

MILGW

Hands on Memphis



2017 Annual Report
Memphis Light, Gas and Water Division

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About MLGW

No one in Memphis and Shelby County starts their day without us. Whether they're slapping the snooze button on their alarm clock, waiting for that first burst of water from their shower or breathing in the aroma of bacon cooking on a gas stove, MLGW is there for its nearly 430,000 customers.

Since 1939, Memphis Light, Gas and Water Division is the nation's only full-service municipal utility company.



Our Suppliers

The Tennessee Valley Authority provides MLGW with wholesale electricity. MLGW is TVA's largest customer, representing about 11 percent of TVA's total load. MLGW buys its natural gas from a variety of suppliers. It is transported by three pipeline companies – Texas Gas Transmission Corp., Trunkline Gas Co. and ANR Pipeline Co. Memphis receives its water from the Memphis Sand and Fort Pillow aquifers which is one of the largest artesian water systems in the world.

Our Leaders

The president and a seven-member Board of Commissioners leads MLGW. Board members serve staggered terms. Two board members, who live outside of Memphis but within Shelby County, serve in an advisory, non-voting capacity. The Memphis mayor appoints the president and the board members with the approval of the Memphis City Council.

MLGW Board of Commissioners

Chairman **Steve Wishnia**

Vice Chair **Carlee McCullough, Esq.**

Leon Dickson Sr.

Mitch Graves

Derwin Sisnett



Advisory Board Members

Dwain Kicklighter

Kevin Young



MLGW Senior Leadership Council

President and CEO **Jerry R. Collins Jr.**

Vice President of Customer Care **Christopher Bieber**

Vice President of Human Resources **Von Goodloe**

Vice President, CFO and Secretary-Treasurer **Dana Jeanes**

Vice President of Construction and Maintenance **Nicholas Newman**

Vice President and General Counsel **Cheryl Patterson**

Vice President and Chief Technology Officer **Lashell Vaughn**

Vice President of Engineering and Operations **Alonzo Weaver III**

Director of Corporate Communications **Gale Jones Carson**

Director of Analysis, Strategy and Performance **Clifford DeBerry**

Director of Internal Audit **Les Walton**

Controller **Roland McElrath**

Jarl “J.T.” Young became MLGW’s new President and CEO in March 2018. He is the 11th president to lead the utility. Prior to assuming his responsibilities at MLGW, he served as Gulf Power Company’s Customer Service and Marketing General Manager. His diverse utility background includes experience in engineering, customer service, marketing, sales, risk management, information technology, finance and supply chain management.



Jerry R. Collins Jr. served as President and CEO until January 31, 2018 when he retired after 10 years of service. During his tenure, Collins saw that MLGW maintained the lowest combined utility rates in the country for five consecutive years.

Under his leadership, MLGW expanded its Share the Pennies program which should raise about \$1.5 million annually to help more people make their homes energy efficient. He also started MLGW's largest capital improvement project with the \$240 million rollout of smart meters which remains on track, under budget and will likely wrap up ahead of its 2020 deadline.

Collins also initiated the Rental Ordinance program, a measure to ensure landlords make weatherization repairs.





Hands on Memphis in 2017

Memphis Light, Gas and Water Division remains in good shape for 2017. MLGW contained costs and kept its electric and gas rates steady again with no local rate increases for the year. The last time MLGW raised rates was in 2004 for electricity, 2008 for gas and 2016 for water.

We strive to provide the highest quality of services to our customers while maintaining the lowest combined rates of any utility in the country.

In 2017, MLGW completed about \$193 million in capital projects by improving our electrical substations, upgrading our water pumping stations and replacing more of our cast iron gas lines. By adding more smart switches to existing utility poles, MLGW can now remotely switch to a nearby working circuit when one goes down. In addition, MLGW is upgrading electrical circuits to pumping stations, hospitals and other emergency services and using smaller pole-hauling equipment so our crews can restore power quicker. All of these efforts are geared toward providing our customers with greater reliability.

Our financial position remains strong with relatively modest debt. That strength is reflected in MLGW's strong credit ratings and healthy funding ratio relative to its Pension and Other Post-Employment Benefit (OPEB) Plan.

As a Division of the City of Memphis, MLGW provided about \$70 million in payments in lieu of property taxes to city and county governments.

Every day, our goal is to provide high quality, reliable service to our customers in a cost-effective and efficient manner. That is what our customers expect and what we strive to deliver.

Smart Meters Helping Our Customers

MLGW's \$240 million smart meter project is ticking along and ahead of schedule.

In 2017, contractors finished installing all residential electric meters. MLGW expects to wrap up gas and water residential connections by late 2018. Industrial and commercial meters will be completed by 2019.

In 2017, residential customers with smart meters saved \$1.75 million in connection/reconnection fees alone.

As customers switched to smart meters, MLGW has reduced utility theft. When someone tampers with a smart meter now, an alert is sent to MLGW immediately. The money MLGW saves from utility theft keeps the rates low for all customers.

As a part of the rollout and as a one-time opportunity, MLGW inspected all electric meter sockets before installation and repaired or replaced over 2,000 sockets at no cost to the customer. Similar to an electrical socket in your home, the smart meter plugs into the socket. It is the homeowner's responsibility when one needs replacing or repairing.

MLGW also has sent 30,000 letters to customers with potential water leaks. We heard from many of our customers who appreciated the new service. People like Mary Campbell of Memphis who wrote:

"I can't tell you enough how pleased my husband and I are with our smart meter!

Last week we received an unexpected letter from MLGW, telling us that, according to our meter, our water usage had spiked and it showed that it was continually running.

We immediately checked all our bathrooms, and found that one that we rarely use was, indeed, running all the time. My husband quickly solved the problem.

We travel a lot and could easily have gone off without noticing the defective toilet. We want to thank you for your proactive stance on water conservation that saved us from a larger problem."





You don't even have to open your gate!

Smart meters let you keep your property safe and your pets happy.



Now you control your utilities.





Helping Us with Better Drinking Water: Replacing Lead Service Water Lines

In 2017, MLGW embarked on a \$60 million, 10-year goal of replacing its lead service lines.

MLGW inspected about 20,500 water lines in 2017. Of those inspections, the crews found about 17 percent of the service lines were lead. Almost 950 lead water lines were replaced.

When distribution mains are replaced, MLGW notifies customers and provides each household with filtered water pitchers for use when work is done in their neighborhoods. Although MLGW uses a corrosion control program that inhibits lead in the water, the use of the filter pitcher is a precautionary step. Water experts believe a temporary rise in lead levels may occur within three months of work that disturbs a lead water line.

It is just one of the ways MLGW is bringing a level of comfort and reassurance to our water customers.





Helping Hands within Our Business Community

Since 1939, MLGW has been helping local businesses grow. When local companies grow, it enhances the economic prosperity for the Memphis area.

In 2017 MLGW celebrated 20 years of making sure everyone has a chance to do business with us through our Supplier Diversity program. Of the \$242 million the Division spent in 2017 for goods, supplies and services, 31 percent – or \$75.4 million – went to companies owned by minorities and women or local small businesses. The program is aimed at connecting minority, women and locally-owned small businesses with the goods and services that MLGW buys.

