016, KUB recognized pension expense of \$4,665,035 (Division's share \$606,455).

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, 2014, this average was 5.00 years. During the measurement year, there were no assumption or benefit changes. There was an experience gain of \$1,890,334 with \$378,067 of that recognized in the current year and in each of the next four years.

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 \$15,382,915. \$3,076,583 of that loss was recognized in the current year and an identical amount will be recognized in each of the next four years. Unrecognized investment gains from prior periods were \$6,378,310 of which \$1,594,577 was recognized as a reduction in pension expense in the current year.

Experience gains this year created a deferred inflow of resources of \$1,512,267 (Division's share \$196,595). The combination of unrecognized investment losses this year along with unrecognized net investment gains from prior periods results in a deferred outflow of resources as of December 31, 2015 of \$7,522,599 (Division's share \$977,938). The table below 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 \$2,834,692 (Division's share \$368,510) at June 30, 2016 for employer contributions made between December 31, 2015 and June 30, 2016.

	Deferred Outflows of Resources		 erred Inflows Resources
Differences between expected and actual			
experience	\$	-	\$ 1,512,267
Changes in assumptions		-	-
Net difference between projected and actual			
earnings on pension plan investments		7,522,599	-
Contributions subsequent to measurement date		2,834,692	 
Total	\$	10,357,291	\$ 1,512,267

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

Year ended June 30:							
2017 \$	3,938,630						
2018	1,103,939						
2019	1,103,938						
2020	2,698,517						
Thereafter	-						

#### 11. 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

\$1,739,057 (Division's share \$226,077) and \$1,593,350 (Division's share \$207,135), respectively, for the years ended June 30, 2016 and 2015.

#### 12. Other Post-Employment Benefits (OPEB)

The Governmental Accounting Standards Board (GASB) established standards for the measurement, recognition, and reporting of other post-employment benefits (OPEB). OPEB includes post-employment benefits other than pension, which, for KUB, is presently limited to post-employment health care. GASB Statement No. 45 (Statement No. 45) requires the recognition of the accrued OPEB liability for the respective year, plus the disclosure of the total unfunded liability.

KUB currently provides post-employment health care benefits to 585 former employees and 593 covered dependents. The cost of coverage is shared with retirees and beneficiaries. KUB recognizes its share of the cost of post-employment health care benefits as an expense as claims are paid.

KUB amended its Group Health Plan in 1999, eliminating post-employment health care benefits for all employees hired on or after July 1, 1999. As of June 30, 2016, 356 active employees were eligible for individual and dependent coverage at separation. To qualify, the employee must meet the Rule of 80 (age plus years of service) with a minimum of 20 years of service, and be enrolled in medical coverage on their last day.

In May 2006, the State of Tennessee adopted Tennessee Code Annotated, Title 8, Chapter 50, Part 12 authorizing governmental entities to establish Trusts for the purpose of pre-funding their respective OPEB liabilities.

Although Statement No. 45 does not require pre-funding of the liability, KUB has determined that it is in the long-term economic interest of KUB and its ratepayers to establish a Trust to pre-fund KUB's OPEB liability.

Knoxville Utilities Board Other Post-Employment Benefits Trust (the "Trust") is a single-employer Other Post-Employment Benefits Plan established by the Knoxville Utilities Board (KUB) 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 KUB 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.

KUB makes annual contributions to the Trust at an actuarially determined rate. 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.

An actuarial valuation of KUB's Postretirement Benefit Plan was performed for the Trust as of January 1, 2014 for fiscal year June 30, 2015 and January 1, 2015 for fiscal year June 30, 2016.

The following table presents the OPEB cost for the year, the amount contributed to the Trust, and changes in the net OPEB obligation for fiscal year ending June 30:

	2016	2015		
a) Net OPEB Obligation/(Asset) at				
beginning of fiscal year	\$ (174,410)	\$	(177,322)	
b) Annual Required Contribution (ARC)	953,221		3,497,372	
c) Interest on Net OPEB Obligation/(Asset)	(13,081)		(14,186)	
d) Adjustment to ARC	(16,427)		(17,098)	
e) Annual OPEB Cost (b+c-d)	956,567		3,500,284	
f) Employer Contributions	953,221		3,497,372	
g) Net OPEB Obligation/(Asset) at				
end of fiscal year (a+e-f)	\$ (171,064)	\$	(174,410)	

KUB's annual OPEB cost, the percentage of annual OPEB cost contributed to the Trust, and the net OPEB obligation for fiscal year 2016 and the two preceding years were as follows:

#### **Schedule of Employer Contributions**

Actuarial Valuation Date	Employer Fiscal Year	Annual Required Contribution	Fiscal Year Actual Contribution	Percentage Contributed	Net OPEB Obligation
1/1/2012	6/30/2014	3,327,412	4,057,091	121.93%	(177,322)
1/1/2013	6/30/2015	3,497,372	3,497,372	100.00%	(174,410)
1/1/2014	6/30/2016	953,221	953,221	100.00%	(171,064)

Total contributions to the OPEB Trust for the fiscal year ended June 30, 2016 were \$953,221 (Division's share \$123,919). The contribution to the Trust was consistent with the annual required contribution, as determined by the Postretirement Benefit Plan's actuarial valuation as of January 1, 2014, which was \$953,221 (Division's share \$123,919). As of June 30, 2016, the employer's OPEB obligation has been exceeded by \$171,064 (Division's share \$22,238).

The annual required contribution for the fiscal year ending June 30, 2017, as determined by the Plan's actuarial valuation as of January 1, 2015 is \$620,015 (Division's share \$80,602).

The actuarial valuation for the Plan as of January 1, 2016 has been completed. The valuation determined that the Plan's actuarial accrued liability was \$45,118,624 (Division's share \$5,865,421). The actuarial value of the Plan's assets was \$48,510,796 (Division's share \$6,306,403). As a result, the Plan's unfunded actuarial accrued liability was (\$3,392,172) (Division's share (\$440,982)). The Plan's actuarial funded ratio was 108 percent. Due to the future implementation of GASB 75, the contributions made for fiscal year ending June 30, 2018 will be the actuarially determined contribution instead of the annual required contribution and the actuarial cost method used to determine the contributions will change from the projected unit credit cost method to the entry age normal cost method. The actuarially determined contribution for fiscal year ending June 30, 2018 will be zero. See Required Supplementary Information for OPEB Schedule of Funding Progress.

The actuarial valuations dated January 1, 2015 and 2016, which determine the annual required contribution and actuarially determined contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

The required schedule of funding progress immediately following the notes to the financial statements presents multi-year trend information about whether the actuarial value of Trust assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members to that point.

Actuarial calculations reflect a long-term perspective. Consistent with that perspective, actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets.

Identification of actuarial methods and significant assumptions used to determine the annual required contribution for the fiscal year ending June 30, 2016:

I. Actuarial cost methodII. Actuarial value of assets

III. Investment return

Medicare

Projected salary increases Healthcare cost Trend:

Non-Medicare

IV. Amortization method

Remaining amortization period

Projected unit credit cost method Smoothed market value with phase-in method using a smoothing period of 5 years

7.5%, based on the expected portfolio return

N/A

2014 - 2030+, ranging from 4.5% to 7.45% 2014 - 2030+, ranging from 4.5% to 8.75%

Level dollar closed (30-year)

22 years

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.

# 13. 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, 2016 and 2015 are summarized as follows:

	2016	2015
City of Knoxville		
Amounts billed by the Division for utilities and		
related services	\$ 4,005,989	\$ 3,894,557
Payments by the Division in lieu of property tax	2,976,406	2,943,719
Payments by the Division for services provided	607,858	507,095
Other divisions of KUB		
Amounts billed to other divisions for utilities		
and related services provided	397,610	327,109
Interdivisional rental expense	207,433	214,469
Interdivisional rental income	127,304	92,415
Amounts billed to the Division by other divisions		
for utilities services provided	2,811,375	2,964,224

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

	2016			2015	
Accounts receivable	\$	325,488	\$	295,804	

#### 14. 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 Funding Progress June 30, 2016 (Unaudited)

# **Other Post-Employment Benefits (OPEB)**

	Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Actuarial Accrued Liability (UAAL) (b-a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b)-(a)]/(c)
	January 1, 2008	\$ -	\$ 108,329,141	\$ 108,329,141	0%	\$ 31,234,509	346.8%
	January 1, 2009	14,593,487	100,726,738	86,133,251	14%	31,846,091	270.5%
	January 1, 2010	21,275,643	58,475,364	37,199,721	36%	30,069,028	123.7%
	January 1, 2011	40,749,815	64,289,254	23,539,439	63%	28,878,791	81.5%
	January 1, 2012	37,907,357	61,603,466	23,696,109	62%	28,269,123	83.8%
	January 1, 2013	38,571,803	63,341,531	24,769,728	61%	27,566,340	89.9%
	January 1, 2014	43,409,955	46,889,808	3,479,853	93%	26,724,154	13.0%
*	January 1, 2015	47,705,478	47,745,640	40,162	100%	25,816,884	0.2%
*	January 1, 2016	48,510,796	45,118,624	(3,392,172)	108%	25,243,127	(13.4%)

<sup>\*</sup> The actuarial valuations dated January 1, 2015 and 2016, which determine the annual required contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

## **Knoxville Utilities Board Water Division**

Required Supplementary Information – Schedule of Changes in Net Pension Liability and Related Ratios
June 30, 2016

(Unaudited)

	Year ended D			ecember 31		
		2015		2014		
Total pension liability						
Service cost	\$	4,157,062	\$	4,092,808		
Interest		14,812,784		14,698,657		
Differences between expected and actual experience		(1,890,334)		-		
Benefit payments, including refunds of member contributions		(15,350,926)		(15,533,167)		
Net change in total pension liability		1,728,586		3,258,298		
Total pension liability - beginning		202,773,764		199,515,466		
Total pension liability - ending (a)	\$	204,502,350	\$	202,773,764		
Plan fiduaisty not position						
Plan fiduciary net position Contributions - employer	\$	5,991,887	\$	5,908,541		
Contributions - participants	φ	487,546	Φ	475,854		
Net investment income		(95,430)		22,292,369		
Other additions		30,879		29,733		
Benefit payments, including refunds of member contributions		(15,274,926)		(15,405,167)		
Administrative expense		(397,160)		(378,085)		
Death benefits		(76,000)		(128,000)		
Net change in plan fiduciary net position**		(9,333,204)		12,795,245		
Het change in plan nuclary het position		(9,555,204)		12,733,243		
Plan fiduciary net position - beginning**		208,795,394		196,000,149		
Plan fiduciary net position - ending (b)**	\$	199,462,190	\$	208,795,394		
Plan's net pension liability - ending (a) - (b)	\$	5,040,160	\$	(6,021,630)		
Plan fiduciary net position as a percentage of the total	<u>-</u>			_		
pension liability		97.54%		102.97%		
Covered-employee payroll	\$	50,679,585	\$	50,246,074		
Plan's net pension liability as a percentage of						
covered-employee payroll		9.95%		(11.98%)		

#### Notes to Schedule:

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

<sup>\*\*</sup> Excludes amounts related to 401(k) matching contributions.

#### **Knoxville Utilities Board Water Division**

# Required Supplementary Information – Schedule of Employer Pension Contributions June 30, 2016 (Unaudited)

		Year ende	ecember 31	
		2015		2014
Annual required contribution Contribution in relation to the annual	\$ 5	5,991,887	\$	5,908,541
required contribution		5,991,887		5,908,541
Contribution deficiency	\$	-	\$	-
Covered-employee payroll Contributions as a percentage of	\$ 50	0,679,585	\$	50,246,074
covered-employee payroll		11.82%		11.76%

#### Notes to Schedule:

Valuation Dates: January 1, 2013 and January 1, 2014

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: Individual entry age
Asset valuation method: 5-year smoothed market

Amortization method: Level dollar closed period with 28 years remaining as of January 1, 2013

and 27 years remaining as of January 1, 2014.

Discount rate: 8% at January 1, 2013 and 7.5% at January 1, 2014

Salary increases: From 2.58% to 7.92% for January 1, 2013 and from 2.8% to 5.15% for

January 1, 2014, based on years of service

Mortality: Sex distinct RP-2000 Combined Mortality projected to 2018 using Scale AA

for the Janaury 1, 2013 valuation. Sex distinct RP-2000 Combined Mortality

projected to 2024 using Scale AA for the January 1, 2014 valuation.

Inflation: 2.8 percent

<sup>\*</sup> 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 Supplemental Information - Schedule of Insurance in Force June 30, 2016

(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), and OPEB Trust funds. 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 \$400,000 per individual participant.

# Knoxville Utilities Board Water Division Supplemental Information - Schedule of Debt Maturities by Fiscal Year June 30, 2016 (Unaudited)

Schedule 2
Continued on Next Page

	s-	-2005	T-	2007	U-2009		W	W-2011		X-2012		Y-2013	
FY	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	
16-17	465,000	267,521	750,000	41,250	875,000	931,625	550,000	871,750	515,000	345,750	280,000	282,200	
17-18	485,000	244,271			925,000	896,625	550,000	844,250	535,000	320,000	300,000	273,800	
18-19	500,000	224,871			950,000	859,625	550,000	827,750	565,000	293,250	320,000	261,800	
19-20	520,000	204,871			1,000,000	821,625	550,000	805,750	590,000	265,000	340,000	249,000	
20-21	545,000	183,421			1,050,000	781,625	550,000	789,250	625,000	235,500	350,000	235,400	
21-22	570,000	160,940			1,125,000	739,625	550,000	772,750	655,000	204,250	375,000	221,400	
22-23	590,000	137,428			1,175,000	694,625	500,000	756,250	670,000	184,600	400,000	210,150	
23-24	615,000	112,353			1,225,000	647,625	500,000	741,250	690,000	164,500	415,000	198,150	
24-25	640,000	86,215			1,300,000	598,625	500,000	726,250	710,000	143,800	435,000	185,700	
25-26	665,000	58,695			1,350,000	546,625	500,000	710,625	735,000	120,725	450,000	172,650	
26-27	700,000	30,100			1,425,000	492,625	500,000	693,125	765,000	95,000	470,000	159,150	
27-28					1,500,000	435,625	500,000	673,125	790,000	64,400	1,250,000	145,050	
28-29					1,575,000	375,625	500,000	655,625	820,000	32,800	1,300,000	107,550	
29-30					1,650,000	308,688	500,000	635,625			2,285,000	68,550	
30-31					1,750,000	238,563	500,000	617,500					
31-32					1,825,000	164,188	500,000	598,750					
32-33					1,925,000	86,625	500,000	580,000					
33-34							2,000,000	560,000					
34-35							2,000,000	480,000					
35-36							2,000,000	400,000					
36-37							2,000,000	320,000					
37-38							2,000,000	240,000					
38-39							2,000,000	160,000					
39-40							2,000,000	80,000					
40-41													
41-42													
42-43													
43-44													
44-45													
	\$ 6,295,000	\$ 1,710,686	\$ 750,000	\$ 41,250	\$ 22,625,000	9,620,189	\$ 22,800,000 \$	14,539,625	8,665,000	\$ 2,469,575	\$ 8,970,000	2,770,550	

# Knoxville Utilities Board Water Division Supplemental Information - Schedule of Debt Maturities by Fiscal Year June 30, 2016 (Unaudited)

Schedule 2
Continued from Previous Page

	Z-2	013	AA	-2014	BB-	2015	CC-	2015	7	TOTAL	
FY	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Total
16-17	500,000	1,004,625	150,000	261,750	100,000	791,700	375,000	703,906	4,560,000	5,502,077	10,062,077
17-18	500,000	989,625	150,000	257,250	865,000	786,700	400,000	696,406	4,710,000	5,308,927	10,018,927
18-19	525,000	979,625	150,000	252,750	885,000	743,450	425,000	684,406	4,870,000	5,127,527	9,997,527
19-20	550,000	963,875	175,000	246,750	950,000	699,200	425,000	667,406	5,100,000	4,923,477	10,023,477
20-21	575,000	947,375	175,000	243,250	960,000	680,200	450,000	650,406	5,280,000	4,746,427	10,026,427
21-22	600,000	930,125	175,000	238,000	1,000,000	661,000	475,000	632,406	5,525,000	4,560,496	10,085,496
22-23	625,000	912,125	200,000	231,000	1,050,000	611,000	475,000	613,406	5,685,000	4,350,584	10,035,584
23-24	625,000	893,375	200,000	223,000	1,110,000	558,500	500,000	599,156	5,880,000	4,137,909	10,017,909
24-25	650,000	874,625	200,000	215,000	1,170,000	503,000	525,000	587,906	6,130,000	3,921,121	10,051,121
25-26	675,000	852,688	225,000	209,000	1,210,000	467,900	550,000	574,782	6,360,000	3,713,690	10,073,690
26-27	700,000	828,219	225,000	202,250	1,245,000	428,575	550,000	560,344	6,580,000	3,489,388	10,069,388
27-28	750,000	800,219	225,000	195,500	1,260,000	385,000	575,000	543,844	6,850,000	3,242,763	10,092,763
28-29	775,000	770,219	250,000	188,750	1,275,000	340,900	600,000	526,594	7,095,000	2,998,063	10,093,063
29-30	800,000	738,250	250,000	181,250	1,315,000	296,275	625,000	508,594	7,425,000	2,737,232	10,162,232
30-31	825,000	704,250	275,000	173,438	2,740,000	256,825	650,000	489,060	6,740,000	2,479,636	9,219,636
31-32	850,000	669,188	275,000	164,844	2,800,000	174,625	675,000	467,938	6,925,000	2,239,533	9,164,533
32-33	900,000	632,000	300,000	155,906	2,900,000	90,625	700,000	446,000	7,225,000	1,991,156	9,216,156
33-34	925,000	591,500	300,000	146,156			725,000	418,000	3,950,000	1,715,656	5,665,656
34-35	950,000	549,875	325,000	136,032			750,000	389,000	4,025,000	1,554,907	5,579,907
35-36	1,000,000	507,125	325,000	124,656			775,000	359,000	4,100,000	1,390,781	5,490,781
36-37	1,025,000	460,875	350,000	113,282			800,000	330,906	4,175,000	1,225,063	5,400,063
37-38	1,075,000	413,469	350,000	101,031			825,000	301,906	4,250,000	1,056,406	5,306,406
38-39	1,100,000	363,750	375,000	88,781			875,000	272,000	4,350,000	884,531	5,234,531
39-40	1,150,000	308,750	375,000	75,656			900,000	237,000	4,425,000	701,406	5,126,406
40-41	1,200,000	251,250	400,000	62,531			925,000	201,000	2,525,000	514,781	3,039,781
41-42	1,225,000	191,250	425,000	48,031			975,000	164,000	2,625,000	403,281	3,028,281
42-43	1,275,000	130,000	450,000	32,625			1,000,000	125,000	2,725,000	287,625	3,012,625
43-44	1,325,000	66,250	450,000	16,313			1,050,000	85,000	2,825,000	167,563	2,992,563
44-45							1,075,000	43,000	1,075,000	43,000	1,118,000
\$	23,675,000	\$ 18,324,502	\$ 7,725,000	\$ 4,584,782	\$ 22,835,000	\$ 8,475,475	\$ 19,650,000	\$ 12,878,372	\$ 143,990,000	\$ 75,415,006	\$ 219,405,006

# Knoxville Utilities Board Water Division Supplemental Information - Schedule of Current Rates in Force June 30, 2016 (Unaudited)

(Unaudited) Schedul
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Rate Class	Base Charge		Number of Customers
Residential Inside City rate	For water furnished to pre Knoxville:	55,363	
		Commodity Charge	
	First Over	<ul> <li>100 Cubic Feet Per Month at \$0.25 Per 100 Cubic Fe</li> <li>100 Cubic Feet Per Month at \$2.65 Per 100 Cubic Fe</li> </ul>	
	A	dditional Monthly Customer Charge	
Residential	For For For For water furnished to prothe corporate limits of the	5/8" meter \$ 14.00 1" meter 28.10 1 1/2" meter 40.00 2" meter 56.00 emises upon which any water faucet or other outlet is outside	13,194
Outside City rate	the corporate limits of the	Commodity Charge	
	First Over	2 100 Cubic Feet Per Month at \$0.30 Per 100 Cubic Fe 2 100 Cubic Feet Per Month at \$3.20 Per 100 Cubic Fe Additional Monthly Customer Charge	
	For For For	5/8" meter \$ 15.40 1" meter 32.40 1 1/2" meter 46.40 2" meter 65.40	

# Knoxville Utilities Board Water Division Supplemental Information - Schedule of Current Rates in Force June 30, 2016 (Unaudited)

(Unaudited)	Schedule 3
-------------	------------

Rate Class	Base Charge		Number of Customers
Non-Residential Inside City rate/ Industrial Park rate	For water furnished to premises Knoxville or within the boundari Tennessee Department of Ecor	9,712	
		Commodity Charge	
	Next         300           Next         4,600           Next         5,000	100 Cubic Feet Per Month at \$3.45 Per 100 Cubic Feet 100 Cubic Feet Per Month at \$4.25 Per 100 Cubic Feet 100 Cubic Feet 100 Cubic Feet Per Month at \$3.05 Per 100 Cubic Feet 100 Cubic Feet Per Month at \$2.00 Per 100 Cubic Feet 100	
	Additio	nal Monthly Customer Charge	
	For For For For For For For For	5/8" meter       \$ 14.00         1" meter       28.10         1 1/2" meter       40.00         2" meter       56.00         3" meter       127.00         4" meter       210.00         6" meter       460.00         8" meter       809.00         10" meter       1,232.00         12" meter       1,823.00	
Non-Residential Outside City rate	the corporate limits of the City of	upon which any water faucet or other outlet is outside of Knoxville, excluding premises within the boundaries ustrial park by the Tennessee Department of Economic	711
		Commodity Charge	
	Next         8           Next         90           Next         300           Next         4,600           Next         5,000	100 Cubic Feet Per Month at \$1.20 Per 100 Cubic Feet	
		itional Monthly Customer Charge	
	For For For For For For For For	5/8" meter       \$ 15.40         1" meter       32.40         1 1/2" meter       46.40         2" meter       65.40         3" meter       151.00         4" meter       253.00         6" meter       552.00         8" meter       970.00         10" meter       1,477.00         12" meter       2,189.00	

# Knoxville Utilities Board Water Division Supplemental Information - Schedule of Unaccounted for Water June 30, 2016

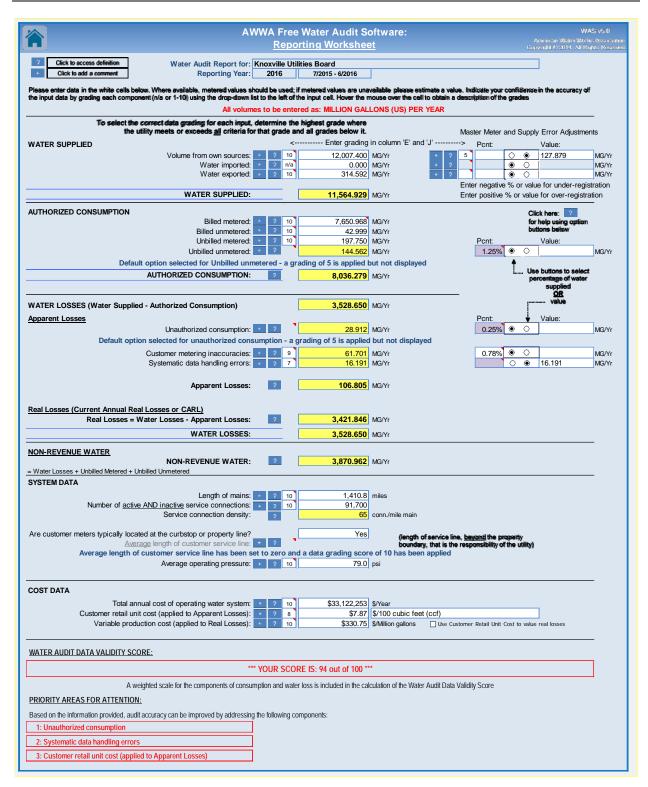
(Unaudited) Schedule 4

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 year 2015, water utilities are required to have a Validity Score greater than 70 and maintain non-revenue water as a percent by cost of operating system of less than 25%. For fiscal year 2016, water utilities are required to have a Validity Score greater than 70 and maintain non-revenue water as a percent by cost of operating system of less than 25%. For fiscal year 2015, KUB reported a Validity Score of 94 and non-revenue water as a percent by cost of operating system of 10.2%. For fiscal year 2016, KUB reported a Validity Score of 94 and non-revenue water as a percent by cost of operating system of 7.2%. See Supplemental Information Schedule 4 for the AWWA Reporting Worksheet.

### **Knoxville Utilities Board Water Division**

# Supplemental Information - Schedule of Unaccounted for Water June 30, 2016

(Unaudited) Schedule 4



# **Knoxville Utilities Board Water Division Supplemental Information - Schedule of Unaccounted for Water June 30, 2016**

(Unaudited) Schedule 4

	AWWA Free Water Audit So	
	System Attributes and Performan	ce Indicators  American Water Works Association. Copyright © 2014, All Rights Reserved.
	Water Audit Report for: Knoxville Utilities Board Reporting Year: 2016 7/2015 - 6/2016	
	*** YOUR WATER AUDIT DATA VALIDITY SCORE	S: 94 out of 100 ***
System Attributes:	Apparent Losses:	106.805 MG/Yr
	+ Real Losses:	3,421.846 MG/Yr
	= Water Losses:	3,528.650 MG/Yr
	Unavoidable Annual Real Losses (UARL):	616.71 MG/Yr
	Annual cost of Apparent Losses:	\$1,123,655
	Annual cost of Real Losses:	\$1,131,775 Valued at Variable Production Cost Return to Reporting Worksheet to change this assumption
Performance Indicators:		return to reporting worksheet to change this assumption
	Non-revenue water as percent by volume of Water Supplied:	33.5%
Financial:	Non-revenue water as percent by volume of Water Supplied:  Non-revenue water as percent by cost of operating system:	7.2% Real Losses valued at Variable Production Cost
٢	Apparent Losses per service connection per day:	3.19 gallons/connection/day
	Real Losses per service connection per day:	102.23 gallons/connection/day
Operational Efficiency:	Real Losses per length of main per day*:	N/A
L	Real Losses per service connection per day per psi pressure:	1.29 gallons/connection/day/psi
	From Above, Real Losses = Current Annual Real Losses (CARL):	3,421.85 million gallons/year
	Infrastructure Leakage Index (ILI) [CARL/UARL]:	5.55
* This performance indicator applies	for systems with a low service connection density of less than 32 service	e connections/mile of pipeline



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

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

#### **Report on the Financial Statements**

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, 2016, 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 27, 2016.

#### **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 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 that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control 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 27, 2016



# **Wastewater Division**

# Financial Statements and Supplemental Information June 30, 2016 and 2015

### **KUB Board of Commissioners**

Nikitia Thompson - Chair

Sara Hedstrom Pinnell - Vice Chair

Dr. Jerry W. Askew

Kathy Hamilton

Celeste Herbert

**Eston Williams** 

John Worden

# Management

#### Mintha Roach

President and
Chief Executive Officer

#### **Bill Elmore**

Executive Vice President and Chief Operating Officer

#### **Mark Walker**

Senior Vice President and Chief Financial Officer

#### **Susan Edwards**

Senior Vice President and Chief Administrative Officer

#### **Eddie Black**

Senior Vice President

## Mike Bolin

Vice President

#### **Julie Childers**

Vice President

#### **Derwin Hagood**

Vice President

#### **Dawn Mosteit**

Vice President

#### **Paul Randolph**

Vice President

#### **Dennis Upton**

Vice President

# **Knoxville Utilities Board Wastewater Division Index**

June 30, 2016 and 2015

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



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#### Report of Independent Auditors

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, 2016 and 2015, 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

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, 2016 and 2015, 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.



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 24 and the required supplementary information on pages 52 through 54 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.

#### Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated October 27, 2016, 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 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 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 27, 2016

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, 2016 and 2015, 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, 2016 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 70,265 wastewater customers. KUB maintains 1,317 miles of services mains, 75 pump stations, and 4 treatment plants to treat 13.9 billion gallons of wastewater on an annual basis. The average daily flow is 38.1 million gallons.

KUB has added approximately 737 wastewater system customers over the past three years representing annual growth of less than one percent.

The typical residential wastewater customer's average monthly wastewater bill was \$53.50 as of June 30, 2016, representing an increase of \$3 compared to June 30, 2015. The increase in the monthly bill reflects a rate increase effective October 2015.

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 2015 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 was awarded a Platinum award for continued outstanding compliance performance over multiple years. Kuwahee and Loves Creek wastewater treatment plants won Gold Awards for having no permit violations in 2015 and the Fourth Creek wastewater treatment plant was awarded Silver for having only one permit violation in 2015.

KUB continued to maintain certification with the National Biosolids Partnership following a rigorous review process and independent audit that was conducted in December 2015. (Biosolids are nutrient-rich organic matter produced by wastewater treatment that can be recycled as fertilizer).

### **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 includes 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 proposed three annual rate increases for the Wastewater Division. The first and second rate increases went into effect in October 2014 and October 2015. The third rate increase will go into effect October 2016. The wastewater rate increases will each produce an additional \$4.7 million of annual sales revenue.

In fiscal year 2016, KUB rehabilitated or replaced 28 miles of wastewater system main, exceeding the target level of 25 miles, 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 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. The total cost of such improvements is estimated to be approximately \$120 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, 2016, the Wastewater Division had issued \$485 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, and three 6 percent rate increases effective October 2014, October 2015 and October 2016. 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 99.5% of manholes and gravity mains, smoke testing 99.9% of 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 334.9 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 82 percent reduction in SSOs.

As of June 30, 2016, the Wastewater Division had completed its twelfth full year under the Consent Decree, spending \$529.5 million on capital investments to meet Consent Decree requirements. During fiscal year 2016, the Wastewater Division incurred \$37.3 million in total expenditures related to Consent Decree requirements, including \$3.3 million for operating costs and \$34 million in capital improvements which included the rehabilitation or replacement of 28 miles of wastewater main. During the fiscal year, \$26.5 million was spent on sewer mini-basin rehabilitation and replacement. Trunk line rehabilitation and replacement accounted for \$2 million of capital expenditures, while pump station improvements accounted for \$4.6 million.

### **Financial Highlights**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

The Division's net position during the year increased \$9.5 million compared to a \$7.8 million increase last fiscal year. A restatement to the fiscal year 2014's net position based on a change in method of accounting for pension expense reduced the total net position by \$0.2 million during fiscal year 2015. This change resulted in a net increase of \$7.6 million or 3 percent in the Division's net position in fiscal year 2015.

Operating revenue increased \$4.4 million or 5.6 percent, the result of additional revenue generated during the fiscal year from the rate increase effective October 2015, along with a 1.1 percent increase in wastewater sales volumes.

Operating expenses increased \$2.1 million or 4 percent. Operating and maintenance (O&M) expenditures increased \$0.6 million or 2 percent. Depreciation expense rose \$1.2 million or 7.1 percent. Taxes and tax equivalents increased \$0.2 million or 5.5 percent.

Interest income was \$0.2 million higher than the prior fiscal year. Interest expense increased \$0.8 million or 4.2 percent, reflecting additional interest expense on revenue bonds sold in fiscal year 2015. Other income (net) was \$0.3 million lower.

Capital contributions increased \$0.3 million, the result of an increase in donated assets from developers compared to the previous fiscal year.

Total plant assets (net) increased \$22.9 million or 3.4 percent since the end of last fiscal year.

Long-term debt represented 64.5 percent of the Division's capital structure as of June 30, 2016, as compared to 65.8 percent last year. The decrease is the result of 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 1.85. Maximum debt service coverage was 1.68.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

The Division's net position during the year increased \$7.8 million compared to a \$5.7 million increase last fiscal year. A restatement to the prior fiscal year's net position based on a change in method of accounting for pension expense reduced the total net position by \$0.2 million during fiscal year 2015. This change resulted in a net increase of \$7.6 million or 3 percent in the Division's net position.

Operating revenue increased \$4.2 million or 5.5 percent, the result of additional revenue generated during the fiscal year from the rate increase effective October 2014, along with a 0.9 percent increase in wastewater sales volumes.

Operating expenses increased \$2.5 million or 5 percent. Operating and maintenance (O&M) expenditures increased \$1.2 million or 4.2 percent. Depreciation expense rose \$1 million or 6.5 percent. Taxes and tax equivalents increased \$0.2 million or 5.1 percent.

Interest income was consistent with the prior fiscal year. Interest expense increased \$0.1 million or less than one percent reflecting additional interest expense on \$60 million in revenue bonds sold in fiscal year 2015. Other income (net) was \$0.4 million higher.

Capital contributions increased \$0.1 million, the result of an increase in donated assets from developers compared to the previous fiscal year.

Total plant assets (net) increased \$21.9 million or 3.4 percent since the end of last fiscal year.

KUB sold two series of wastewater system revenue bonds during fiscal year 2015 for the purpose of funding wastewater system capital improvements totaling \$60 million. The \$30 million bond issue in April 2015 was accelerated to take advantage of the low interest rate environment which impacted the Division's debt rate and debt service coverage levels for fiscal year 2015. Long-term debt represented 65.8 percent of the Division's capital structure as of June 30, 2015, as compared to 63.9 percent last year. The increase is the net result of the issuance of revenue bonds in August 2014 and April 2015 offset 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 1.65. Maximum debt service coverage was 1.55.