Helping Hands In Our Community

Whether it is lending a helping hand through community service projects or reaching into our wallets, MLGW is there.

We live, eat, work, play and volunteer here. Among MLGW's 2017 helping hand highlights:

- Raising just over \$600,000 for United Way and over \$37,000 for Operation Feed
- Adopting 100 children and seniors through the local Salvation Army's Adopt-an-Angel program
- Partnering with the Tennessee Valley Authority and its \$1 million weatherization pilot for 125 homes
- Working with former Memphis Grizzlies player Zach Randolph who donated \$20,000 for the Plus-1 program and helps pay for one-time utility assistance for families in crisis
- Preserving the location of Memphis sanitation strike organizer's "I Am A Man" home during MLGW's expansion of its North Service Center



Rental Ordinance Helps Tenants with Energy Repairs

Jan Harris* was fed up with her broken down house with no heat, no hot water, a broken toilet, a leaky roof and mold in her bedrooms.

Harris was among the 45 customers who called and got the help she needed through MLGW's Rental Ordinance Hotline. The ordinance allows MLGW to take landlords to court, if necessary, if they refuse to make such energy draining repairs such as water leaks, broken HVAC units and leaky roofs.

Harris called MLGW energy technician Vidale Cothran, her "best partner. If it wasn't for him, we wouldn't have heat."

Cothran said the homeowner fixed the HVAC unit, replaced the toilet and hot water heater and repaired the roof.

This is just one of the ways MLGW improves the lives of dozens of our customers each year. Inspecting rental homes is an important role we play in our community. We want to ensure that our customers' basic energy needs are being met.

**This is a pseudonym. The renter did not want to be identified.*



Helping Hands Through the Storm

Mother Nature added sizzle to our 2017 Memorial Day weekend. The May 27 storm rocked our world. Straight line winds reaching up to 105 mph plowed through some of our communities and left 188,000 customers without power.

The Tom Lee storm ranks as the third largest power disaster in MLGW's history.

In less than 72 hours after the storm hit, MLGW had the lights back on to 124,000 homes.

In just 10 days, MLGW – with the help of 101 contract electrical crews from East Tennessee, North Carolina and Ohio and 78 tree trimming crews – restored power to the rest of our customers. In all, about 200 linemen accomplished that herculean task by working 16-hour days.

Our workers even put MLGW's customers first – before their own individual disasters.

As a warehouse material handler, MLGW's Ronnie Thomas was at work making sure electrical supplies were ready when the straight line winds hit Memphis. The winds pushed a large oak onto his two-story home and split the structure in half. His wife was trapped in the debris for three hours. When rescuers arrived, they could only see her hand. She was shaken and bruised but escaped serious injury. Except for a few days getting his family resettled, Thomas returned to work putting in 16-hour days.

Our customers noticed our sacrifices when we left our own families in the dark to make sure the lights were on elsewhere. This is a sample of their social media posts:

Sherman Pruitt: @MLGW My Power Back On J I'm Doing the happy Dance.! I want 2 Give a Big Thanks To #MLGW & to the Other Workers.!

Jacob Klaven: And on the seventh day, @MLGW said let there be lights, AC, and wifi. And there was. And it was good.





Tom Lee Storm by the Numbers

- Third largest storm in MLGW's history
- 105 mph winds
- 680 trees fell in Memphis
- 1,000 homes damaged in Memphis
- 188,000 customers without power
- 288,000 customer calls logged in during the storm and its aftermath
- \$16.9 million in storm expenses eligible for federal aid sought by MLGW from a county-wide total of \$22.5 million



Helping Hands Away from Home

In September 2017, Hurricane Irma slammed Florida. Before the Category 5 hurricane reached central Florida, officials at the publicly-owned Gainesville Regional Utilities asked MLGW for assistance.

A dozen MLGW linemen and a lone mechanic rode out of Memphis in advance of Irma's reaching landfall.

The MLGW crews were among the estimated 50,000 out-of-state utility workers who helped restore power in the Sunshine state. Twelve inches of rain and winds of up to 70 miles per hour tore through Gainesville, flooding homes and streets, toppling trees and knocking out power to 30,000 residents. As the linemen rolled into Gainesville late that night on Sept. 11 after their 757-mile journey, MLGW's Todd Carr with Electric Distribution looked back at the interstate traffic with pride.

"There was over two miles of blinking yellow lights behind us of linemen coming into Florida," he said. "I have never seen that many linemen altogether headed to work before."

For the next 12 days, MLGW crews worked 16-hour days from 5 a.m. to 9 p.m. restoring power. It is what MLGW does here and elsewhere. We help our utility neighbors in times of need.



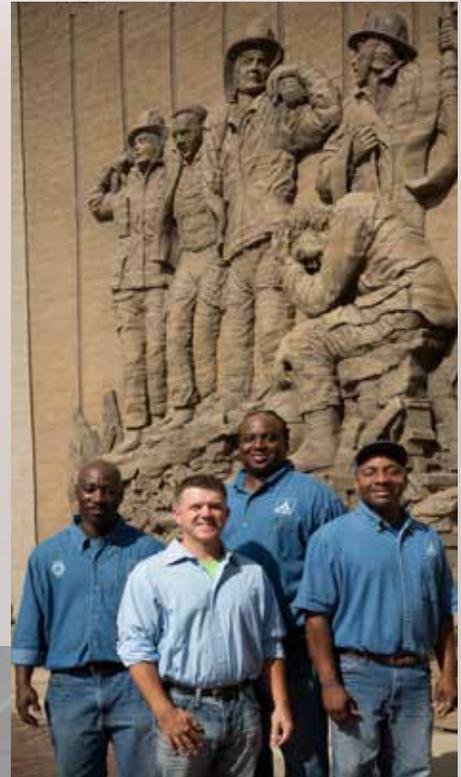
Hero Hands:

Crew Rescues Woman from House Fire

On a bitter cold December morning in 2016, a MLGW gas crew saw smoke billowing from the roof of a small wood-frame home in Memphis. The men yelled for the homeowner to no avail.

As they ran to the back, they found an elderly woman in her housecoat trying to re-enter her home through a window. Tracey Baldwin, Benjamin Rye, Montero Evan and Tyree Reaves stayed with the woman until the Memphis Fire Department and family members arrived.

Their efforts earned them a 2017 Hero Award by MLGW's Board of Commissioners. MLGW is proud of our heroes who are always thinking of our customers first.



L to R: Tyree Reaves, Benjamin Rye, Montero Evans and Tracey Baldwin



Hands Above the Rest

In 2017, MLGW celebrated its many successes. State and national officials and organizations recognized MLGW for its efforts related to cybersecurity, energy efficiency, clean air contributions and strong financial strength.

Cybersecurity

Keeping our customers electronic data secure is vital to us. *Security Magazine* recognized MLGW for its industry practices in data leadership and management. When the publication issued its top 500 rankings, MLGW ranked among the top 30 utilities in the country.



Energy Efficiency

Because more and more of our local businesses are cashing in on energy efficiency measures, the Tennessee Valley Authority honored MLGW in 2017 with its Top Performer Award. More than 400 businesses switched to LED lights in their stores and warehouses, along with other measures, and reduced their energy usage by 26 million kilowatts.