#### 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.

#### **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 year and the year preceding the prior year.

# Statements of Net Position As of June 30

(in thousands of dollars)		2016		2015		2014
Current, restricted and other assets Capital assets, net Deferred outflows of resources Total assets and deferred outflows of resources	\$	80,075 687,056 19,413 786,544	\$	104,099 664,178 18,593 786,870	\$ _	66,802 642,302 10,064 719,168
Current and other liabilities Long-term debt outstanding Deferred inflows of resources Total liabilities and deferred inflows of resources	_	22,630 492,466 333 515,429	_	19,981 503,955 1,339 525,275	_	19,979 445,190 - 465,169
Net position Net investment in capital assets Restricted Unrestricted Total net position	\$ <u></u>	205,784 2,737 62,594 271,115	\$ <u></u>	172,144 2,624 86,827 261,595	\$ <u></u>	201,947 2,263 49,789 253,999

#### **Normal Impacts on Statement of Net Position**

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

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

#### **Impacts and Analysis**

#### **Current, Restricted and Other Assets**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Current, restricted and other assets decreased \$24 million or 23.1 percent, reflecting the utilization of \$15.6 million in bond proceeds and a \$9.1 million decrease in general fund cash for the primary purpose of funding wastewater capital improvements. Operating contingency reserves increased \$1.1 million and accounts receivable increased \$0.3 million.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Current, restricted and other assets increased \$37.3 million or 55.8 percent, reflecting a \$17.4 million increase in the general fund balance and \$15.6 million in unused bond proceeds. Operating contingency reserves increased \$2.4 million and accounts receivable increased \$0.6 million.

#### **Capital Assets**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Capital assets increased \$22.9 million or 3.4 percent, the result of capital expenditures, net of depreciation. Major capital expenditures during the year included \$32.6 million for major system improvements related to Century II (previously reported as PACE 10 expenditures), and \$1.8 million for upgrades to various information systems, and \$1.3 million for the replacement and relocation of wastewater system assets to accommodate Tennessee Department of Transportation (TDOT) highway improvement projects.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Capital assets increased \$21.9 million or 3.4 percent, the result of capital expenditures, net of depreciation. Major capital expenditures during the year included \$25.3 million for major system improvements related to Century II (previously reported as PACE 10 expenditures), \$7 million for general system improvements and \$1.8 million for information system upgrades.

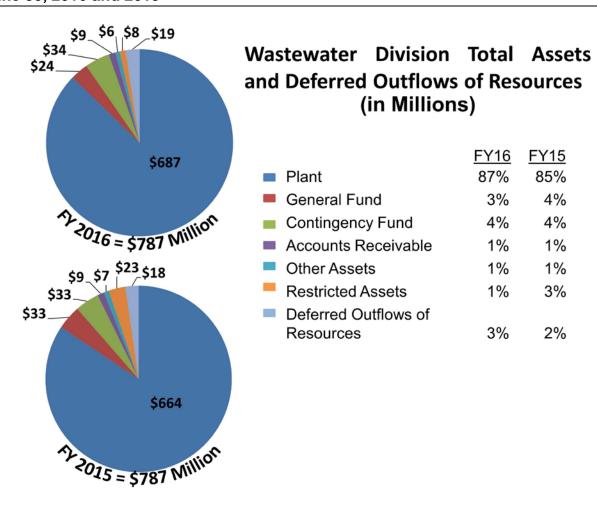
#### **Deferred Outflows of Resources**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Deferred outflows increased \$0.8 million compared to the prior year, reflecting a \$1.6 million increase in pension outflow and a \$0.8 million decrease in unamortized bond refunding costs.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Deferred outflows increased \$8.5 million compared to the prior year, reflecting \$7.9 million in unamortized bond refunding costs from fiscal year 2015 bond refinancing.



#### **Current and Other Liabilities**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Current and other liabilities were \$2.6 million more than the prior fiscal year. This increase was primarily due to a \$1.4 million increase in accounts payable and an actuarially determined net pension obligation of \$1.1 million recognized in fiscal year 2016.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Current and other liabilities were consistent with the prior fiscal year.

### **Long-Term Debt**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

The Division's outstanding long-term debt decreased \$11.5 million or 2.3 percent primarily due to \$10.9 million of long-term bond debt that shifted to current liabilities as payable within the next year.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

The Division's outstanding long-term debt increased \$58.8 million or 13.2 percent. The Division issued \$30 million in revenue bonds both in August 2014 and in April 2015. The increase was partially offset by the scheduled repayment of bond debt.

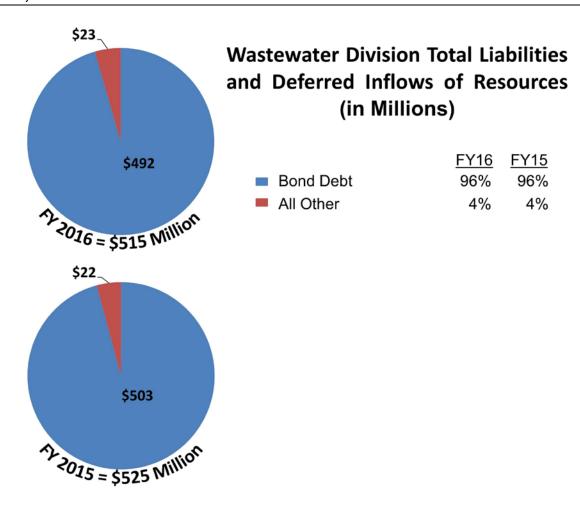
#### **Deferred Inflows of Resources**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Deferred inflows of resources were \$1 million lower than the prior fiscal year due to differences in pension inflows.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Deferred inflows of resources were \$1.3 million higher than the prior fiscal year due to the addition of pension inflow.



#### **Net Position**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Net investment in capital assets increased \$33.6 million or 19.5 percent. The increase was the result of \$22.9 million in net plant additions and a decrease in current and long term debt of \$11 million, reflecting the scheduled repayment of bonds. Unrestricted assets decreased \$24.2 million primarily due to the \$24 million decrease in current and other assets compared to the prior year. Restricted net position was \$0.1 million higher than the previous fiscal year, based on increases in debt service.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Net investment in capital assets decreased \$29.8 million or 14.8 percent. The increase was the result of \$21.9 million in net plant additions and an increase in current and long term debt of \$53.2 million. Unrestricted assets increased \$37 million primarily due to the \$37.3 million increase in current and other assets compared to the prior year. Restricted net position was \$0.4 million higher than the previous fiscal year, based on increases in debt service.

#### 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 year and the year preceding the prior year.

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

(in thousands of dollars)		2016		2015		2014
Operating revenues	\$	83,646	\$	79,206	\$	75,042
Operating expenses						
Treatment		12,516		11,597		10,769
Collection		7,462		8,609		7,795
Customer service		2,962		2,837		2,605
Administrative and general		8,572		7,846		8,484
Depreciation		18,343		17,131		16,086
Taxes and tax equivalents		4,537	_	4,301	_	4,092
Total operating expenses		54,392		52,321		49,831
Operating income		29,254		26,885		25,211
Interest income		462		301		292
Interest expense		(20,169)		(19,355)		(19,264)
Other income/(expense)	_	(717)	_	(433)	_	(837)
Change in net position before capital contributions	_	8,830	_	7,398	_	5,402
Capital contributions	_	690	_	358	_	272
Change in net position	\$ _	9,520	\$ =	7,756	\$ _	5,674

# 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.

- 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 2016 Compared to Fiscal Year 2015

The Division's net position during the year increased \$9.5 million compared to a \$7.8 million increase last fiscal year. A restatement to fiscal year 2014's net position based on a change in method of accounting for pension expense reduced the total net position by \$0.2 million during fiscal year 2015.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

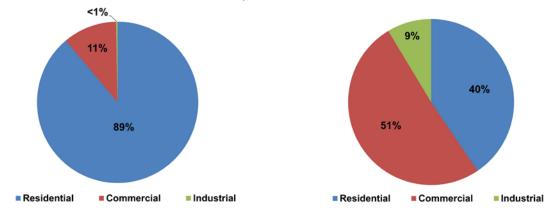
The Division's net position during the year increased \$7.8 million compared to a \$5.7 million increase last fiscal year. A restatement to the prior fiscal year's net position based on a change in method of accounting for pension expense reduced the total net position by \$0.2 million during fiscal year 2015. This change resulted in a net increase of \$7.6 million or 3 percent in the Division's net position.

#### **Margin from Sales**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Operating revenue increased \$4.4 million or 5.6 percent for the fiscal year ending June 30, 2016, the result of additional revenue generated during the fiscal year from the October 2015 rate increase as well as a 1.1 percent increase in wastewater sales volumes. 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 2016.

FY 2016 Total Wastewater Customers = 70,265 FY 2016 Wastewater Sales = 6.5 Billion Gallons



Residential customers accounted for 89 percent of wastewater customers and 40 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.

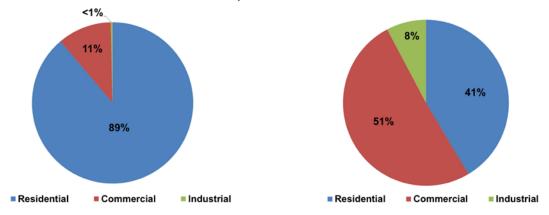
KUB's ten largest wastewater customers accounted for 11.1 percent of KUB's billed wastewater volumes. Those ten customers represent five industrial and five commercial customers, including four governmental customers.

KUB has added 737 wastewater customers over the past three years, representing annual growth of less than one percent.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Operating revenue increased \$4.2 million or 5.5 percent for the fiscal year ending June 30, 2015, the result of additional revenue generated during the fiscal year from the rate increase effective October 2014 and a 0.9 percent increase in wastewater sales volumes. 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 \$2.7 million in revenue for BABs rebates in fiscal year 2015.

FY 2015 Total Wastewater Customers = 69,847 FY 2015 Wastewater Sales = 6.5 Billion Gallons



Residential customers accounted for 89 percent of wastewater customers and 41 percent of total billed sales for the year. Commercial customers accounted for the largest portion of total sales for the year.

KUB's ten largest wastewater customers accounted for 9.1 percent of KUB's billed wastewater volumes. Those ten customers represent five industrial and five commercial customers, including four governmental customers.

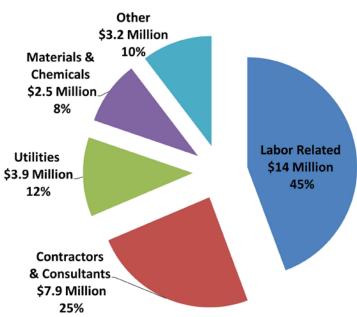
The Division has added 664 customers over the past three years, representing annual growth of less than one percent. Billed wastewater volumes have slowed in recent years, reflecting declining water usage due to more efficient appliances and conservation efforts.

#### **Operating Expenses**

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Operating expenses increased \$2.1 million or 4 percent compared to fiscal year 2015. 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 were up \$0.9 million, primarily due to higher outside contractor expenses.
- Collection system expenses decreased \$1.1 million, reflecting lower outside contractor expenses for Century II initiatives.
- Customer service expenses increased \$0.1 million.
- Administrative and general expenses increased \$0.7 million, due primarily to an increase in pension expense.



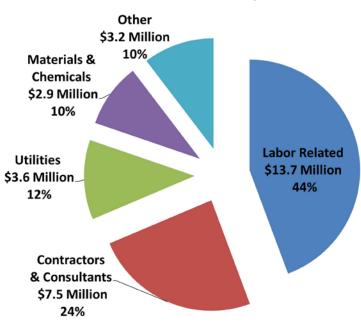
# FY 2016 Wastewater O&M Expense = \$31.5 Million

- Depreciation expense increased \$1.2 million or 7.1 percent, the result of a full year of depreciation on \$16.2 million of wastewater system assets placed in service during fiscal year 2015 and a partial year of depreciation of \$53.6 million of wastewater system assets placed in service during fiscal year 2016. \$12.1 million of wastewater system assets 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.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Operating expenses increased \$2.5 million or 5 percent compared to fiscal year 2014. 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.

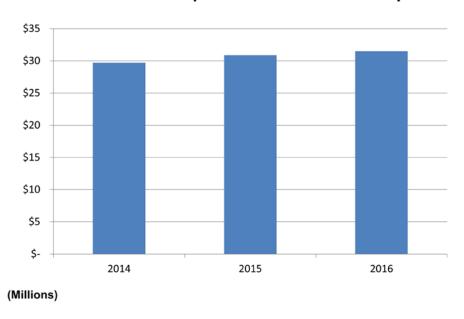
- Treatment expenses were up \$0.8 million, primarily due to higher consulting and contracting expenses.
- Collection system expenses increased \$0.8 million, reflecting higher labor related expenses, outside contractor expenses for lift station maintenance and repairs, and outside consultant expenses for blockage abatement.
- Customer service expenses increased \$0.2 million, reflecting the Division's share of expenses for software licenses.
- Administrative and general expenses decreased \$0.6 million, due to a decrease in pension expense.



## FY 2015 Wastewater O&M Expense = \$30.9 Million

- Depreciation expense increased \$1 million or 6.5 percent, the result of a full year of depreciation on \$72.3 million of wastewater system assets placed in service during fiscal year 2014, and a partial year of depreciation on \$16.2 million placed in service during fiscal year 2015. \$3.4 million of wastewater system assets were retired during the fiscal year.
- Taxes and tax equivalents increased \$0.2 million. The City of Knoxville's property tax rate increased this year and higher plant in service levels contributed to the growth in tax equivalent payments.

### **Wastewater Division Operation & Maintenance Expense**



#### Other Income and Expense

#### Fiscal Year 2016 Compared to Fiscal Year 2015

Interest income was \$0.2 million higher than the prior fiscal year.

Interest expense increased \$0.8 million or 4.2 percent, the net effect of interest expense associated with bonds issued in fiscal year 2015 offset by debt interest savings from refinancing outstanding bonds at lower interest rates.

Other income (net) was \$0.3 million lower, primarily due to a loss on disposition of wastewater system assets.

Capital contributions increased \$0.3 million compared to last fiscal year as a result of additional assets received from developers and other governmental entities.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

Interest income was consistent with the prior fiscal year.

Interest expense increased \$0.1 million or less than one percent, the net effect of additional interest expense associated with \$60 million in new bonds offset by debt interest savings from bond refinancing.

Other income (net) was \$0.4 million lower primarily, due to a prior year loss on disposition of wastewater system assets.

Capital contributions increased \$0.1 million compared to last fiscal year as a result of additional assets received from developers and other governmental entities.

# **Capital Assets**

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

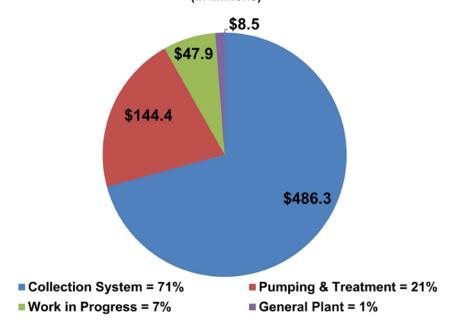
(in thousands of dollars)

		2016	2015	2014		
Pumping & Treatment Plant	\$	144,383	\$	135,248	\$	136,055
Collection Plant						
Mains and Metering		416,102		390,454		389,515
Other Accounts	_	70,145		71,708		72,884
Total Collection Plant		486,247		462,162		462,399
Total General Plant	_	8,480		8,101		8,070
Total Wastewater Plant	\$	639,110	\$	605,511	\$	606,524
Work In Progress	_	47,946		58,667		35,778
Total Net Plant	\$_	687,056	\$	664,178	\$	642,302

#### Fiscal Year 2016 Compared to Fiscal Year 2015

As of June 30, 2016, the Division had \$687.1 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 \$22.9 million or 3.4 percent over the end of the last fiscal year.

FY 2016 Wastewater Division Capital Assets = \$687.1 Million (in Millions)



Major capital asset expenditures during the year were as follows:

- \$32.6 million related to Century II projects
  - \$15.8 million for sewer mini-basin rehabilitation and replacement
  - \$7.7 million for sewer trunk line rehabilitation and replacement
  - \$5.3 million for pump station design and construction
  - \$3.8 million for wastewater treatment plant upgrades
- \$1.8 million for upgrades to various information systems
- \$1.3 million for replacement and relocation of wastewater system assets to accommodate TDOT highway improvement projects

# Knoxville Utilities Board Wastewater Division Management's Discussion and Analysis June 30, 2016 and 2015

#### Fiscal Year 2015 Compared to Fiscal Year 2014

As of June 30, 2015, the Division had \$664.2 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 \$21.9 million or 3.4 percent over the end of the last fiscal year.

FY 2015 Wastewater Division Capital Assets = \$664.2 Million (in Millions)

\$8.1

\$135.2

Collection System = 70%

Work in Progress = 9%

Pumping & Treatment = 20%

General Plant = 1%

Major capital asset expenditures during the year were as follows:

- \$25.3 million related to Century II projects
  - \$20.4 million for sewer mini-basin rehabilitation and replacement
  - \$2.6 million for pump station design and construction
  - \$1.3 million for wastewater treatment plant upgrades
  - \$1 million for sewer trunk line rehabilitation and replacement
- \$7 million for system improvements
- \$1.8 million for information system upgrades

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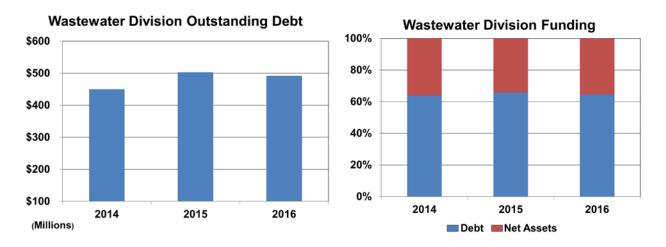
# Knoxville Utilities Board Wastewater Division Management's Discussion and Analysis June 30, 2016 and 2015

#### **Debt Administration**

As of June 30, 2016, the Wastewater Division had \$492.3 million in outstanding wastewater system bonds. The Division's outstanding debt rose in fiscal year 2015 to \$503.3 million due to \$60 million in new bonds sold during the fiscal year. As part of the Century II Infrastructure Program, as well as PACE10 in previous years, bond proceeds were 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 64.5 percent in 2016, 65.8 percent in 2015 and 63.9 percent at the end of fiscal year 2014. 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)		2016		2015		2014
Revenue bonds	\$_	492,330	\$ <u>_</u>	503,260	\$ <u>-</u>	450,050
Total outstanding debt	\$_	492,330		503,260	\$ <u>-</u>	450,050



The Division will pay \$129.9 million in principal payments over the next ten years, representing 26.4 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 2016 Compared to Fiscal Year 2015

As of June 30, 2016, the Division had \$492.3 million in outstanding debt (including the current portion of revenue bonds), representing a decrease of \$11 million or 2.2 percent. The decrease is attributable to the scheduled repayments of bond debt. The Division's weighted average cost of debt as of June 30, 2016 was 4.03 percent.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2016, the Division's revenue bonds were rated AA+ by Standard & Poor's and Aa2 by Moody's Investors Service.

# Knoxville Utilities Board Wastewater Division Management's Discussion and Analysis June 30, 2016 and 2015

#### Fiscal Year 2015 Compared to Fiscal Year 2014

As of June 30, 2015, the Division had \$503.3 million in outstanding debt (including the current portion of revenue bonds), compared to \$450.1 million last year, representing an increase of \$53.2 million or 11.8 percent. The Division's weighted average cost of debt as of June 30, 2015 was 4.03 percent.

The increase is attributable to the issuance of revenue bonds during the fiscal year of \$30 million in August 2014 and \$30 million in April 2015. The increase was partially offset by scheduled repayments of bond debt.

In April 2015, KUB sold \$129.8 million of revenue refunding bonds. The refunding of certain bonds at lower interest rates will provide debt service savings of \$13.4 million over the life of the bonds.

The Division's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2015, 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 250 wastewater customers in fiscal year 2017.

In June 2014, the KUB Board adopted three years of rate increases for all four Divisions to help fund the ongoing Century II infrastructure programs for each system. The first and second rate increases were effective October 2014 and October 2015. The remaining wastewater rate increase will be effective October 2016. The wastewater rate increases provide additional annual revenue of \$4.7 million.

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 long-term debt includes \$94.5 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 6.8 percent. Any future actions by Congress may also affect the anticipated rebates for future fiscal years.

GASB Statement No. 82, Pension Issues – An amendment of GASB Statements No. 67, No. 68 and No. 73 is effective for fiscal years beginning after June 15, 2016. GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, and GASB No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, are effective for periods beginning after June 15, 2017. 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 2016.

#### **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, 2016 and 2015. 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, 2016 and 2015**

		2016		2015
Assets and Deferred Outflows of Resources				
Current assets:	Φ.	00 705 045	Φ.	00 050 070
Cash and cash equivalents	\$	23,725,645	\$	32,853,270
Short-term contingency fund investments		10,857,109		456,174
Other current assets		45,463		45,356
Accrued interest receivable		10,171		7,154
Accounts receivable, less allowance of uncollectible accounts		0.476.445		0.040.525
of \$106,528 in 2016 and \$88,128 in 2015 Inventories		9,176,445		8,848,535
		314,034		248,831
Prepaid expenses  Total current assets	-	85,397 44,214,264		64,592
Total current assets	-	44,214,204	į	42,523,912
Restricted assets:				
Wastewater bond fund		7,696,384		7,097,019
Other funds		4,712		9,218
Unused bond proceeds		-		15,605,921
Total restricted assets	-	7,701,096		22,712,158
	_		,	
Wastewater plant in service		812,426,671		770,902,707
Less accumulated depreciation	_	(173,316,844)		(165,391,520)
		639,109,827		605,511,187
Retirement in progress		185,012		187,702
Construction in progress	_	47,761,132		58,479,696
Net plant in service	_	687,055,971	,	664,178,585
Oller				
Other assets:				1 001 E10
Net pension asset  Long-term contingency fund investments		23,110,075		1,264,542 32,373,560
Other		5,049,594		5,224,902
Total other assets	-	28,159,669		38,863,004
Total assets Total assets	-	767,131,000		768,277,659
Total assets	-	707,131,000		700,277,033
Deferred outflows of resources:				
Pension outflow		2,278,604		663,012
Unamortized bond refunding costs		17,134,459		17,929,691
Total deferred outflows of resources	-	19,413,063	·	18,592,703
Total assets and deferred outflows of resources	\$	786,544,063	\$	786,870,362
	=			

# Knoxville Utilities Board Wastewater Division Statements of Net Position June 30, 2016 and 2015

		2016		2015
Liabilities, Deferred Inflows, and Net Position				
Current liabilities:				
Current portion of revenue bonds	\$	10,930,000	\$	10,930,000
Accounts payable		2,340,915		899,476
Accrued expenses		716,125		579,027
Customer deposits plus accrued interest		917,734		1,037,256
Accrued interest on revenue bonds	_	4,963,784	_	4,482,373
Total current liabilities	_	19,868,558	_	17,928,132
Other liabilities:				
Accrued compensated absences		1,584,302		1,661,822
Customer advances for construction		-		306,000
Net pension liability		1,108,835		-
Other	_	67,881	_	85,069
Total other liabilities	-	2,761,018	-	2,052,891
Long-term debt:				
Wastewater revenue bonds		481,400,000		492,330,000
Unamortized premiums/discounts	_	11,066,224	_	11,625,190
Total long-term debt	_	492,466,224		503,955,190
Total liabilities	_	515,095,800	_	523,936,213
Deferred inflows of resources:				
Pension inflow		332,699	_	1,339,445
Total deferred inflows of resources	_	332,699		1,339,445
Total liabilities and deferred inflows of resources	_	515,428,499	_	525,275,658
Net position				
Net investment in capital assets		205,783,783		172,143,725
Restricted for:				
Debt service		2,732,600		2,614,646
Other		4,712		9,218
Unrestricted	_	62,594,469	_	86,827,115
Total net position	_	271,115,564		261,594,704
Total liabilities, deferred inflows, and net position	\$ _	786,544,063	\$	786,870,362

# Knoxville Utilities Board Wastewater Division Statements of Revenues, Expenses and Changes in Net Position Years Ended June 30, 2016 and 2015

		2016	2015
Operating revenues	\$	83,645,509	\$ 79,206,028
Operating expenses			
Treatment		12,515,728	11,596,638
Collection		7,462,333	8,608,980
Customer service		2,961,518	2,837,597
Administrative and general		8,571,620	7,845,973
Provision for depreciation		18,342,674	17,130,721
Taxes and tax equivalents	_	4,537,378	4,300,666
Total operating expenses	_	54,391,251	52,320,575
Operating income	_	29,254,258	26,885,453
Non-operating revenues (expenses)			
Contributions in aid of construction		652,525	394,551
Interest and dividend income		461,544	301,292
Interest expense		(20,168,993)	(19,355,169)
Amortization of debt costs		(473,327)	(405,039)
Write-down of plant for costs recovered through contributions		(652,525)	(394,551)
Other	_	(243,304)	(27,974)
Total non-operating revenues (expenses)	_	(20,424,080)	(19,486,890)
Change in net position before capital contributions		8,830,178	7,398,563
Capital contributions	_	690,682	357,246
Change in net position		9,520,860	7,755,809
Net position, beginning of year, as previously reported		261,594,704	253,999,330
Change in method of accounting for pension	_		(160,435)
Net position, beginning of year, as restated	_	261,594,704	253,838,895
Net position, end of year	\$_	271,115,564	\$ 261,594,704