The Environmental Protection Agency also ranked Memphis in the top 10 mid-sized cities with the most Energy Star certified buildings with superior energy efficiency.

Clean Air Contributions

Likewise, the state of Tennessee honored MLGW for its clean air contributions with a 2017 Sustainable Transportation award. As the state grapples with reducing emissions, MLGW is doing its part in a city known as America's Distribution Center.



Financial Ratings

For years, MLGW has watched its bottom line. The bond market has taken notice of MLGW's efforts. When MLGW issued over \$150 million in bonds across its utility divisions, it rated MLGW as a high-quality and sound investment.

For the second year in a row, MLGW's Water Division garnered its highest rating by Standard & Poor's with an AAA credit rating and Aa1 by Moody's Investors Service. Very few utilities achieve a Triple A rating. The Electric Division was rated AA and Aa2, and the Gas Division received AA- and Aa1 from S&P's and Moody's, respectively.

2017 Revenues and Expenses

The total operating and capital budget for this year was \$1.9 billion. Almost \$1.1 billion was spent for buying electrical power from TVA and natural gas.

Where does your utility dollar go?

For every dollar paid to MLGW, 67 cents buys electrical power and natural gas. This is where the rest of your dollar goes:



- 67 cents — Electrical power and natural gas purchases
- 23 cents — Operations/Maintenance
- 5 cents — Depreciation
- 5 cents — Payment In Lieu of Taxes

Where do the revenues come from?

- Electric: \$1.2 billion
- Gas: \$226 million
- Water: \$101 million



Letter of Transmittal

MEMPHIS LIGHT, GAS AND WATER DIVISION

To the Board of Commissioners and Valued Stakeholders:

I am pleased to submit the Annual Report of Memphis Light, Gas and Water Division (MLGW) for the fiscal year ending on December 31, 2017, as required by the Charter Provisions of the City of Memphis (City) creating Memphis Light, Gas and Water Division. This report has been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) for proprietary funds of governmental entities.

Responsibility for the accuracy and presentation of the information provided is the full responsibility of the management of MLGW. Disclosures necessary to assist the reader in understanding of the financial statements have been included.

MLGW's financial statements have been audited by Mayer Hoffman McCann P.C., licensed certified public accountants. The goal of the independent audit was to provide reasonable assurance that the financial statements of MLGW for the fiscal year ending on December 31, 2017 are free from material misstatement. The audit involved performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements; evaluating the appropriateness of accounting policies used and the reasonableness of significant estimates made by management; and evaluating the overall financial statement presentation.

The independent auditors concluded, based upon the audit, that there was a reasonable basis for rendering an unmodified opinion that MLGW's financial statements for the fiscal year ending on December 31, 2017 are fairly presented in conformity with GAAP. The independent auditor's report is presented as the first component of the financial section of the report.

GAAP requires that management provide a narrative introduction, overview and analysis to accompany the basic financial statements in the form of a Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. MLGW's MD&A can be found immediately following the auditor's report.

Profile of the Government – MLGW was created by an amendment to the City Charter by Chapter 381 of the Private Acts of the General Assembly of Tennessee, adopted March 9, 1939, as amended (the "Private Act"). MLGW operates three separate utilities, as divisions, providing electricity and gas in the City and Shelby County. Water service is provided by MLGW in the City, and together with other municipal systems, in Shelby County.

Each division operates as a separate entity for accounting and financial purposes in accordance with the Private Act. For economic reasons, activities common to all three divisions are administered jointly and costs are prorated monthly among the divisions. A 1981 amendment to the City Charter permits forming additional divisions to provide other energy services.

MLGW controls the administration of its activities and business affairs. It operates independently, manages its own finances and is responsible for obligations incurred in such operations, including indebtedness payable from operations of the Division. MLGW must have the City Council's approval for its annual budget and also before incurring certain obligations, including purchasing real estate and exercising the right of eminent domain.

MLGW is managed by a Board of Commissioners, which consists of five members nominated by the Mayor and approved by the City Council and two advisory, non-voting members which were added in 2017. The Board is responsible for supplying the Division's service areas with electricity, gas and water. Board members serve staggered terms of three years each. Every two years, the Board elects a Chairman and a Vice Chair, whose terms begin January 1. Board members continue to serve until a new board member is appointed by the Mayor and confirmed by the City Council.

The daily operations of MLGW are managed by the President and Chief Executive Officer, who is nominated for a five-year term by the Mayor and approved by the City Council. Under the Private Act, the President generally supervises MLGW's operations and its officers and employees.

Local Economy – Memphis sits on the banks of the Mississippi River in the southwestern corner of Tennessee. The Bluff City ranks as the second largest city in the state and the 25th largest in the nation with a population of 668,228. In Greater Memphis today, there is more than \$13 billion in recent, current and future development. St. Jude Children's Research Hospital is embarking on a billion-dollar expansion. The city's unemployment rate recently hit a 27-year low, and about 12,000 more people are working today when compared to just a few years ago.

Three Fortune 500 world headquarters – FedEx, International Paper and AutoZone – call Memphis home. In addition, Nike, Hilton, Coca-Cola and Medtronic have major offices or distribution facilities in Memphis. Memphis was recently named as the Number 1 city in America for black businesses. In 2017, an Urban Land Institute study ranked Memphis fourth among U.S. cities where millennials are moving.

MLGW has a major impact on the local economy. Of the \$242 million the Division spent in 2017 for goods, supplies and services, 31 percent – or \$75.4 million – went to companies owned by minorities and women or local small businesses. For the fifth consecutive year, MLGW has the lowest combined residential rates for electric, gas and water among 25 major metropolitan cities. All three Divisions earned excellent credit ratings from Standard and Poor's and Moody's. The rankings saw MLGW as a reliable and stable financial investment.

National Economy – According to the Bureau of Economic Analysis, a division of the U.S. Department of Commerce, real gross domestic product (GDP), a key indicator of economic growth, increased 2.3 percent, compared with 1.5 percent growth in 2016. Increases in consumer spending, residential investment, local, state and federal government spending and exports contributed to the GDP's growth in 2017.

Financial Policies and Major Initiatives – MLGW maintains a comprehensive cash flow model which assesses the growth of the separate divisions and determines future rate increase and debt issuance requirements. MLGW also incorporates a five-year capital plan in its budgeting process. MLGW's Electric, Gas and Water Engineering Departments develop detail technical master plans for their respective systems which are then correlated with the financial plan.

In 2017 MLGW invested over \$193 million in capital assets and system infrastructure. In May, significant straight line winds inflicted major damage to the electric system leaving 188,000 customers without power. MLGW worked to restore power at a cost of almost \$17 million. Due to the declared disaster, federal funding was made available to assist with the recovery cost.

The smart meter project is a major continuing initiative which is moving ahead of the 2020 schedule. All residential electric smart meters have been installed, and the commercial and indus-

trial meters will be completed by the end of 2019. As a part of the smart meter program, MLGW began to offer prepayment options for customers which provides an alternative to receive and pay for utility services.

Electric infrastructure investment is moving ahead for a new substation in the southern part of Shelby County and for additional substation capacity to an existing station in the central part of the county. Distribution automation investments began this year with the installation of smart devices throughout the county which will enhance reliability.

The Gas Division maintained progress on its 30-year cast iron pipe replacement program. Gas smart meter deployment was also a primary focus. The residential smart meter installations for the Gas Division are planned to be completed by the end of 2018.

For the Water Division, work is ongoing for major rehabilitations to the Mallory and Allen pumping stations, and several new wells were constructed and brought online at various pumping stations. MLGW is committed to removing lead service lines from the distribution system. The installation of residential water smart meters is scheduled to be completed by the end of 2018.

MLGW also has a formal five-year Strategic Plan and engages in joint endeavors with the City of Memphis, the Tennessee Valley Authority and other stakeholders when possible to streamline costs through collaborative efforts. The plan also addresses MLGW's commitment to cost control, which is discussed in other sections of this financial report.

As an example, TVA selected a 2017 Distributed Solar Solutions proposal from MLGW that will result in the construction of a two-MW solar array at Nike's logistics facility in Frayser. Once completed, it will produce enough power for the annual electricity use of roughly 240 households. In addition, TVA built a 997 kW solar array at the Allen Combined Cycle Plant, enabling MLGW to offer new options for businesses interested in renewable energy.

Acknowledgements – The preparation of this report was made possible by the overall dedication of MLGW's Finance Division. I would like to express my appreciation to all Finance Division members who helped prepare this report. Special thanks must also be given to Mayer Hoffman McCann P.C. and Jones & Tuggle PLLC for their efficient and timely completion of this year's audit.

Respectfully submitted,



Dana J. Jeanes

Vice President, CFO and Secretary-Treasurer

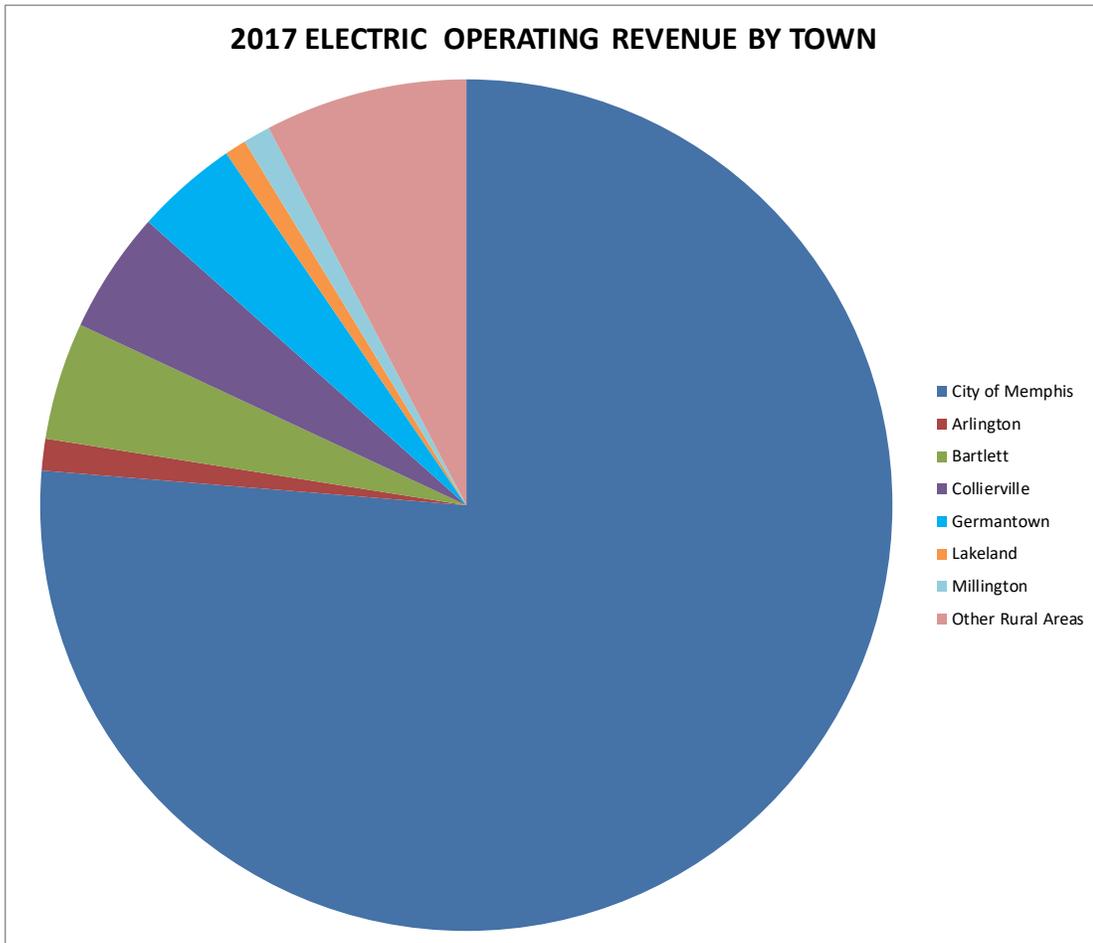
**FINANCIAL HIGHLIGHTS
FOR THE YEARS ENDED
DECEMBER 31, 2017, 2016, AND 2015
(dollars and consumption in thousands)**



MLGW

Operating Statistics by Towns:

	ELECTRIC AMOUNT			ELECTRIC KWH		
	2017	2016	2015	2017	2016	2015
City of Memphis	\$ 941,590	\$ 950,692	\$ 967,152	10,154,668	10,436,626	10,514,853
Arlington	14,859	14,939	15,134	161,287	165,439	164,884
Bartlett	54,997	56,320	56,242	560,817	585,813	575,767
Collierville	57,100	58,332	58,423	600,718	626,769	615,079
Germantown	47,985	49,555	49,929	499,700	526,438	518,118
Lakeland	10,073	10,049	10,288	104,400	106,211	105,900
Millington	12,733	12,528	12,720	129,112	130,117	129,797
Other Rural Areas	94,737	97,120	98,673	1,097,479	1,144,430	1,131,610
Total	\$ 1,234,074	\$ 1,249,535	\$ 1,268,561	13,308,181	13,721,843	13,756,008