# Knoxville Utilities Board Wastewater Division Statements of Cash Flows Years Ended June 30, 2016 and 2015

Cash Incorpt (Cash receipts from customers)         \$ 8,0657,704         \$ 76,288,180           Cash (payments to) preceipts from other operations         2,243,660         1,399,282           Cash payments to employees for services         (11,216,903)         (10,185,046)           Cash payments to employees for services         (11,216,903)         (3,754,611)           Net cash provided by operating activities         (3,789,989)         (3,575,461)           Net cash provided by operating activities         60,671,889           Payment in lieu of taxes         60,671,898           Net cash provided by operating activities         60,671,898           Perincipal paid on revenue bonds and notes payable         (10,930,000)         (10,930,000)           (Increase) decrease in unused bond proceeds         15,605,921         (15,605,921)           Interest paid on revenue bonds and notes payable         (19,687,582)         (19,633,40,00)           (Increase) decrease in unused bond proceeds         (59,685,292)         (19,605,301,00)           (Increase) decrease in unused bond proceeds         (59,685,292)         (19,605,301,00)           (Increase) decrease in unused bond proceeds         (59,685,292)         (19,605,301,00)           (Increase) decrease in unused bond proceeds         (59,695,292)         (19,605,301,00)           (Increase) decrease in unused			2016		2015
Cash (payments to suppliers of goods or services         (19.375,607)         (21.331,092)           Cash payments to suppliers of goods or services         (19.375,607)         (21.331,092)           Cash payments to suppliers of goods or services         (11,216,903)         (10,185,046)           Payment in lieu of taxes         (3,789,998)         (3,578,461)           Net cash provided by operating activities         8,851,765         42,595,872           Cash flows from capital and related financing activities:         60,671,698         60,671,698           Principal paid on revenue bonds and notes payable         (10,930,000)         (19,900,000)           (Increase) decrease in unused bond proceeds         (5,605,921)         (15,605,921)           (Increase) decrease in unused bond proceeds         (5,605,921)         (19,605,921)           (Increase) decrease in unused bond proceeds         (5,605,921)         (19,605,921)           (Increase) decrease in unused bond proceeds         (5,907,928)         (92,223)           (Increase) decrease in unused bond proceeds         (5,907,928)         (92,223)           (Increase) decrease in unused bond proceeds         (599,368)         (82,223)           Customer advances for construction         17,546         -2           Cash received from developers and individuals for capital purposes         652,525 <t< td=""><td></td><td>•</td><td>00.057.704</td><td>Φ.</td><td>70 000 400</td></t<>		•	00.057.704	Φ.	70 000 400
Cash payments to suppliers of goods or services         (19,375,607)         (21,331,092)           Cash payments to employees for services         (11,216,903)         (10,185,046)           Payment in lieu of taxes         (3,789,998)         (3,575,461)           Net cash provided by operating activities         48,518,765         42,595,872           Cash flows from capital and related financing activities:         -         60,671,688           Principal paid on revenue bonds and notes payable         (10,930,000)         (9,900,000)           (Increase) decrease in unused bond proceeds         15,605,921         (15,605,921)           Interest paid on revenue bonds and notes payable         (10,930,000)         (9,930,000)           (Increase) decrease in unused bond proceeds         15,605,921         (15,605,921)           Interest paid on revenue bonds and notes payable         (10,931,000)         (9,930,000)           (Changes in wastewater bonds and notes payable         (10,687,582)         (19,603,241)           Acquisition and construction of wastewater plant         (14,981,738)         (39,310,000)           Changes in wastewater bond fund, restricted         (599,362)         (22,2961,641)           Customer advances for construction         17,546         17,241,807           Net cash used in capital and related financing activities         (14,48,958)		Ф	, ,	Ф	
Cash payments to employees for services         (11,216,903)         (10,185,046)           Payment in lieu of taxes         (3,789,988)         (3,575,461)           Net cash provided by operating activities         48,518,765         42,595,877           Cash flows from capital and related financing activities:         \$\$\$         60,671,688           Principal paid on revenue bonds and notes payable         (10,930,000)         (9,390,000)           (Increase) decrease in unused bond proceeds         15,605,921         (15,605,921)           Interest paid on revenue bonds and notes payable         (19,687,582)         (19,633,440)           Acquisition and construction of wastewater plant         (41,981,738)         (39,310,000)           Acquisition and construction of wastewater plant         (41,981,738)         (39,310,000)           Customer advances for construction         17,546         66,000           Proceeds received on disposal of plant         17,546         66,000           Proceeds received midevelopers and individuals for capital purposes         655,252         394,551           Net cash used in capital and related financing activities         (1,458,958)         (7,241,807)           Purchase of investment securities         (1,458,958)         (7,241,807)           Maturities of investment securities         (1,859,596)         (2,194,807) <td></td> <td></td> <td></td> <td></td> <td>· ·</td>					· ·
Payment in lieu of taxes         (3,789,989)         (3,575,461)           Net cash provided by operating activities         48,518,765         42,595,872           Cash flows from capital and related financing activities:         w         60,671,688           Principal paid on revenue bonds and notes payable         (10,930,000)         (9,390,000)           (Increase) decrease in unused bond proceeds         15,605,521         (15,605,821)           Interest paid on revenue bonds and notes payable         (19,687,582)         (19,633,440)           Interest paid on revenue bonds and notes payable         (19,687,582)         (19,633,440)           Changes in wastewater bond fund, restricted         (599,366)         (82,523)           Customer advances for construction         17,546         (60,000)           Proceeds received on disposal of plant         17,546         (59,362)           Cash received from developers and individuals for capital purposes         652,525         34,551           Net cash used in capital and related financing activities         (14,458,958)         (7,241,807)           Matrities of investment securities         (14,589,568)         (7,241,807)           Matrities of investment securities         (17,855)         (60,631)           Net cash provided by (used in) investing activities         (9,127,625)         17,438,935     <					
Net cash provided by operating activities:         48,518,765         42,595,872           Cash flows from capital and related financing activities:         0.60,671,689         60,671,689           Net proceeds from bond issuance         1.60,30,000         (9,390,000)           Principal paid on revenue bonds and notes payable         (19,687,582)         (15,605,921)           Interest paid on revenue bonds and notes payable         (19,687,582)         (19,633,440)           Acquisition and construction of wastewater plant         (41,981,738)         (39,310,006)           Changes in wastewater bond fund, restricted         (599,366)         (82,523)           Customer advances for construction         1.7,546         -6,000           Proceeds received on disposal of plant         1.7,546         -6,000           Proceeds received on investing activities:         (56,922,694)         (22,961,641)           Purchase of investment securities         (1,458,958)         (7,241,807)           Maturities of investment securities         (1,458,958)         (7,241,807)           Maturities of investment securities         (1,458,958)         (7,241,807)           Interest received         455,690         4,810,557           Interest received         (59,227,25)         (2,194,880)           Net cash provided by (used in) investment securities			,		, , , , , , , , , , , , , , , , , , , ,
Cash flows from capital and related financing activities:         Cash flows from capital and related financing activities         Cash flows from investing activities         Cas	•	-		_	
Net proceeds from bond issuance         - 60,671,688           Principal paid on revenue bonds and notes payable (Increase) decrease in unused bond proceeds         15,605,921         (15,605,921)           Interest paid on revenue bonds and notes payable         (19,687,582)         (19,633,440)           Acquisition and construction of wastewater plant         (41,981,738)         (39,310,006)           Changes in wastewater bond fund, restricted         (50,000)         (60,000)           Proceeds received on disposal of plant         17,546         -           Cash received from developers and individuals for capital purposes         652,525         394,551           Net cash used in capital and related financing activities         (56,922,694)         (22,961,641)           Prochase of investment securities         (1,458,958)         (7,241,807)           Maturities of investment securities         455,690         4,810,557           Interest received         458,527         297,004           Other property and investments         (178,955)         (60,634)           Net cash provided by (used in) investing activities         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         32,853,270         15,413,919           Cash and cash equivalents, end of year         29,254,258         26,885,453           A	iver cash provided by operating activities		46,516,765	-	42,595,672
Principal paid on revenue bonds and notes payable (Increase) decrease in unused bond proceeds         15,605,921 (15,605,921)           Interest paid on revenue bonds and notes payable         15,605,921 (15,605,921)           Interest paid on revenue bonds and notes payable         (19,687,584)         (19,633,440)           Acquisition and construction of wastewater plant         (41,981,738)         (39,310,006)           Changes in wastewater bond fund, restricted         (59,936)         (82,523)           Customer advances for construction         1,7546         -           Cash received from developers and individuals for capital purposes         655,525         394,551           Net cash used in capital and related financing activities         (56,922,694)         (22,961,641)           Purchase of investing activities         (1,458,958)         (7,241,807)           Maturities of investing activities         455,690         4,810,557           Interest received         455,690         4,810,557           Interest received         455,690         4,810,557           Interest received         (72,3696)         (2,194,880)           Other property and investments         (17,39,351           Vet increase (decrease) in cash and cash equivalents         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         29,254,2	· · · · · · · · · · · · · · · · · · ·				
(Increase) decrease in unused bond proceeds         15,605,921         (15,605,921)           Interest paid on revenue bonds and notes payable         (19,687,582)         (19,633,401)           Acquisition and construction or wastewater plant         (41,981,738)         (39,310,006)           Changes in wastewater bond fund, restricted         (599,366)         (82,523)           Customer advances for construction         17,546         -           Cash received from developers and individuals for capital purposes         652,525         394,551           Net cash used in capital and related financing activities         (56,922,694)         (22,961,641)           Cash flows from investing activities:         ***         (7,241,807)           Purchase of investment securities         455,690         4,810,557           Interest received         458,527         297,004           Other property and investments         (723,696)         (2,194,807)           Net increase (decrease) in cash and cash equivalents         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         32,853,270         15,413,919           Cash and cash equivalents, end of year         \$23,725,645         \$28,883,870           Reconciliation of operating income to net cash provided by operating activities:         \$29,254,258         26,885,453	Net proceeds from bond issuance		=		60,671,698
Interest paid on revenue bonds and notes payable			(10,930,000)		(9,390,000)
Acquisition and construction of wastewater plant         (41,981,738)         (39,310,006)           Changes in wastewater bond fund, restricted         (599,366)         (82,523)           Customer advances for construction         17,546         6,000           Proceeds received on disposal of plant         17,546         394,551           Cash received from developers and individuals for capital purposes         652,525         394,551           Net cash used in capital and related financing activities         (56,922,694)         (22,961,641)           Purchase of investment securities         (1,458,958)         (7,241,807)           Maturities of investment securities         455,690         4,810,557           Interest received         458,527         297,004           Other property and investments         (178,955)         (60,634)           Net cash provided by (used in) investing activities         (723,696)         2,194,800           Net cash provided by (used in) investing activities         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         32,853,270         15,413,919           Cash and cash equivalents, end of year         \$29,254,258         26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities         \$29,254,258         17,336,391      <	(Increase) decrease in unused bond proceeds		15,605,921		(15,605,921)
Changes in wastewater bond fund, restricted         (599,366)         (82,523)           Customer advances for construction         1,7546         -           Cash received from developers and individuals for capital purposes         652,525         394,551           Net cash used in capital and related financing activities         (56,922,694)         (22,961,641)           Cash flows from investing activities:           Purchase of investment securities         (1,458,958)         (7,241,807)           Maturities of investment securities         455,690         4,810,557           Interest received         458,527         297,004           Other property and investments         (178,955)         (60,634)           Net cash provided by (used in) investing activities         (723,696)         2,194,880           Net increase (decrease) in cash and cash equivalents         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         32,853,270         15,413,919           Cash and cash equivalents, end of year         \$23,725,645         \$32,853,270           Reconciliation of operating income to net cash provided by operating activities         \$29,254,258         \$26,885,453           Operating income         \$29,254,258         \$26,885,453         \$26,885,453         \$26,885,453         \$26,885,453	Interest paid on revenue bonds and notes payable		(19,687,582)		(19,633,440)
Customer advances for construction         (6,000)           Proceeds received on disposal of plant         17,546         3-           Cash received from developers and individuals for capital purposes         652,525         394,551           Net cash used in capital and related financing activities         (56,922,694)         (22,961,641)           Cash flows from investing activities:         ***         ***           Purchase of investment securities         (1,458,958)         (7,241,807)           Maturities of investment securities         455,690         4,810,557           Interest received         458,527         297,004           Other property and investments         (178,955)         (60,634)           Net cash provided by (used in) investing activities         (723,696)         (2,194,880)           Net increase (decrease) in cash and cash equivalents         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         32,853,270         15,413,919           Reconciliation of operating income to net cash provided by operating activities         29,254,258         26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities:         18,592,426         17,336,991           Changes in operating assets and liabilities:         (327,909)         (647,772)	Acquisition and construction of wastewater plant		(41,981,738)		(39,310,006)
Proceeds received on disposal of plant         17,546         394,551           Cash received from developers and individuals for capital purposes         652,525         394,551           Net cash used in capital and related financing activities         (56,922,694)         (22,961,641)           Cash flows from investing activities:         ****  Purchase of investment securities         (1,458,958)         (7,241,807)           Maturities of investment securities         455,690         4,810,557         10,400,700	Changes in wastewater bond fund, restricted		(599,366)		(82,523)
Cash received from developers and individuals for capital purposes         655,525         394,551           Net cash used in capital and related financing activities         (56,922,694)         (22,961,641)           Cash flows from investing activities:         \$\$\$\$         \$\$\$\$\$         (7,241,807)           Maturities of investment securities         455,690         4,810,557           Interest received         458,527         297,004           Other property and investments         (178,955)         (60,634)           Net cash provided by (used in) investing activities         (723,696)         (2,194,800)           Net increase (decrease) in cash and cash equivalents         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         32,853,270         15,413,919           Reconciliation of operating income to net cash provided by operating activities         29,254,258         26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities:         29,254,258         26,885,453           Depreciation expense         18,592,426         17,336,391           Changes in operating assets and liabilities:         32,7909         (647,772)           Inventories         (55,202)         (48,067)           Prepaid expenses         (50,354)         (55,9797)	Customer advances for construction		=		(6,000)
Net cash used in capital and related financing activities         (56,922,694)         (22,961,641)           Cash flows from investing activities:         Veral (1,458,958)         (7,241,807)           Purchase of investment securities         (1,458,958)         (7,241,807)           Maturities of investment securities         455,690         4,810,557           Interest received         458,527         297,004           Other property and investments         (178,955)         (60,634)           Net cash provided by (used in) investing activities         (723,696)         (2,194,880)           Net increase (decrease) in cash and cash equivalents         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         32,853,270         15,413,919           Cash and cash equivalents, end of year         32,853,270         15,413,919           Reconciliation of operating income to net cash provided by operating activities         29,254,258         26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities:         18,592,426         17,336,391           Depreciation expense         18,592,426         17,336,391           Changes in operating assets and liabilities:         (65,202)         (647,772)           Inventories         (65,202)         (48,067) <t< td=""><td>Proceeds received on disposal of plant</td><td></td><td>17,546</td><td></td><td>-</td></t<>	Proceeds received on disposal of plant		17,546		-
Cash flows from investing activities:           Purchase of investment securities         (1,458,958)         (7,241,807)           Maturities of investment securities         455,690         4,810,557           Interest received         458,527         297,004           Other property and investments         (178,955)         (60,634)           Net cash provided by (used in) investing activities         (723,696)         (2,194,880)           Net increase (decrease) in cash and cash equivalents         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         32,853,270         15,413,919           Cash and cash equivalents, end of year         \$ 23,725,645         \$ 32,853,270           Reconciliation of operating income to net cash provided by operating activities           Operating income         \$ 29,254,258         26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities         18,592,426         17,336,391           Changes in operating assets and liabilities:         (327,909)         (647,772)           Inventories         (327,909)         (647,772)           Inventories         (65,202)         (48,067)           Prepaid expenses         (20,805)         11,080           Other assets         (57,354) <td>Cash received from developers and individuals for capital purposes</td> <td></td> <td>652,525</td> <td></td> <td>394,551</td>	Cash received from developers and individuals for capital purposes		652,525		394,551
Purchase of investment securities         (1,458,958)         (7,241,807)           Maturities of investment securities         455,690         4,810,557           Interest received         455,692         297,004           Other property and investments         (178,955)         (60,634)           Net cash provided by (used in) investing activities         (723,696)         (2,194,880)           Net increase (decrease) in cash and cash equivalents         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         32,853,270         15,413,919           Cash and cash equivalents, end of year         \$ 23,725,645         \$ 32,853,270           Reconciliation of operating income to net cash provided by operating activities         \$ 29,254,258         \$ 26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities:         \$ 29,254,258         \$ 26,885,453           Depreciation expense         18,592,426         17,336,391           Changes in operating assets and liabilities:         \$ (327,909)         (647,772)           Inventories         (327,909)         (647,772)           Inventories         (65,202)         (48,067)           Prepaid expenses         (57,354)         (559,797)           Accounts payable and accrued expenses         1,280,061 <td>Net cash used in capital and related financing activities</td> <td>•</td> <td>(56,922,694)</td> <td>_</td> <td>(22,961,641)</td>	Net cash used in capital and related financing activities	•	(56,922,694)	_	(22,961,641)
Purchase of investment securities         (1,458,958)         (7,241,807)           Maturities of investment securities         455,690         4,810,557           Interest received         458,527         297,004           Other property and investments         (178,955)         (60,634)           Net cash provided by (used in) investing activities         (723,696)         (2,194,880)           Net increase (decrease) in cash and cash equivalents         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         32,853,270         15,413,919           Cash and cash equivalents, end of year         \$ 23,725,645         \$ 26,885,453           Reconciliation of operating income to net cash provided by operating activities         \$ 29,254,258         \$ 26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities:         \$ 29,254,258         \$ 26,885,453           Depreciation expense         18,592,426         17,336,391           Changes in operating assets and liabilities:         \$ (327,909)         (647,772)           Inventories         (327,909)         (647,772)           Inventories         (65,202)         (48,067)           Prepaid expenses         (20,805)         11,080           Other assets         (59,797)         (599,797)		•		_	
Maturities of investment securities         455,690         4,810,557           Interest received         458,527         297,004           Other property and investments         (178,955)         (60,634)           Net cash provided by (used in) investing activities         (723,696)         (2,194,880)           Net increase (decrease) in cash and cash equivalents         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         32,853,270         15,413,919           Cash and cash equivalents, end of year         \$23,725,645         32,853,270           Reconciliation of operating income to net cash provided by operating activities           Operating income         \$29,254,258         26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities         18,592,426         17,336,391           Depreciation expense         18,592,426         17,336,391           Changes in operating assets and liabilities:         (327,909)         (647,772)           Inventories         (65,202)         (48,067)           Prepaid expenses         (20,805)         11,080           Other assets         (57,354)         (559,797)           Accounts payable and accrued expenses         1,280,061         (402,115)	Cash flows from investing activities:				
Interest received         458,527         297,004           Other property and investments         (178,955)         (60,634)           Net cash provided by (used in) investing activities         (723,696)         (2,194,880)           Net increase (decrease) in cash and cash equivalents         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         32,853,270         15,413,919           Cash and cash equivalents, end of year         \$ 23,725,645         \$ 32,853,270           Reconciliation of operating income to net cash provided by operating activities           Operating income         \$ 29,254,258         \$ 26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities:         18,592,426         17,336,391           Depreciation expense         18,592,426         17,336,391           Changes in operating assets and liabilities:         (327,909)         (647,772           Accounts receivable         (85,202)         (48,067)           Prepaid expenses         (20,805)         11,080           Other assets         (57,354)         (559,797)           Accounts payable and accrued expenses         1,280,061         (402,115)	Purchase of investment securities		(1,458,958)		(7,241,807)
Other property and investments         (178,955)         (60,634)           Net cash provided by (used in) investing activities         (723,696)         (2,194,880)           Net increase (decrease) in cash and cash equivalents         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         32,853,270         15,413,919           Cash and cash equivalents, end of year         \$ 23,725,645         \$ 32,853,270           Reconciliation of operating income to net cash provided by operating activities           Operating income         \$ 29,254,258         \$ 26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities:         \$ 18,592,426         17,336,391           Obspreciation expense         18,592,426         17,336,391         17,336,391           Changes in operating assets and liabilities:         (647,772         (647,772           Accounts receivable         (327,909)         (647,772           Inventories         (65,202)         (48,067)           Prepaid expenses         (20,805)         11,080           Other assets         (57,354)         (559,797)           Accounts payable and accrued expenses         1,280,061         (402,115)	Maturities of investment securities		455,690		4,810,557
Net cash provided by (used in) investing activities         (723,696)         (2,194,880)           Net increase (decrease) in cash and cash equivalents         (9,127,625)         17,439,351           Cash and cash equivalents, beginning of year         32,853,270         15,413,919           Cash and cash equivalents, end of year         \$ 23,725,645         \$ 32,853,270           Reconciliation of operating income to net cash provided by operating activities           Operating income         \$ 29,254,258         \$ 26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities:         \$ 29,254,258         \$ 26,885,453           Depreciation expense         18,592,426         17,336,391         \$ 17,336,391	Interest received		458,527		297,004
Net increase (decrease) in cash and cash equivalents       (9,127,625)       17,439,351         Cash and cash equivalents, beginning of year       32,853,270       15,413,919         Cash and cash equivalents, end of year       \$ 23,725,645       \$ 32,853,270         Reconciliation of operating income to net cash provided by operating activities         Operating income       \$ 29,254,258       \$ 26,885,453         Adjustments to reconcile operating income to net cash provided by operating activities:       \$ 29,254,258       \$ 26,885,453         Depreciation expense       18,592,426       17,336,391       17,336,391         Changes in operating assets and liabilities:       (327,909)       (647,772)         Inventories       (65,202)       (48,067)         Prepaid expenses       (20,805)       11,080         Other assets       (57,354)       (559,797)         Accounts payable and accrued expenses       1,280,061       (402,115)	Other property and investments		(178,955)	_	(60,634)
Cash and cash equivalents, beginning of year       32,853,270       15,413,919         Cash and cash equivalents, end of year       \$ 23,725,645       \$ 32,853,270         Reconciliation of operating income to net cash provided by operating activities         Operating income       \$ 29,254,258       \$ 26,885,453         Adjustments to reconcile operating income to net cash provided by operating activities:       \$ 29,254,258       \$ 26,885,453         Depreciation expense       18,592,426       17,336,391         Changes in operating assets and liabilities:       \$ (327,909)       (647,772)         Inventories       (65,202)       (48,067)         Prepaid expenses       (20,805)       11,080         Other assets       (57,354)       (559,797)         Accounts payable and accrued expenses       1,280,061       (402,115)	Net cash provided by (used in) investing activities		(723,696)	-	(2,194,880)
Cash and cash equivalents, end of year         \$ 23,725,645         \$ 32,853,270           Reconciliation of operating income to net cash provided by operating activities           Operating income         \$ 29,254,258         \$ 26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities:         \$ 18,592,426         17,336,391           Depreciation expense         18,592,426         17,336,391           Changes in operating assets and liabilities:         (327,909)         (647,772)           Inventories         (65,202)         (48,067)           Prepaid expenses         (20,805)         11,080           Other assets         (57,354)         (559,797)           Accounts payable and accrued expenses         1,280,061         (402,115)	Net increase (decrease) in cash and cash equivalents		(9,127,625)		17,439,351
Reconciliation of operating income to net cash provided by operating activities           Operating income         \$ 29,254,258         \$ 26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities:         18,592,426         17,336,391           Depreciation expense         18,592,426         17,336,391           Changes in operating assets and liabilities:         (327,909)         (647,772)           Inventories         (65,202)         (48,067)           Prepaid expenses         (20,805)         11,080           Other assets         (57,354)         (559,797)           Accounts payable and accrued expenses         1,280,061         (402,115)	Cash and cash equivalents, beginning of year		32,853,270	_	15,413,919
Operating income         \$ 29,254,258         \$ 26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities:	Cash and cash equivalents, end of year	\$	23,725,645	\$ _	32,853,270
Operating income         \$ 29,254,258         \$ 26,885,453           Adjustments to reconcile operating income to net cash provided by operating activities:	Reconciliation of operating income to net cash provided by operating activities				
Adjustments to reconcile operating income to net cash provided by operating activities:       18,592,426       17,336,391         Depreciation expense       18,592,426       17,336,391         Changes in operating assets and liabilities:       (327,909)       (647,772)         Inventories       (65,202)       (48,067)         Prepaid expenses       (20,805)       11,080         Other assets       (57,354)       (559,797)         Accounts payable and accrued expenses       1,280,061       (402,115)		\$	29,254,258	\$	26,885,453
provided by operating activities:           Depreciation expense         18,592,426         17,336,391           Changes in operating assets and liabilities:         Accounts receivable         (327,909)         (647,772)           Inventories         (65,202)         (48,067)           Prepaid expenses         (20,805)         11,080           Other assets         (57,354)         (559,797)           Accounts payable and accrued expenses         1,280,061         (402,115)	·				
Depreciation expense       18,592,426       17,336,391         Changes in operating assets and liabilities:	· · · · · · · · · · · · · · · · · · ·				
Changes in operating assets and liabilities:         Accounts receivable       (327,909)       (647,772)         Inventories       (65,202)       (48,067)         Prepaid expenses       (20,805)       11,080         Other assets       (57,354)       (559,797)         Accounts payable and accrued expenses       1,280,061       (402,115)			18.592.426		17.336.391
Accounts receivable       (327,909)       (647,772)         Inventories       (65,202)       (48,067)         Prepaid expenses       (20,805)       11,080         Other assets       (57,354)       (559,797)         Accounts payable and accrued expenses       1,280,061       (402,115)			-,,		,,
Inventories         (65,202)         (48,067)           Prepaid expenses         (20,805)         11,080           Other assets         (57,354)         (559,797)           Accounts payable and accrued expenses         1,280,061         (402,115)			(327.909)		(647.772)
Prepaid expenses       (20,805)       11,080         Other assets       (57,354)       (559,797)         Accounts payable and accrued expenses       1,280,061       (402,115)	Inventories		,,		` (
Other assets         (57,354)         (559,797)           Accounts payable and accrued expenses         1,280,061         (402,115)			, , ,		
Accounts payable and accrued expenses 1,280,061 (402,115)			, , ,		
Customer deposits plus accrued interest (119.522) 19.006	Customer deposits plus accrued interest		(119,522)		19,006
Other liabilities (17,188) 1,693			, ,		
Net cash provided by operating activities \$\frac{48,518,765}{48,518,765}\$		\$	<u> </u>	\$	
Noncash capital activities:	Noncash capital activities:				
Acquisition of plant assets through developer contributions \$ 690,682 \$ 357,246	•	\$	690,682	\$	357,246