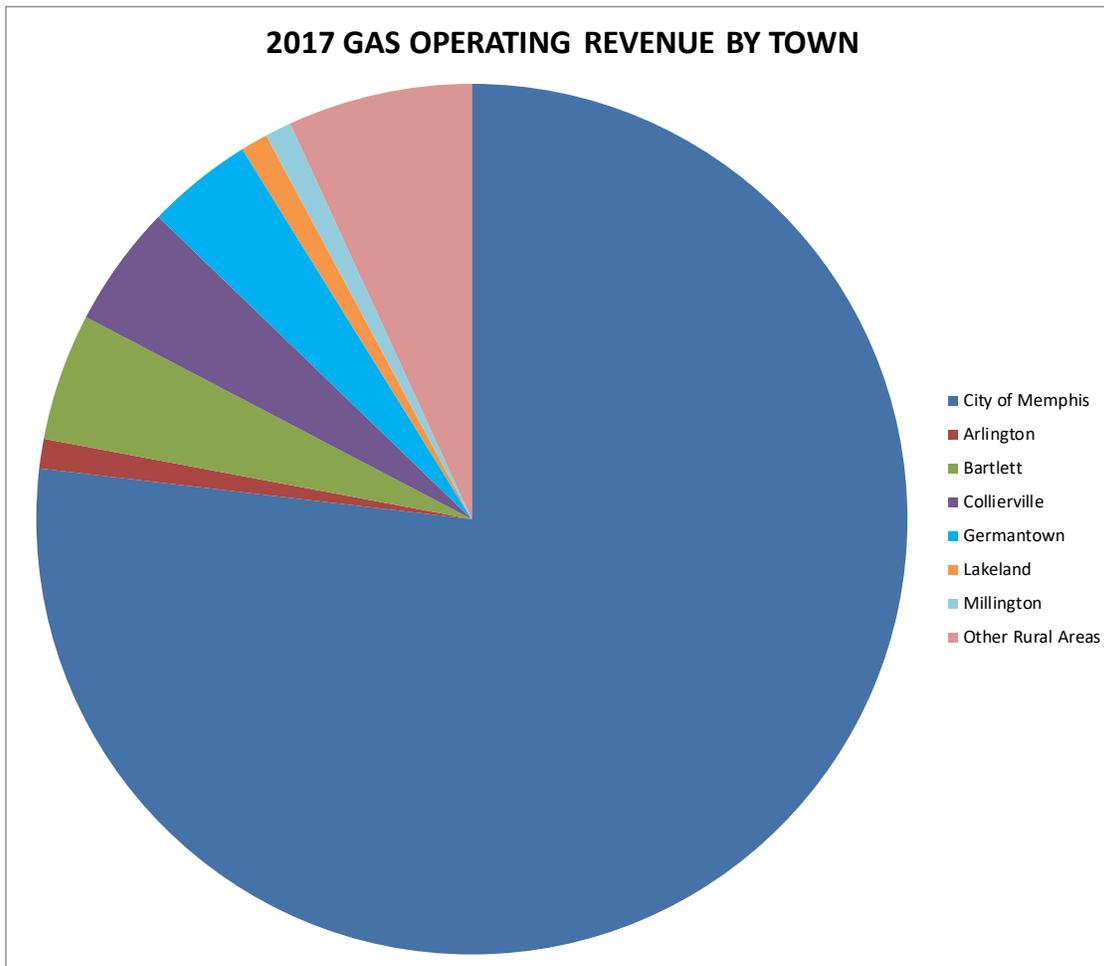
**FINANCIAL HIGHLIGHTS
FOR THE YEARS ENDED
DECEMBER 31, 2017, 2016, AND 2015
(dollars and consumption in thousands)**



MLGW

Operating Statistics by Towns:

	GAS AMOUNT			GAS MCF		
	2017	2016	2015	2017	2016	2015
City of Memphis	\$ 174,012	\$ 155,671	\$ 188,488	20,122	20,940	25,189
Arlington	2,481	2,444	3,047	331	370	448
Bartlett	10,705	10,224	12,312	1,361	1,438	1,682
Collierville	10,259	10,125	12,170	1,400	1,541	1,778
Germantown	8,953	8,718	10,584	1,247	1,360	1,568
Lakeland	2,265	1,939	2,506	300	281	351
Millington	2,216	2,036	2,580	305	314	372
Other Rural Areas	15,512	14,719	18,218	1,976	2,097	2,510
Total	\$ 226,403	\$ 205,876	\$ 249,905	27,042	28,341	33,898



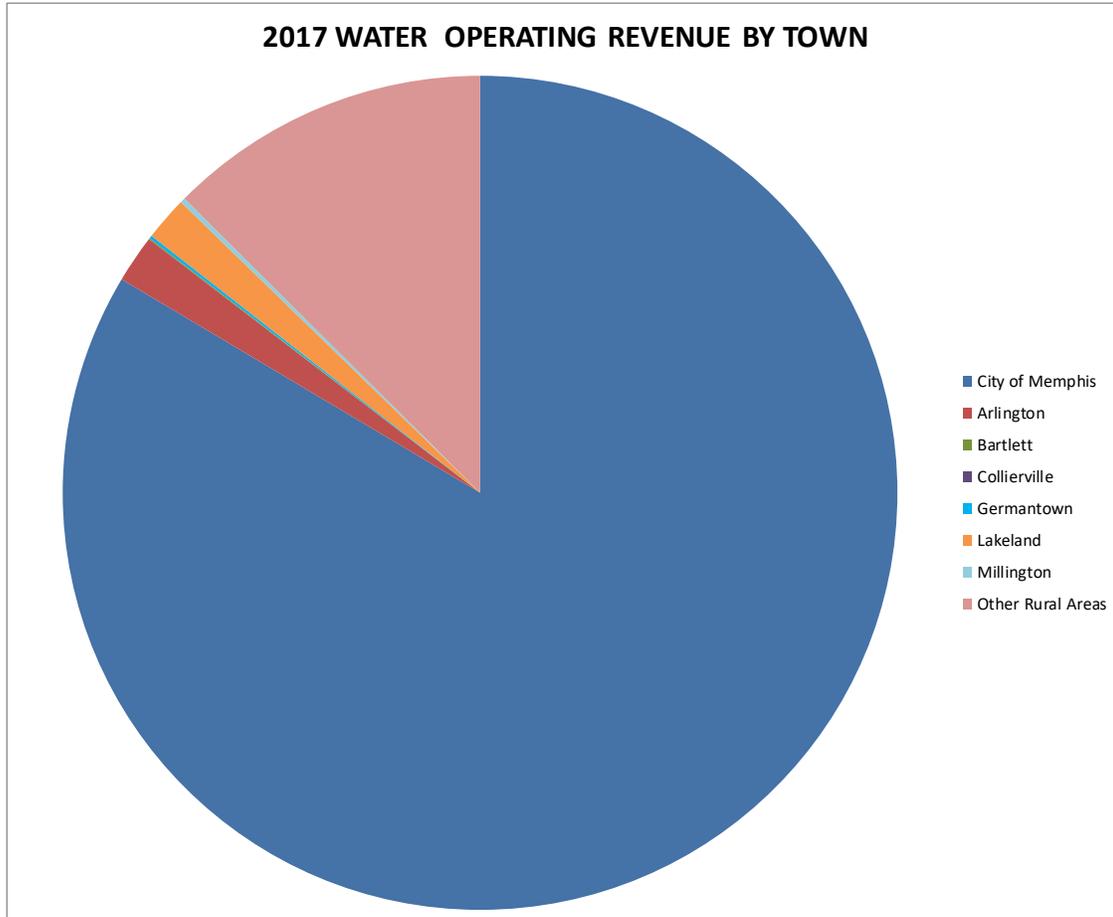
**FINANCIAL HIGHLIGHTS
FOR THE YEARS ENDED
DECEMBER 31, 2017, 2016, AND 2015
(dollars and consumption in thousands)**