## 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, 2016 and 2015, 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 will 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 February 2015, the Governmental Accounting Standards Board (GASB) issued Statement No. 72 (Statement No. 72), *Fair Value Measurement and Application*. Statement No. 72 is intended to provide guidance for determining a fair value measurement for financial reporting purposes and

for applying fair value to certain investments and disclosures related to all fair value measurements.

In June 2015, the GASB issued GASB Statement No. 73 (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 Provision of GASB Statements 67 and 68. The requirements of this Statement will improve financial reporting by establishing a single framework for the presentation of information about pensions and enhance comparability.

In June 2015, the GASB issued GASB Statement No. 76 (Statement No. 76), *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*. The objective of this Statement is to simplify the hierarchy of generally accepted accounting principles (GAAP) used to prepare financial statements of state and local governmental entities. This Statement supersedes Statement No. 55, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*, and amends Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, paragraphs 64, 74, and 82.

In December 2015, the GASB issued GASB Statement No. 79 (Statement No. 79), *Certain External Investment Pools and Pool Participants*. This statement establishes criteria for an external investment pool to qualify for making the election to measure all of its investments at amortized cost for financial reporting purposes.

Statements No. 72, 73, 76, and 79 are effective for fiscal years beginning after June 15, 2015.

#### **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 \$249,752 in fiscal year 2016 and \$205,670 in fiscal year 2015. 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 \$249,369 in fiscal year 2016 and \$213,886 in fiscal year 2015.

#### 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.

# **Knoxville Utilities Board Wastewater Division Notes to Financial Statements**

June 30, 2016 and 2015

#### **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, 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 Pension**

In June 2012, the Governmental Accounting Standards Board (GASB) issued Statement No. 68, Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27, which revises existing standards of financial reporting for pensions. In addition, during November

2013, GASB issued Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date*, which requires deferred outflow of resources to be recognized for any contributions made subsequent to the measurement date of the beginning net pension liability. These standards were adopted by KUB in 2015 and resulted in a restatement of 2015 beginning net position of \$763,975 (Division's share \$160,435).

#### **Pension Plan**

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, 2016 and 2015 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2016 and 2015 are based on a December 31, 2015 and 2014 measurement date, respectively.

#### **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 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 previously reported as assets 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 previously reported as liabilities related to the acquisition of assets or

# Knoxville Utilities Board Wastewater Division Notes to Financial Statements

June 30, 2016 and 2015

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 differences between expected and actual experience in accordance with Statement No. 68.

#### **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 27, 2016, the date these financial statements were issued, for items that should potentially be recognized or disclosed. KUB sold \$20 million in wastewater system revenue bonds in July 2016 for the purpose of funding wastewater system capital improvements in fiscal year 2017. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.72 percent.

#### **Recently Issued Accounting Pronouncements**

In June 2015, the GASB issued two related Statements that affect accounting and financial reporting by state and local governments for postemployment benefits other than pensions (OPEB). GASB Statement No. 74 (Statement No. 74), *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, addresses reporting by OPEB plans that administer benefits on behalf of governments. GASB Statement No. 75 (Statement No. 75), *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, addresses reporting by governments that provide OPEB to their employees. Statement No. 74 is effective for fiscal years beginning after June 15, 2016, and Statement No. 75 is effective for fiscal years beginning after June 15, 2017.

In March 2016, the GASB issued GASB Statement No. 82 (Statement No. 82), *Pension Issues – An amendment of GASB Statements No. 67, No. 68 and No. 73.* The objective of this Statement is to address certain issues that have been raised with respect to the presentation of payroll-related measures in required supplementary information, the selection of assumptions and treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes and the classification of payments made by employers to satisfy employee contribution obligations. Statement No. 82 is effective for fiscal years beginning after June 15, 2016.

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. KUB's Agency Bond investments are rated Aaa by Moody's Investors Service.

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:

	2016	2015
Current assets		
Cash and cash equivalents	\$ 23,725,645	\$ 32,853,270
Short-term contingency fund investments	10,857,109	456,174
Other assets		
Long-term contingency fund investments	23,006,967	32,306,048
Restricted assets		
Unused bond proceeds	-	15,605,874
Wastewater bond fund	7,696,384	7,097,019
Other funds	 4,712	9,218
	\$ 65,290,817	\$ 88,327,603

The above amounts do not include accrued interest of \$103,108 in fiscal year 2016 and \$67,559 in fiscal year 2015. 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, 2016:

		Deposit and Investment Maturities (in Years)									
		Fair		Less							
		Value		Than 1		1-5					
Supersweep NOW and Other Deposits	\$	29,749,540	\$	29,749,540	\$	-					
State Treasurer's Investment Pool		1,654,595		1,654,595		-					
Agency Bonds		37,801,501		10,857,109		26,944,392					
Certificates of Deposits	_	7,124,064		6,041,689		1,082,375					
	\$	76,329,700	\$	48,302,933	\$	28,026,767					
	_		_								

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, 2016:

- U.S. Agency bonds of \$26,944,392, which have a maturity at purchase of greater than one year, are valued using quoted market prices (Level 1 inputs)
- Certificates of deposits of \$1,082,375, which have a maturity at purchase of greater than one year, are valued at interest rates and yield curves observable at commonly quoted intervals (Level 2 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:

	2016	2015
Wholesale and retail customers		
Billed services	\$ 5,053,928	\$ 4,886,812
Unbilled services	3,529,053	3,206,393
Other	699,992	843,458
Allowance for uncollectible accounts	(106,528)	(88,128)
	\$ 9,176,445	\$ 8,848,535

# 5. Accounts Payable and Accruals

Accounts payable and accruals were composed of the following:

	2016	2015
Trade accounts	\$ 2,340,915	\$ 899,476
Salaries and wages	330,469	222,361
Self-insurance liabilities	 385,656	 356,666
	\$ 3,057,040	\$ 1,478,503

# 6. Long-Term Obligations

Long-term debt consists of the following:

	Balance June 30, 2015	Additions	Payments	Defeased		Balance June 30, 2016	Amounts Due Within One Year
2005 B - 3.0 - 5.0% \$	16,045,000	\$ _	\$ 1,410,000	\$ _	\$	14,635,000	\$ 1,470,000
2008 - 4.0 - 6.0%	11,000,000	-	4,450,000	-		6,550,000	4,600,000
2010 - 6.3 - 6.5%	30,000,000	=	=	=		30,000,000	-
2010C - 1.18 - 6.1%	65,750,000	-	1,250,000	-		64,500,000	1,400,000
2012A - 2.0 - 4.0%	15,415,000	=	820,000	=		14,595,000	840,000
2012B - 1.25 - 5.0%	63,275,000	-	925,000	-		62,350,000	975,000
2013A - 2.0 - 4.0%	112,325,000	-	610,000	-		111,715,000	620,000
2014A - 2.0 - 4.0%	29,625,000	-	425,000	-		29,200,000	450,000
2015A - 3.0 - 5.0%	129,825,000	-	465,000	-		129,360,000	125,000
2015B - 3.0 - 5.0%	30,000,000	 -	575,000	 -	_	29,425,000	450,000
Total bonds \$	503,260,000	\$ -	\$ 10,930,000	\$ -	\$	492,330,000	\$ 10,930,000
<b>Unamortized Premium</b>	11,625,190	-	558,966	 -	-	11,066,224	-
Total long term debt \$	514,885,190	\$ -	\$ 11,488,966	\$ -	\$	503,396,224	\$ 10,930,000

# **Knoxville Utilities Board Wastewater Division Notes to Financial Statements**

June 30, 2016 and 2015

		Balance June 30, 2014		Additions		Payments	Defeased		Balance June 30, 2015		Amounts Due Within One Year
2005 A - 4.0 - 5.0%	\$	36,550,000	\$	-	\$	-	\$ 36,550,000	\$	-	\$	-
2005 B - 3.0 - 5.0%		17,395,000		-		1,350,000	-		16,045,000		1,410,000
2007 - 4.0 - 5.0%		75,000,000		-		-	75,000,000		-		-
2008 - 4.0 - 6.0%		30,975,000		-		4,300,000	15,675,000		11,000,000		4,450,000
2010 - 6.3 - 6.5%		30,000,000		-		-	-		30,000,000		-
2010C - 1.18 - 6.1%		66,850,000		-		1,100,000	-		65,750,000		1,250,000
2012A - 2.0 - 4.0%		16,215,000		-		800,000	-		15,415,000		820,000
2012B - 1.25 - 5.0%		64,150,000		-		875,000	-		63,275,000		925,000
2013A - 2.0 - 4.0%		112,915,000		-		590,000	-		112,325,000		610,000
2014A - 2.0 - 4.0%		-		30,000,000		375,000	-		29,625,000		425,000
2015A - 3.0 - 5.0%		-		129,825,000		-	-		129,825,000		465,000
2015B - 3.0 - 5.0%		-		30,000,000	_	-	 -	_	30,000,000	_	575,000
Total bonds	\$	450,050,000	\$	189,825,000	\$	9,390,000	\$ 127,225,000	\$	503,260,000	\$	10,930,000
Unamortized Premium	-	4,154,409	_	8,539,211	_	312,636	 755,794	_	11,625,190	_	-
Total long term debt	\$	454,204,409	\$	198,364,211	\$	9,702,636	\$ 127,980,794	\$	514,885,190	\$	10,930,000

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

Fiscal Year			T Principal	ota	l Interest	Grand Total
2017		\$	10,930,000	\$	19,855,137	\$ 30,785,137
2018			11,380,000		19,439,779	30,819,779
2019			11,810,000		18,969,000	30,779,000
2020			12,320,000		18,473,025	30,793,025
2021			12,830,000		17,958,645	30,788,645
2022-2026			70,625,000		80,921,305	151,546,305
2027-2031			76,135,000		67,260,745	143,395,745
2032-2036			91,580,000		52,086,863	143,666,863
2037-2041			105,745,000		32,888,520	138,633,520
2042-2046			74,600,000		11,970,575	86,570,575
2047-2050		_	14,375,000		1,076,675	15,451,675
	Total	\$_	492,330,000	\$	340,900,269	\$ 833,230,269

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, 2016, those bond covenants had been satisfied.

During fiscal year 2006, KUB's Wastewater Division issued Series 2005B bonds in part to retire certain existing debt and fund wastewater system capital improvements. Concurrent with the issuance of these bonds, KUB transferred funds to an irrevocable trust to pay a portion of the Series 1998 bonds and Series 2001A bonds, as such amounts mature.

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, 2015 these bonds became subject to a 6.8 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 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, 2015 these bonds became subject to a 6.8 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.

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, \$90.7 million at June 30, 2016, and the trust account assets are not included in the financial statements.

Other liabilities consist of the following:

		Balance June 30, 2015		Increase		Decrease	Balance June 30, 2016
Accrued compensated absences Customer advances	\$	1,661,822	\$	3,192,415	\$	(3,269,935)	\$ 1,584,302
for construction		306,000				(306,000)	-
Other	_	85,069	_	143,427	_	(160,615)	67,881
	\$	2,052,891	\$	3,335,842	\$	(3,736,550)	\$ 1,652,183

### 7. Lease Commitments

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

2017	\$ 8,047
2018	4,749
2019	2,972
2020	 1,801
Total operating minimum lease payments	\$ 17,569

### 8. Capital Assets

Capital asset activity was as follows:

		Balance June 30, 2015	Increase	Decrease	Balance June 30, 2016
Pumping & Treatment Plant Collection Plant	\$	206,630,404	\$ 14,986,965	\$ (1,850,766)	\$ 219,766,603
Mains and Metering		457,776,419	35,573,089	(9,665,081)	483,684,427
Other Accounts		80,547,995	3,357	(165,471)	80,385,881
Total Collection Plant	\$	538,324,414	\$ 35,576,446	\$ (9,830,552)	\$ 564,070,308
Total General Plant	_	25,947,889	2,975,604	(333,733)	28,589,760
Total Wastewater Plant	\$	770,902,707	\$ 53,539,015	\$ (12,015,051)	\$ 812,426,671
Less accumulated depreciation	_	(165,391,520)	(18,624,856)	10,699,532	(173,316,844)
Net Plant Assets	\$	605,511,187	\$ 34,914,159	\$ (1,315,519)	\$ 639,109,827
Work In Progress		58,667,398	41,026,770	(51,748,024)	47,946,144
Total Net Plant	\$	664,178,585	\$ 75,940,929	\$ (53,063,543)	\$ 687,055,971

		Balance June 30, 2014	Increase	Decrease	Balance June 30, 2015
Pumping & Treatment Plant Collection Plant	\$	202,877,753	\$ 4,119,355	\$ (366,704)	\$ 206,630,404
Mains and Metering Other		450,538,908	9,876,536	(2,639,025)	457,776,419 80,547,995
Total Collection Plant	\$	80,411,724 530,950,632	\$ 197,288 10,073,824	\$ (61,017) (2,700,042)	\$ 538,324,414
Total General Plant Total Wastewater Plant	\$	24,303,876 758,132,261	\$ 1,974,951 16,168,130	\$ (330,938) (3,397,684)	\$ 25,947,889 770,902,707
Less accumulated depreciation	_	(151,608,595)	 (17,196,280)	 3,413,355	(165,391,520)
Net Plant Assets	\$	606,523,666	\$ (1,028,150)	\$ 15,671	\$ 605,511,187
Work In Progress Total Net Plant	\$ _	35,777,951 642,301,617	\$ 39,146,048 38,117,898	\$ (16,256,601) (16,240,930)	\$ 58,667,398 664,178,585

## 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, 2016 and 2015, the amount of these liabilities was \$385,656 and \$356,666, respectively, resulting from the following changes:

	2016		2015
Balance, beginning of year	\$ 356,666	\$	330,289
Current year claims and changes in estimates	3,104,281		2,971,832
Claims payments	 (3,075,291)	_	(2,945,455)
Balance, end of year	\$ 385,656	\$	356,666

#### 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, 2014 to include all prior approved amendments. The Plan is a single-employer contributory, defined benefit pension plan established by Knoxville Utilities Board ("KUB") 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 KUB 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:

	2015	2014
Inactive plan members:		
Terminated vested participants	39	40
Retirees and beneficiaries	628	627
Active plan members	<u>692</u>	<u>725</u>
Total	<u>1,359</u>	<u>1,392</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 will not be 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 address the loss 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. Plan B participants may not make contributions to the Plan. 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 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 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, 2015:

Asset Class	<b>Target Allocation</b>
December 2 december 2	000/ 500/
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 \$5,669,380 and \$6,314,399 for 2014 and 2013, respectively, were made during KUB's fiscal years ending June 30, 2016 and 2015, respectively. Of these amounts, \$1,247,264 and \$1,326,024 are attributable to the Wastewater Division. The contribution was determined as part of the January 1, 2014 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. The actuarial valuation for the Plan year ending December 31, 2015 resulted in an actuarially determined contribution of \$4,816,913 for the fiscal year ending June 30, 2017, based on the Plan's current funding policy. The Wastewater Division's portion of this contribution is \$1,059,721.