MLGW

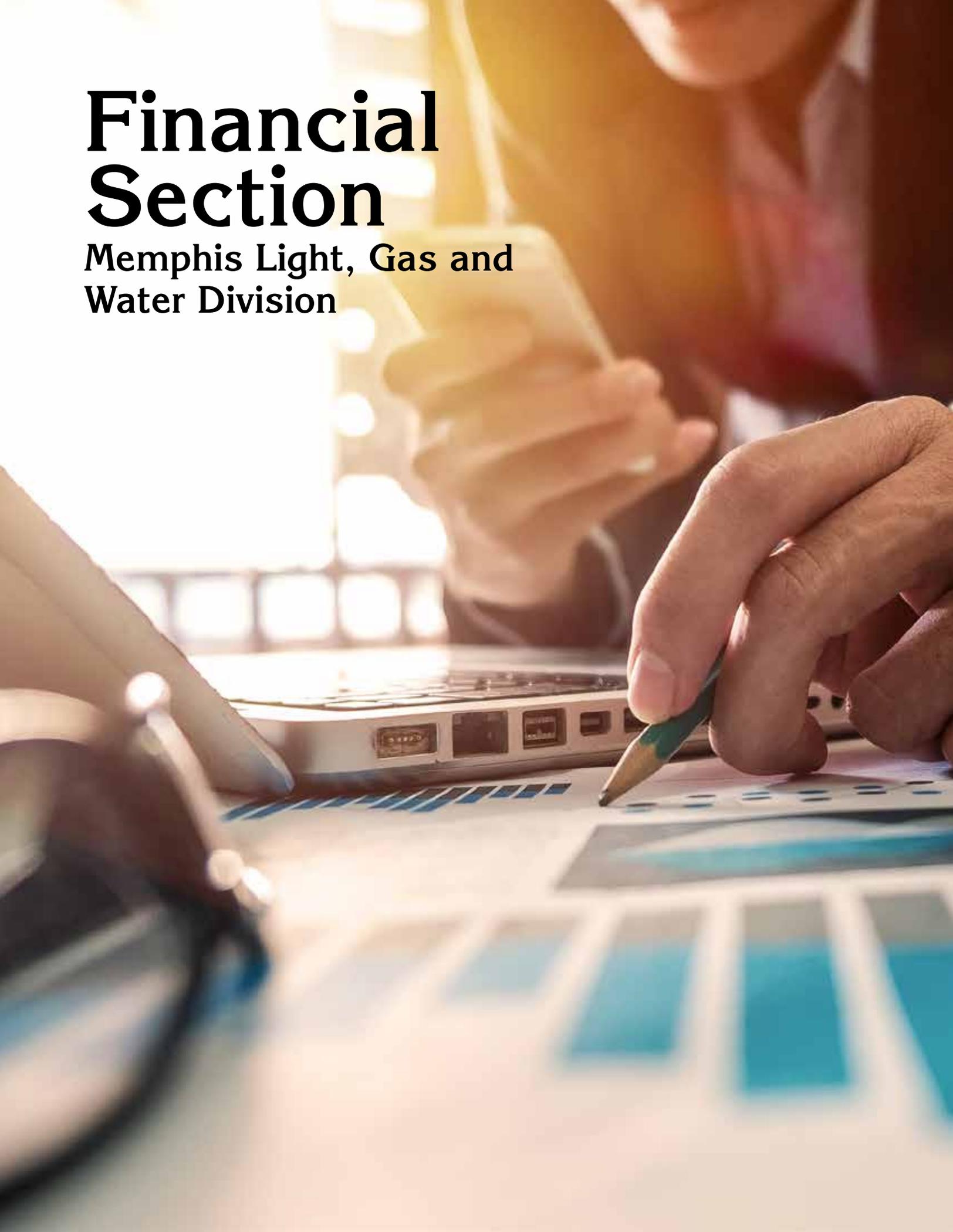
Operating Statistics by Towns:

	WATER AMOUNT			WATER CCF		
	2017	2016	2015	2017	2016	2015
City of Memphis	\$ 83,144	\$ 82,677	\$ 70,107	42,499	43,243	44,264
Resale to Other Municipalities:						
Arlington	1,849	1,916	1,526	566	605	590
Bartlett	49	48	40	3	3	3
Collierville	-	160	161	-	46	59
Germantown	111	108	94	32	32	35
Lakeland	1,700	1,734	1,443	525	543	556
Millington	184	179	162	51	62	60
Other Rural Areas	12,476	13,025	10,958	3,865	4,197	4,528
Total	\$ 99,513	\$ 99,847	\$ 84,491	47,541	48,731	50,095



Financial Section

Memphis Light, Gas and
Water Division







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Independent Auditor's Report

To the Board of Commissioners and Management
Memphis Light, Gas and Water Division
Memphis, Tennessee

Report on the Financial Statements

We have audited the accompanying financial statements of the Electric, Gas and Water Divisions (the "Divisions") of Memphis Light, Gas and Water Division, enterprise funds of the City of Memphis, Tennessee, as of and for the years ended December 31, 2017 and 2016, and the related notes to the financial statements, which collectively comprise the Divisions' basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

The Divisions' 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 opinions 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 Divisions' 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 entity'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 opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Electric, Gas and Water Divisions of Memphis Light, Gas and Water Division as of December 31, 2017 and 2016, and the changes in their financial position and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in note 1, the financial statements present only the Electric, Gas and Water Divisions of Memphis Light, Gas and Water Division, and do not purport to, and do not, present fairly the financial position of the City of Memphis, Tennessee, as of December 31, 2017 and 2016, and the changes in its financial position, or, where applicable, its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that management's discussion and analysis; schedule of changes in net pension liability; schedule of employer contributions - pension; schedule of funding progress for OPEB; and the schedule of employer contributions - OPEB, on the pages listed in the table of contents, 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 audits 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 audits were conducted for the purpose of forming opinions on the basic financial statements of each Division. The introductory section, supplemental information, and the schedule of expenditures of federal awards on the pages listed in the table of contents 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 is required by Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*. The schedule of bonds, principal and interest requirements; schedule of current utility rates; non-revenue water; and schedule of insurance are required by the State of Tennessee Comptroller of the Treasury's *Audit Manual*.

The supplementary information shown as the schedule of bonds, principal and interest requirements; schedule of additions and retirements to utility plant; and the schedule of expenditures of federal awards 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 audits 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, this supplementary information is fairly stated, in all material respects in relation to the basic financial statements as a whole.

The introductory section and supplementary information shown as the schedule of current utility rates, non-revenue water, and schedule of insurance 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 them.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated June 8, 2018, on our consideration of the Divisions' internal control over financial reporting and on our tests of their compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Divisions' 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 Divisions' internal control over financial reporting and compliance.

Mayer Hoffman McCann P.C.

Memphis, Tennessee
June 8, 2018



The following management discussion and analysis (“MD&A”) for the Electric, Gas, and Water Divisions of Memphis Light, Gas and Water Division (“MLGW”) is intended as an introduction and should be read in conjunction with the financial statements and the notes that follow this section.