Subsequent to June 30, 2016, the actuarial valuation for the Plan year ending December 31, 2016 was completed. The actuarial valuation resulted in an actuarially determined contribution of \$3,756,283 for the fiscal year ending June 30, 2018, based on the Plan's current funding policy. The Wastewater Division's portion of this contribution is \$826,382. For the Plan year ending December 31, 2016, the Plan's actuarial funded ratio was 103.04 percent.

The actuarial valuations for the Plan years ending December 31, 2015 and 2016, which determine the actuarially determined contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

#### Implementation of GASB 68

In fiscal year 2015, KUB adopted 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, 2016 and 2015 will be based on the December 31, 2015 and 2014 measurement date,

# **Knoxville Utilities Board Wastewater Division**

## **Notes to Financial Statements**

June 30, 2016 and 2015

respectively. The division's share of the net pension liability at June 30, 2016 is \$1,108,835 and the net pension asset at June 30, 2015 is \$1,264,542.

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

	2015	2014
Total pension liability	\$ 204,502,350 \$	202,773,764
Plan fiduciary net position	199,462,190	(208,795,394)
Plan's net pension liability (asset)	\$ 5,040,160 \$	(6,021,630)

Plan fiduciary net position as a percentage of the total pension liability

97.54%

102.97%

Changes in Net Pension Liability are as follows:

				Increase		
	-	otal Danaian	Б	(Decrease)		Net Pension
	'	otal Pension Liability		Plan Fiduciary Net Position		
		(a)		(b)	LIC	ability (a) - (b)
Balances at December 31, 2014	\$	202,773,764	\$	208,795,394	\$	(6,021,630)
Changes for the year:						
Service cost		4,157,062		-		4,157,062
Interest		14,812,784		-		14,812,784
Differences between Expected						
and Actual Experience		(1,890,334)		-		(1,890,334)
Changes of Assumptions		-		-		-
Contributions - employer		-		5,991,887		(5,991,887)
Contributions - rollovers		-		482,060		(482,060)
Contributions - member		-		5,486		(5,486)
Net investment income		-		(64,551)		64,551
Benefit payments		(15,350,926)		(15,350,926)		-
Administrative expense		-		(397,160)		397,160
Net changes		1,728,586		(9,333,204)		11,061,790
Balances at December 31, 2015	\$	204,502,350	\$	199,462,190	\$	5,040,160

#### Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of December 31, 2015 and 2014, 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 28 years remaining as of

January 1, 2013 and 27 years remaining as of January 1, 2014

Discount rate: 8% at January 1, 2013 and 7.5% at January 1, 2014

Salary increases: From 2.58% to 7.92% for January 1, 2013 and from 2.80% to

# **Knoxville Utilities Board Wastewater Division Notes to Financial Statements**

June 30, 2016 and 2015

5.15% for January 1, 2014, based on years of service Mortality:

Sex distinct RP-2000 Combined Mortality projected to

Sex distinct RP-2000 Combined Mortality projected to 2018 using Scale AA for the January 1, 2013 valuation. Sex distinct RP-2000 Combined Mortality projected to 2024 using Scale

AA for the January 1, 2014 valuation

Inflation 2.8 percent

The actuarial assumptions used in the December 31, 2015 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, 2015 and 2014 are summarized in the following table. The real rate of return reported for fixed income is for aggregate fixed income. The Plan has both aggregate and long duration fixed income.

	Long Term Expected					
	Real Rate of Return					
Asset Class	2015	2014				
Domestic equity	7.2%	6.0%				
Non-U.S. equity	7.4%	7.0%				
Real estate equity	6.5%	5.7%				
Fixed income	3.7%	1.8%				
Cash and deposits	2.6%	0.5%				

#### Discount rate

The discount rate used to measure the total pension liability was 7.5 percent as of January 1, 2015 and 2014. 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, 2015, 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		1%
				Discount Rate (7.5%)		Increase (8.5%)
Plan's net pension liability	\$	17,128,897	\$	5,040,160	\$	(5,963,331)

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

For the year ended June 30, 2015, KUB recognized pension expense of \$2,749,905 (Division's share \$577,480).

The impact of experience gains or losses and assumption changes on the Total Pension Liability are recognized in expense over the average expected remaining service life of all active and inactive members. As of the measurement date, this recognition period was 3.72 years. However, there were no experience gains or losses, and there were no assumption changes during the measurement year.

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 \$7,972,887. \$1,594,577 of that gain was recognized in the current year and an identical amount will be recognized in each of the next four years, resulting in a deferred inflow of resources of \$6,378,310 (Division's share \$1,339,445). The table below summarizes the current balances of deferred outflows and deferred inflows of resources along with the net recognition over the next five years. In addition, KUB recorded a deferred outflow of resources of \$3,157,199 (Division's share \$663,012) at June 30, 2015 for employer contributions made between December 31, 2014 and June 30, 2015.

	 rred Outflows Resources	Deferred Inflows of Resources		
Differences between expected and actual				
experience	\$ -	\$	-	
Changes in assumptions	-		-	
Net difference between projected and actual				
earnings on pension plan investments	-		6,378,310	
Contributions subsequent to measurement date	3,157,199		-	
Total	\$ 3,157,199	\$	6,378,310	

For the year ended June 30, 2016, KUB recognized pension expense of \$4,665,035 (Division's share \$1,026,308).

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, 2014, this average was 5.00 years. During the measurement year, there were no assumption or benefit changes. There was an experience gain of \$1,890,334 with \$378,067 of that recognized in the current year and in each of the next four years.

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 \$15,382,915. \$3,076,583 of that loss was recognized in the current year and an identical amount will be recognized in each of the next four years. Unrecognized investment gains from prior periods were \$6,378,310 of which \$1,594,577 was recognized as a reduction in pension expense in the current year.

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Experience gains this year created a deferred inflow of resources of \$1,512,267 (Division's share \$332,699). The combination of unrecognized investment losses this year along with unrecognized net investment gains from prior periods results in a deferred outflow of resources as of December 31, 2015 of \$7,522,599 (Division's share \$1,654,972). The table below 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 \$2,834,692 (Division's share \$623,632) at June 30, 2016 for employer contributions made between December 31, 2015 and June 30, 2016.

	erred Outflows Resources	erred Inflows Resources
Differences between expected and actual		
experience	\$ -	\$ 1,512,267
Changes in assumptions	-	-
Net difference between projected and actual		
earnings on pension plan investments	7,522,599	-
Contributions subsequent to measurement date	 2,834,692	 
Total	\$ 10,357,291	\$ 1,512,267

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

Year ended June 30:									
2017 \$	3,938,630								
2018	1,103,939								
2019	1,103,938								
2020	2,698,517								
Thereafter	_								

#### 11. 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

\$1,739,057 (Division's share \$382,593) and \$1,593,350 (Division's share \$334,604), respectively, for the years ended June 30, 2016 and 2015.

#### 12. Other Post-Employment Benefits (OPEB)

The Governmental Accounting Standards Board (GASB) established standards for the measurement, recognition, and reporting of other post-employment benefits (OPEB). OPEB includes post-employment benefits other than pension, which, for KUB, is presently limited to post-employment health care. GASB Statement No. 45 (Statement No. 45) requires the recognition of the accrued OPEB liability for the respective year, plus the disclosure of the total unfunded liability.

KUB currently provides post-employment health care benefits to 585 former employees and 593 covered dependents. The cost of coverage is shared with retirees and beneficiaries. KUB recognizes its share of the cost of post-employment health care benefits as an expense as claims are paid.

KUB amended its Group Health Plan in 1999, eliminating post-employment health care benefits for all employees hired on or after July 1, 1999. As of June 30, 2016, 356 active employees were eligible for individual and dependent coverage at separation. To qualify, the employee must meet the Rule of 80 (age plus years of service) with a minimum of 20 years of service, and be enrolled in medical coverage on their last day.

In May 2006, the State of Tennessee adopted Tennessee Code Annotated, Title 8, Chapter 50, Part 12 authorizing governmental entities to establish Trusts for the purpose of pre-funding their respective OPEB liabilities.

Although Statement No. 45 does not require pre-funding of the liability, KUB has determined that it is in the long-term economic interest of KUB and its ratepayers to establish a Trust to pre-fund KUB's OPEB liability.

Knoxville Utilities Board Other Post-Employment Benefits Trust (the "Trust") is a single-employer Other Post-Employment Benefits Plan established by the Knoxville Utilities Board (KUB) 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 KUB 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.

KUB makes annual contributions to the Trust at an actuarially determined rate. 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.

An actuarial valuation of KUB's Postretirement Benefit Plan was performed for the Trust as of January 1, 2014 for fiscal year June 30, 2015 and January 1, 2015 for fiscal year June 30, 2016. The following table presents the OPEB cost for the year, the amount contributed to the Trust, and changes in the net OPEB obligation for fiscal year ending June 30:

2016		2015
\$ (174,410)	\$	(177,322)
953,221		3,497,372
(13,081)		(14,186)
(16,427)		(17,098)
 956,567		3,500,284
953,221		3,497,372
\$ (171,064)	\$	(174,410)
_	\$ (174,410) 953,221 (13,081) (16,427) 956,567 953,221	\$ (174,410) \$ 953,221 (13,081) (16,427) 956,567 953,221

KUB's annual OPEB cost, the percentage of annual OPEB cost contributed to the Trust, and the net OPEB obligation for fiscal year 2016 and the two preceding years were as follows:

#### **Schedule of Employer Contributions**

Actuarial Valuation Date	/aluation Employer Required		Fiscal Year Actual Contribution	Percentage Contributed	Net OPEB Obligation	
1/1/2012	6/30/2014	3,327,412	4,057,091	121.93%	(177,322)	
1/1/2013	6/30/2015	3,497,372	3,497,372	100.00%	(174,410)	
1/1/2014	6/30/2016	953,221	953,221	100.00%	(171,064)	

Total contributions to the OPEB Trust for the fiscal year ended June 30, 2016 were \$953,221 (Division's share \$209,708). The contribution to the Trust was consistent with the annual required contribution, as determined by the Postretirement Benefit Plan's actuarial valuation as of January 1, 2014, which was \$953,211 (Division's share \$209,708). As of June 30, 2016, the employer's OPEB obligation has been exceeded by \$171,064 (Division's share \$37,634).

The annual required contribution for the fiscal year ending June 30, 2017, as determined by the Plan's actuarial valuation as of January 1, 2015 is \$620,015 (Division's share \$136,403).

The actuarial valuation for the Plan as of January 1, 2016 has been completed. The valuation determined that the Plan's actuarial accrued liability was \$45,118,624 (Division's share \$9,926,097). The actuarial value of the Plan's assets was \$48,510,796 (Division's share \$10,672,375). As a result, the Plan's unfunded actuarial accrued liability was (\$3,392,172) (Division's share (\$746,278)). The Plan's actuarial funded ratio was 108 percent. Due to the future implementation of GASB 75, the contributions made for fiscal year ending June 30, 2018 will be the actuarially determined contribution instead of the annual required contribution and the actuarial cost method used to determine the contributions will change from the projected unit credit cost method to the entry age normal cost method. The actuarially determined contribution for fiscal year ending June 30, 2018 will be zero. See Required Supplementary Information for OPEB Schedule of Funding Progress.

The actuarial valuations dated January 1, 2015 and 2016, which determine the annual required contribution and actuarially determined contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

The required schedule of funding progress immediately following the notes to the financial statements presents multi-year trend information about whether the actuarial value of Trust assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members to that point.

Actuarial calculations reflect a long-term perspective. Consistent with that perspective, actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets.

Identification of actuarial methods and significant assumptions used to determine the annual required contribution for the fiscal year ending June 30, 2016:

<ol> <li>Actuarial cost method</li> </ol>	
II. Actuarial value of assets	

III. Investment return
Projected salary increases

Healthcare cost Trend: Medicare

Non-Medicare

IV. Amortization method

Remaining amortization period

Projected unit credit cost method Smoothed market value with phase-in method using a

smoothing period of 5 years

7.5%, based on the expected portfolio return

N/A

2014 - 2030+, ranging from 4.5% to 7.45% 2014 - 2030+, ranging from 4.5% to 8.75%

Level dollar closed (30-year)

22 years

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.

## 13. 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, 2016 and 2015 are summarized as follows:

	2016	2015
City of Knoxville  Amounts billed by the Division for utilities and		
related services	\$ 1,111,067	\$ 1,013,354
Payments by the Division in lieu of property tax	3,789,989	3,575,461
Payments by the Division for services provided	1,466,961	1,147,555
Other divisions of KUB		
Amounts billed to other divisions for utilities		
and related services provided	290,250	285,944
Interdivisional rental expense	306,304	306,769
Interdivisional rental income	114,197	96,075
Amounts billed to the Division by other divisions		
for utilities services provided	2,911,300	3,002,595

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

	2016	2015	
Accounts receivable	\$ 28,514	\$ 29,056	

#### 14. Other Commitments and Contingencies

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

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

The Consent Decree also required KUB to perform an evaluation of the wet weather performance and capacity of its wastewater treatment plants. In July 2007, KUB submitted a Composite Correction Plan (CCP) for its wastewater treatment plants to EPA for review. The development and filing of the CCP was a requirement of the federal order of February 2005. The CCP includes recommended improvements to KUB's Kuwahee and Fourth Creek treatment plants to address wet weather capacity issues noted in prior assessments. The EPA approved the CCP in January 2009 including a recommended schedule of plant improvements that extends beyond the expiration date of the original Consent Decree. An amendment to the Consent Decree incorporating and establishing this schedule was agreed to by all parties and was entered on June 23, 2009. The purpose of the Amendment is to allow KUB to complete a portion of work outlined in the CCP after the Consent Decree deadline of June 30, 2016. The CCP provides for a

biologically enhanced high-rate clarification (the BEHRC) secondary treatment system to be installed at the Fourth Creek treatment plant by June 30, 2018 and at the Kuwahee treatment plant by June 30, 2021. The total cost of such improvements is estimated to be approximately \$120 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, 2016, the Wastewater Division had issued \$485 million in bonds to fund system capital improvements since the inception of the Consent Decree. The Board previously 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, and three 6 percent rate increases effective October 2014, October 2015 and October 2016. 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 99.5% of manholes and gravity mains, smoke testing 99.9% of 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 334.9 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 82 percent reduction in SSOs.

As of June 30, 2016, the Wastewater Division had completed its twelfth full year under the Consent Decree, spending \$529.5 million on capital investments to meet Consent Decree requirements. During fiscal year 2016, the Wastewater Division incurred \$37.3 million in total expenditures related to Consent Decree requirements, including \$3.3 million for operating costs and \$34 million in capital improvements which included the rehabilitation or replacement of 28 miles of wastewater main. During the fiscal year, \$26.5 million was spent on sewer mini-basin rehabilitation and replacement. Trunk line rehabilitation and replacement accounted for \$2 million of capital expenditures, while pump station improvements accounted for \$4.6 million.

# Knoxville Utilities Board Wastewater Division Required Supplementary Information – Schedule of Funding Progress June 30, 2016 (Unaudited)

# **Other Post-Employment Benefits (OPEB)**

Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Actuarial Accrued Liability (UAAL) (b-a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b)-(a)]/(c)	
January 1, 2008	\$ -	\$ 108,329,141	\$ 108,329,141	0%	\$ 31,234,509	346.8%	
January 1, 2009	14,593,487	100,726,738	86,133,251	14%	31,846,091	270.5%	
January 1, 2010	21,275,643	58,475,364	37,199,721	36%	30,069,028	123.7%	
January 1, 2011	40,749,815	64,289,254	23,539,439	63%	28,878,791	81.5%	
January 1, 2012	37,907,357	61,603,466	23,696,109	62%	28,269,123	83.8%	
January 1, 2013	38,571,803	63,341,531	24,769,728	61%	27,566,340	89.9%	
January 1, 2014	43,409,955	46,889,808	3,479,853	93%	26,724,154	13.0%	
* January 1, 2015	47,705,478	47,745,640	40,162	100%	25,816,884	0.2%	
* January 1, 2016	48,510,796	45,118,624	(3,392,172)	108%	25,243,127	(13.4%)	

<sup>\*</sup> The actuarial valuations dated January 1, 2015 and 2016, which determine the annual required contribution for future fiscal years ending June 30, 2017 and 2018, have not been audited.

# **Knoxville Utilities Board Wastewater Division**

Required Supplementary Information – Schedule of Changes in Net Pension Liability and Related Ratios

June 30, 2016 (Unaudited)

		Year ended Dec	cember 31 2014
Total pension liability			
Service cost	\$	4,157,062 \$	4,092,808
Interest		14,812,784	14,698,657
Differences between expected and actual experience		(1,890,334)	-
Benefit payments, including refunds of member contributions		(15,350,926)	(15,533,167)
Net change in total pension liability		1,728,586	3,258,298
Total pension liability - beginning		202,773,764	199,515,466
Total pension liability - ending (a)	\$	204,502,350 \$	202,773,764
Plan fiduciary net position			
Contributions - employer	\$	5,991,887 \$	5,908,541
Contributions - participants	Ψ	487,546	475,854
Net investment income		(95,430)	22,292,369
Other additions		30,879	29,733
Benefit payments, including refunds of member contributions		(15,274,926)	(15,405,167)
Administrative expense		(397,160)	(378,085)
Death benefits		(76,000)	(128,000)
Net change in plan fiduciary net position**		(9,333,204)	12,795,245
Plan fiduciary net position - beginning**		208,795,394	196,000,149
Plan fiduciary net position - ending (b)**	\$	199,462,190 \$	208,795,394
Plan's net pension liability - ending (a) - (b)	\$	5,040,160 \$	(6,021,630)
Plan fiduciary net position as a percentage of the total		σ,σ.εσ,.σσ. φ	(0,021,000)
pension liability		97.54%	102.97%
Covered-employee payroll	\$	50,679,585 \$	50,246,074
Plan's net pension liability as a percentage of	*	, - : -,	,
covered-employee payroll		9.95%	(11.98%)

#### **Notes to Schedule:**

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

<sup>\*\*</sup> Excludes amounts related to 401(k) matching contributions.

## **Knoxville Utilities Board Wastewater Division**

Required Supplementary Information – Schedule of Employer Pension Contributions
June 30, 2016
(Unaudited)

	Year ended D	ecember 31
	2015	2014
Annual required contribution  Contribution in relation to the annual	\$ 5,991,887 \$	5,908,541
required contribution	5,991,887	5,908,541
Contribution deficiency	\$ - \$	-
Covered-employee payroll Contributions as a percentage of	\$ 50,679,585 \$	50,246,074
covered-employee payroll	11.82%	11.76%

#### Notes to Schedule:

Valuation Dates: January 1, 2013 and January 1, 2014

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: Individual entry age
Asset valuation method: 5-year smoothed market

Amortization method: Level dollar closed period with 28 years remaining as of January 1, 2013

and 27 years remaining as of January 1, 2014.

Discount rate: 8% at January 1, 2013 and 7.5% at January 1, 2014

Salary increases: From 2.58% to 7.92% for January 1, 2013 and from 2.8% to 5.15% for

January 1, 2014, based on years of service

Mortality: Sex distinct RP-2000 Combined Mortality projected to 2018 using Scale AA

for the Janaury 1, 2013 valuation. Sex distinct RP-2000 Combined Mortality

projected to 2024 using Scale AA for the January 1, 2014 valuation.

Inflation: 2.8 percent

<sup>\*</sup> 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 Wastewater Division Supplemental Information - Schedule of Insurance in Force June 30, 2016

(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), and OPEB Trust funds. 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 \$400,000 per individual participant.

# Knoxville Utilities Board Wastewater Division Supplemental Information – Schedule of Debt Maturities by Fiscal Year June 30, 2016 (Unaudited)

Schedule 2

## Continued on Next Page

_	200	05B	2008	8		2010		2010C			2012A	
FY	Principal	Interest	Principal	Interest	Principal	Interest	Rebate*	Principal	Interest	Rebate*	Principal	Interest
16-17	1,470,000	620,185	4,600,000	327,500		1,910,000	668,500	1,400,000	3,634,545	1,272,090	840,000	551,425
17-18	1,525,000	561,385	1,950,000	97,500		1,910,000	668,500	1,500,000	3,584,425	1,254,548	985,000	528,325
18-19	1,595,000	498,860	.,,	01,000		1,910,000	668,500	1,550,000	3,525,625	1,233,968	970,000	498,775
19-20	1,655,000	433,066				1,910,000	668,500	1,600,000	3,460,990	1,211,346	950,000	467,250
20-21	1,725,000	363,556				1,910,000	668,500	1,650,000	3,394,270	1,187,994	1,085,000	434,000
21-22	1,800,000	290,244				1,910,000	668,500	1,700,000	3,325,465	1,163,912	1,175,000	390,600
22-23	1,880,000	212,844				1,910,000	668,500	1,750,000	3,246,925	1,136,424	1,165,000	343,600
23-24	695,000	130,594				1,910,000	668,500	1,850,000	3,162,575	1,106,902	1,250,000	297,000
24-25	730,000	100,188				1,910,000	668,500	1,950,000	3,065,450	1,072,908	1,140,000	247,000
25-26	765,000	68,250				1,910,000	668,500	2,375,000	2,961,125	1,036,394	1,190,000	201,400
26-27	795,000	34,781				1,910,000	668,500	2,500,000	2,830,738	990,758	1,235,000	153,800
27-28	,	- , -				1,910,000	668,500	2,600,000	2,688,488	940,970	1,280,000	104,400
28-29						1,910,000	668,500	2,725,000	2,536,388	887,736	1,330,000	53,200
29-30						1,910,000	668,500	2,850,000	2,376,975	831,942	,,	,
30-31						1,910,000	668,500	2,975,000	2,210,250	773,588		
31-32						1,910,000	668,500	3,100,000	2,031,750	711,112		
32-33						1,910,000	668,500	3,250,000	1,845,750	646,012		
33-34						1,910,000	668,500	3,375,000	1,650,750	577,762		
34-35						1,910,000	668,500	3,550,000	1,448,250	506,882		
35-36						1,910,000	668,500	3,700,000	1,235,250	432,338		
36-37						1,910,000	668,500	3,875,000	1,009,550	353,342		
37-38						1,910,000	668,500	4,050,000	773,175	270,612		
38-39						1,910,000	668,500	4,225,000	526,125	184,144		
39-40						1,910,000	668,500	4,400,000	268,400	93,940		
40-41						1,910,000	668,500					
41-42						1,910,000	668,500					
42-43					10,000,000	1,910,000	668,500					
43-44					10,000,000	1,260,000	441,000					
44-45					10,000,000	630,000	220,500					
45-46												
46-47												
47-48												
48-49												
49-50												
Total :	\$ 14,635,000	3,313,953 \$	6,550,000 \$	425,000 \$	30,000,000 \$	53,460,000 \$	18,711,000 \$	64,500,000 \$	56,793,234 \$	19,877,624	14,595,000 \$	4,270,775

<sup>\*</sup>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, 2015 these bonds became subject to a 6.8% 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.

# Knoxville Utilities Board Wastewater Division Supplemental Information – Schedule of Debt Maturities by Fiscal Year June 30, 2016 (Unaudited)

Schedule 2

## **Continued from Previous Page**

	20	12B	201	3A	A 2014		14A 2015A		2015B		т	OTALS	Grand Total (P + I)	Grand Total (Less Rebates)
FY	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest		
16-17	975,000	1,916,563	620,000	3,551,100	450,000	1,086,119	125,000	5,115,762	450,000	1,141,938	10,930,000	19,855,137	30,785,137	28,844,547
17-18	1,000,000	1,904,375	635,000	3,538,700	475,000	1,077,119	2,835,000	5,109,512	475,000	1,128,438	11,380,000	19,439,779	30,819,779	28,896,731
18-19	1,050,000	1,891,871	660,000	3,513,300	475,000	1,058,119	5,010,000	4,967,762	500,000	1,104,688	11,810,000	18,969,000	30,779,000	28,876,532
19-20	1,100,000	1,878,750	685,000	3,486,900	500,000	1,039,119	5,305,000	4,717,262	525,000	1,079,688	12,320,000	18,473,025	30,793,025	28,913,179
20-21	1,150,000	1,862,250	710,000	3,459,500	525,000	1,019,119	5,460,000	4,452,012	525,000	1,063,938	12,830,000	17,958,645	30,788,645	28,932,151
21-22	1,200,000	1,804,750	740,000	3,431,100	550,000	998,119	5,675,000	4,179,012	550,000	1,042,938	13,390,000	17,372,228	30,762,228	28,929,816
22-23	1,250,000	1,744,750	770,000	3,401,500	575,000	981,619	6,005,000	3,895,262	575,000	1,020,936	13,970,000	16,757,436	30,727,436	28,922,512
23-24	1,300,000	1,694,750	4,600,000	3,370,700	600,000	964,369	3,720,000	3,595,012	600,000	997,938	14,615,000	16,122,938	30,737,938	28,962,536
24-25	1,375,000	1,642,750	4,900,000	3,232,700	625,000	946,369	3,785,000	3,483,412	625,000	973,938	15,130,000	15,601,807	30,731,807	28,990,399
25-26	1,425,000	1,587,750	5,040,000	3,085,700	650,000	927,619	1,425,000	3,369,864	650,000	955,188	13,520,000	15,066,896	28,586,896	26,882,002
26-27	1,500,000	1,530,750	5,200,000	2,934,500	700,000	908,119	1,490,000	3,323,550	675,000	935,688	14,095,000	14,561,926	28,656,926	26,997,668
27-28	1,575,000	1,470,750	6,305,000	2,778,500	725,000	880,119	1,405,000	3,271,400	700,000	915,438	14,590,000	14,019,095	28,609,095	26,999,625
28-29	1,625,000	1,423,500	6,535,000	2,573,588	750,000	851,119	1,450,000	3,222,226	725,000	887,438	15,140,000	13,457,459	28,597,459	27,041,223
29-30	1,700,000	1,374,750	8,315,000	2,377,538	775,000	821,119	1,455,000	3,178,726	775,000	858,438	15,870,000	12,897,546	28,767,546	27,267,104
30-31	1,775,000	1,323,750	8,550,000	2,128,088	825,000	790,119	1,515,000	3,135,076	800,000	827,436	16,440,000	12,324,719	28,764,719	27,322,631
31-32	1,875,000	1,270,500	8,840,000	1,871,588	850,000	757,119	1,520,000	3,089,626	825,000	795,436	17,010,000	11,726,019	28,736,019	27,356,407
32-33	1,950,000	1,214,250	9,120,000	1,606,388	900,000	723,119	1,580,000	3,042,125	850,000	762,436	17,650,000	11,104,068	28,754,068	27,439,556
33-34	2,025,000	1,155,750	9,390,000	1,332,788	925,000	687,119	1,635,000	2,992,750	900,000	733,750	18,250,000	10,462,907	28,712,907	27,466,645
34-35	2,125,000	1,095,000	9,705,000	1,015,875	975,000	650,119	1,690,000	2,939,612	925,000	703,375	18,970,000	9,762,231	28,732,231	27,556,849
35-36	2,225,000	1,031,250	10,025,000	688,331	1,025,000	611,119	1,750,000	2,884,688	975,000	671,000	19,700,000	9,031,638	28,731,638	27,630,800
36-37	2,325,000	964,500	10,370,000	349,988	1,075,000	570,119	1,825,000	2,827,812	1,000,000	632,000	20,470,000	8,263,969	28,733,969	27,712,127
37-38	2,425,000	894,750			500,000	527,119	13,420,000	2,768,500	500,000	592,000	20,895,000	7,465,544	28,360,544	27,421,432
38-39	2,550,000	822,000			500,000	507,119	13,895,000	2,298,800	500,000	572,000	21,670,000	6,636,044	28,306,044	27,453,400
39-40	2,650,000	745,500			500,000	488,994	14,480,000	1,743,000	500,000	552,000	22,530,000	5,707,894	28,237,894	27,475,454
40-41	2,775,000	666,000			1,175,000	470,869	15,130,000	1,236,200	1,100,000	532,000	20,180,000	4,815,069	24,995,069	24,326,569
41-42	2,900,000	582,750			1,225,000	428,275	15,775,000	631,000	1,150,000	488,000	21,050,000	4,040,025	25,090,025	24,421,525
42-43	3,025,000	495,750			1,300,000	382,950			1,200,000	442,000	15,525,000	3,230,700	18,755,700	18,087,200
43-44	3,150,000	405,000			1,350,000	334,850			1,250,000	394,000	15,750,000	2,393,850	18,143,850	17,702,850
44-45	3,300,000	310,500			1,400,000	284,900			1,300,000	344,000	16,000,000	1,569,400	17,569,400	17,348,900
45-46	3,450,000	211,500			1,475,000	233,100			1,350,000	292,000	6,275,000	736,600	7,011,600	7,011,600
46-47	3,600,000	108,000			1,550,000	178,525			1,400,000	238,000	6,550,000	524,525	7,074,525	7,074,525
47-48		,			1,600,000	121,175			1,450,000	182,000	3,050,000	303,175	3,353,175	3,353,175
48-49					1,675,000	61,975			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	\$ 62,350,000	\$ 37,025,059	\$ 111,715,000	\$ 53,728,372	\$ 29,200,000	\$ 22,366,850	129,360,000	\$ 85,469,963	\$ 29,425,000	\$ 24,047,063	\$ 492,330,000	\$ 340,900,269	\$ 833,230,269	794,641,645

\*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, 2015 these bonds became subject to a 6.8% 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.

# Knoxville Utilities Board Wastewater Division Supplemental Information – Schedule of Current Rates in Force June 30, 2016 (Unaudited)

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:					
mside Oily fale	Commodity Charge					
	First	2	100 Cubic Feet Pe	er Month at \$0.70 Per 100 Cubic Feet		
Over 2 100 Cubic Feet Per Month at \$8.70 Per 100 Cubic Feet				r Month at \$8.70 Per 100 Cubic Feet		
Additional Monthly Customer Charge						
		_	/8" meter \$ 1" meter /2" meter 2" meter	26.00 41.00 53.00 73.00		
Non-Residential Inside City rate						
	First		v Month at 60 00 Par 400 Cubic Foot			
	Next	2 8		er Month at \$0.80 Per 100 Cubic Feet er Month at \$10.45 Per 100 Cubic Feet		
	Next 90 100 Cubic Feet Per Month at \$9.35 Per 100 Cubic Feet  Next 90 100 Cubic Feet Per Month at \$9.35 Per 100 Cubic Feet  Next 300 100 Cubic Feet Per Month at \$8.00 Per 100 Cubic Feet					
	Next 4,600 100 Cubic Feet Per Month at \$6.50 Per 100 Cubic Feet					
	Next 5,000 100 Cubic Feet Per Month at \$4.30 Per 100 Cubic Feet					

Schedule 3

# Knoxville Utilities Board Wastewater Division Supplemental Information – Schedule of Current Rates in Force June 30, 2016

(Unaudited) Schedule 3

#### **Additional Monthly Customer Charge**

5/8" meter	\$ 26.00
1" meter	41.00
1 1/2" meter	53.00
2" meter	73.00
3" meter	130.00
4" meter	212.00
6" meter	453.00
8" meter	787.00
10" meter	1,193.00
12" meter	1,757.00

# Knoxville Utilities Board Wastewater Division Supplemental Information – Schedule of Current Rates in Force June 30, 2016 (Unaudited)

Rate Class	Base Charge					Number of Customers
Residential Outside City rate	For wastewater of the City of Kr	7,670				
Outside Oily rate	of the Oity of Ri	loxville.				
	First Over	2 2			r Month at \$0.85 Per 100 Cubic Feet r Month at \$9.30 Per 100 Cubic Feet	
			5/8" meter 1" meter 1/2" meter 2" meter	\$	30.00 44.00 61.00 81.00	
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					507
	First Next Next Next Next Next	2 8 90 300 4,600 5,000	100 Cubic I 100 Cubic I 100 Cubic I 100 Cubic I	eet Pe eet Pe eet Pe eet Pe	r Month at \$0.95 Per 100 Cubic Feet r Month at \$11.55 Per 100 Cubic Feet r Month at \$10.25 Per 100 Cubic Feet r Month at \$8.75 Per 100 Cubic Feet r Month at \$7.30 Per 100 Cubic Feet r Month at \$4.80 Per 100 Cubic Feet	

Schedule 3

# Knoxville Utilities Board Wastewater Division Supplemental Information – Schedule of Current Rates in Force June 30, 2016

(Unaudited) Schedule 3

#### **Additional Monthly Customer Charge**

5/8" meter	\$	30.00
1" meter		44.00
1 1/2" meter		61.00
2" meter		81.00
3" meter		147.00
4" meter		235.00
6" meter		497.00
8" meter		866.00
10" meter	1	,308.00
12" meter	1	1,930.00



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

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

#### **Report on the Financial Statements**

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, 2016, 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 27, 2016.

#### **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 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 that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control 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 27, 2016