Highlights

- ❖ In 2015, MLGW’s Smart Meter Project contract was approved to begin the full-scale implementation of smart meters that will be completed by the end of 2020. Existing MLGW meters are being replaced with smart electric, gas, and water models. This enables MLGW to communicate with meters on a daily basis instead of sending a meter reader to each property to collect consumption data once a month and this enables the customer to be more energy efficient. By the end of 2017, MLGW had installed approximately 650,000 electric, gas, and water smart meters.
- ❖ MLGW issued debt for the capital programs for the Electric, Gas, and Water Divisions in September 2017. The Electric Division’s Senior Lien Series 2017 bonds were rated Aa2 by Moody’s Investors Service (“Moody’s”) and AA by Standard & Poor’s Ratings Services (“S&P”). Senior Lien means a lien on one or more categories of revenues that entitles the beneficiaries of such lien to have a claim on such revenues prior to any other person and ahead of the use of such revenues for any purpose other than payment of operating expenses provided one or more series of revenue obligations, contracts and related beneficiaries may have parity Senior Liens on the same categories of revenues pursuant to the terms of the bond resolution. The Electric Division’s long-term rating was reaffirmed at Aa2 by Moody’s. S&P downgraded its long-term rating for the Electric Division from AA+ to AA. MLGW’s electric subordinate lien bonds related to the electric prepay bonds was assigned an AA-, which is a downgrade from the previous year’s rating of AA. The Gas Division’s Series 2017 bonds were rated Aa1 by Moody’s and AA- by S&P. Both Moody’s and S&P reaffirmed their long-term ratings for the Gas Division at Aa1 and AA-, respectively. The Water Division’s Series 2017 bonds were rated Aa1 by Moody’s and AAA by S&P. The AAA rating is the highest rating given by S&P. Both Moody’s and S&P reaffirmed their long-term ratings for the Water Division at Aa1 and AAA, respectively.
- ❖ The new TVA gas-fired generation plant will be operational prior to the end of 2018 and is projected to be MLGW’s largest gas customer. MLGW has completed the construction of the 13 plus mile transmission pipeline portion of the project that will be the primary supply for this new gas-fired plant. The completed project will generate additional gas transportation revenues for the gas division.
- ❖ MLGW was named as an Energy Right Solutions Top Performer for energy savings by the Tennessee Valley Authority (“TVA”) and the Environmental Protection Agency ranked Memphis in the top 10 mid-sized cities with the most Energy Star certified buildings.
- ❖ Security Magazine has ranked MLGW a top performer for the past four years for its industry practices in data leadership and management.
- ❖ MLGW has been awarded a solar generation project through the Tennessee Valley Authority’s (“TVA”) Distributed Solar Solutions pilot program. This project includes the installation and operation of a two megawatt direct current solar array and is expected to generate approximately 3.7 million kilowatt-hours of electricity per year. Solar power from the array will be sold to TVA under a 20-year power purchase agreement.
- ❖ MLGW continues to be intentional in its efforts to encourage the growth of minority, women, and locally owned small business enterprises by providing opportunities for MLBE/LSBs to furnish goods and services through MLGW’s Supplier Diversity Program. MLGW spent \$75.4 million on contracts with MWBE/LSBs for 2017.



Overview of the Financial Statements

MLGW's financial statements are comprised of the Statements of Net Position; the Statements of Revenues, Expenses and Changes in Net Position; the Statements of Cash Flows; and the accompanying Notes. This report also contains required and supplemental information in addition to the basic financial statements.

The Statement of Net Position reports the assets and deferred outflows of resources less liabilities and deferred inflows of resources, with the difference being the net position. Net position will be displayed in three components: net investment in capital assets, restricted, and unrestricted. Over time, increases or decreases in net position may serve as an indicator of whether the financial position of the organization is improving or declining. The Statements of Revenues, Expenses and Changes in Net Position show how net position changed during each year based on revenues and expenses. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. The Statements of Cash Flows report changes in cash and cash equivalents summarized by net changes from operating, capital and related financing and investing activities. The Notes provide additional detailed information to support the financial statements. The statements present the current year and preceding year for comparison. The report also includes Statistical Highlights: these highlights convey significant data that afford the reader a better historical perspective and assist in assessing the current financial status and trends of MLGW. The highlights present a three-year comparison encompassing the current year and preceding two years for the Electric, Gas, and Water Divisions.

MLGW comprises the utility operations of the City of Memphis. Pursuant to the Memphis City Charter, MLGW is required to maintain separate books and accounts of the electric, gas, and water operations, so that said books and accounts reflect the financial condition of each division separately, to the end that each division shall be self-sustaining.

Costs are allocated to the three divisions in a manner that ensures results of operations and changes in financial position are presented fairly and consistently from year to year.

MLGW's statements are provided to the City of Memphis and reformatted to conform to the City's format for enterprise funds. The City of Memphis incorporates MLGW's statements ending December 31 into its statements ending June 30.

MANAGEMENT'S DISCUSSION AND ANALYSIS
 FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016
 (Continued)



MLGW

STATISTICAL HIGHLIGHTS-ELECTRIC DIVISION

Years Ended December 31

CATEGORIES	2017	2016	2015
OPERATING REVENUE			
Residential	\$ 490,018,631	\$ 505,811,638	\$ 513,804,077
Commercial - General Service	585,741,219	585,812,041	592,357,531
Industrial	98,508,276	95,656,535	108,647,814
Outdoor Lighting and Traffic Signals	11,410,983	11,330,518	11,300,413
Street Lighting Billing	13,180,372	13,076,088	13,061,894
Interdepartmental	8,244,320	8,117,897	9,281,301
Green Power	(240,957)	(255,347)	(220,049)
Miscellaneous	28,895,434	30,505,018	30,253,807
Accrued Unbilled Revenue	3,864,761	6,309,242	(3,360,498)
Revenue Adjustment for Uncollectibles	(5,549,465)	(6,828,137)	(6,564,675)
TOTAL OPERATING REVENUE	\$ 1,234,073,574	\$ 1,249,535,493	\$ 1,268,561,615
CUSTOMERS			
Residential	370,693	366,265	366,721
Commercial - General Service	43,469	43,373	43,761
Industrial	118	133	152
Outdoor Lighting and Traffic Signals	17,186	17,004	17,110
Interdepartmental	36	41	45
Total Customers	431,502	426,816	427,789
KWH SALES (THOUSANDS)			
Residential	5,042,850	5,322,901	5,295,187
Commercial - General Service	6,138,759	6,286,966	6,326,434
Industrial	1,870,301	1,859,280	1,866,238
Outdoor Lighting and Traffic Signals	89,244	88,928	88,441
Street Lighting Billing	76,117	75,141	75,321
Interdepartmental	90,910	88,627	104,387
Total KWH Sales (Thousands)	13,308,181	13,721,843	13,756,008
OPERATING REVENUE/CUSTOMER			
Residential	\$ 1,321.90	\$ 1,381.00	\$ 1,401.08
Commercial - General Service	13,474.92	13,506.38	13,536.20
Industrial	834,815.90	719,222.07	714,788.25
Outdoor Lighting and Traffic Signals	663.97	666.34	660.46
Interdepartmental	229,008.89	197,997.49	206,251.13
OPERATING REVENUE/KWH*			
Residential	\$ 0.097	\$ 0.095	\$ 0.097
Commercial - General Service	0.096	0.093	0.094
Industrial	0.053	0.051	0.058
Outdoor Lighting and Traffic Signals	0.128	0.127	0.128
Street Lighting Billing	0.173	0.174	0.173
Interdepartmental	0.091	0.092	0.089
KWH/CUSTOMER			
Residential	13,603.84	14,532.92	14,439.28
Commercial - General Service	141,221.54	144,951.14	144,567.86
Industrial	15,850,008.47	13,979,548.87	12,277,881.58
Outdoor Lighting and Traffic Signals	5,192.83	5,229.83	5,168.97
Interdepartmental	2,525,277.78	2,161,634.15	2,319,711.11

*See graph on M-6.

MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016
(Continued)



MLGW

STATISTICAL HIGHLIGHTS-GAS DIVISION

Years Ended December 31

CATEGORIES	2017	2016	2015
OPERATING REVENUE			
Residential	\$ 126,870,403	\$ 120,179,376	\$ 150,174,338
Commercial - General Service	59,846,939	55,227,388	69,815,939
Industrial	1,699,136	1,681,543	2,652,791
Interdepartmental	238,872	172,754	315,995
Transported Gas	7,765,697	6,350,515	5,385,298
Spot Gas	7,125,396	6,388,974	7,936,852
Liquefied Natural Gas (LNG)	4,469,127	4,571,710	7,892,439
Compressed Natural Gas (CNG)	158,607	107,847	400,439
Miscellaneous	15,508,704	8,439,778	12,486,159
Accrued Unbilled Revenue	4,469,213	4,161,055	(5,847,200)
Revenue Adjustment for Uncollectibles	(1,749,310)	(1,404,506)	(1,308,386)
TOTAL OPERATING REVENUE	\$ 226,402,784	\$ 205,876,434	\$ 249,904,664
CUSTOMERS			
Residential	292,019	289,592	291,448
Commercial - General Service	21,621	21,634	21,931
Industrial	30	31	32
Interdepartmental	12	12	12
Transported Gas	81	98	113
Spot Gas	23	33	44
Subtotal	313,786	311,400	313,580
LNG	3	3	4
CNG (Sales Transactions)	297	212	732
Total Customers	314,086	311,615	314,318
MCF SALES			
Residential	15,824,781	16,713,964	20,326,974
Commercial - General Service	9,099,362	9,308,766	10,951,838
Industrial	370,190	405,442	544,046
Interdepartmental	44,633	35,733	57,180
Spot Gas	1,703,336	1,877,488	2,017,649
Subtotal	27,042,302	28,341,393	33,897,687
LNG	574,294	654,780	1,062,917
CNG	15,552	10,949	44,204
Total MCF Sales	27,632,148	29,007,122	35,004,808
OPERATING REVENUE/CUSTOMER			
Residential	\$ 434.46	\$ 415.00	\$ 515.27
Commercial - General Service	2,768.00	2,552.81	3,183.44
Industrial	56,637.87	54,243.32	82,899.71
Interdepartmental	19,906.01	14,396.17	26,332.96
Transported Gas	95,872.80	64,801.17	47,657.51
Spot Gas	309,799.81	193,605.29	180,383.00
OPERATING REVENUE/MCF*			
Residential	\$ 8.017	\$ 7.190	\$ 7.388
Commercial - General Service	6.577	5.933	6.375
Industrial	4.590	4.147	4.876
Interdepartmental	5.352	4.835	5.526
Spot Gas	4.183	3.403	3.934
MCF/CUSTOMER			
Residential	54.19	57.72	69.74
Commercial - General Service	420.86	430.28	499.38
Industrial	12,339.68	13,078.77	17,001.44
Interdepartmental	3,719.42	2,977.75	4,765.00
Spot Gas	74,058.09	56,893.58	45,855.66

*See graph on M-6.

MANAGEMENT'S DISCUSSION AND ANALYSIS
 FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016
 (Continued)



MLGW

STATISTICAL HIGHLIGHTS-WATER DIVISION

Years Ended December 31

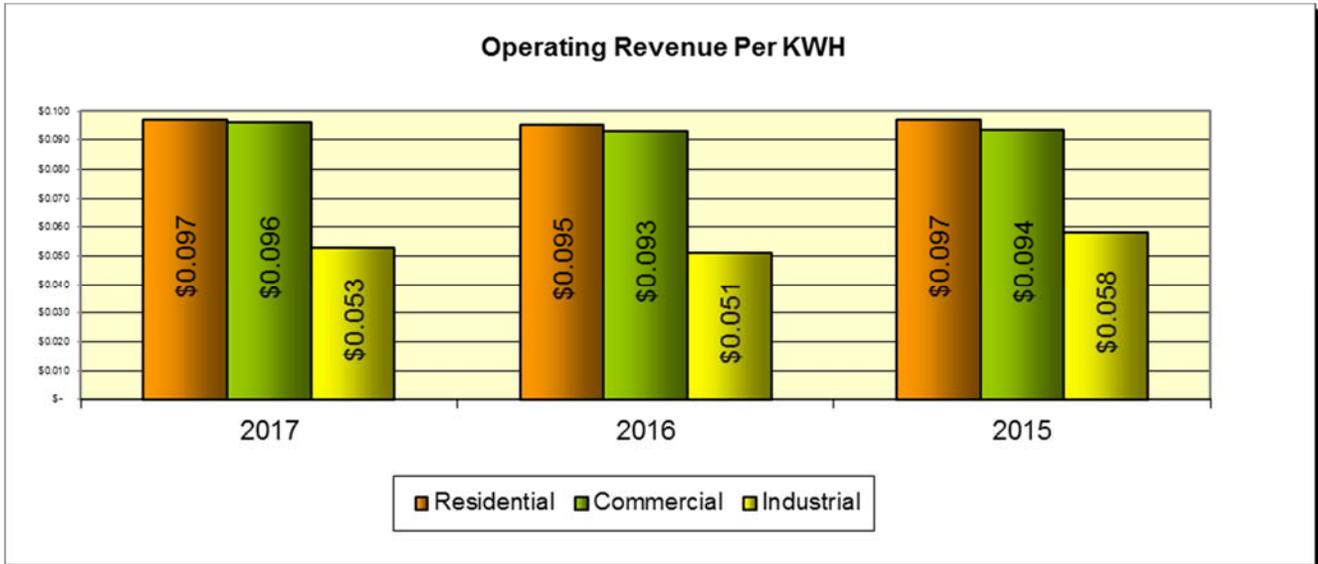
CATEGORIES	2017	2016	2015
OPERATING REVENUE			
Residential	\$ 48,029,486	\$ 49,486,005	\$ 41,072,210
Commercial - General Service	42,060,419	42,137,657	35,036,929
Resale	133,360	255,521	571,067
Fire Protection	5,102,740	5,056,147	4,152,650
Interdepartmental	118,612	55,699	47,425
Miscellaneous	4,815,982	3,611,421	3,742,311
Accrued Unbilled Revenue	256,154	340,781	545,218
Revenue Adjustment for Uncollectibles	(1,003,826)	(1,095,891)	(676,130)
TOTAL OPERATING REVENUE	\$ 99,512,927	\$ 99,847,340	\$ 84,491,680
CUSTOMERS			
Residential	229,285	227,171	228,562
Commercial - General Service	20,625	20,580	20,844
Resale	12	12	12
Fire Protection	5,347	5,297	5,270
Interdepartmental	50	49	52
Total Customers	255,319	253,109	254,740
METERED WATER (CCF)			
Residential	21,419,459	22,442,729	22,853,763
Commercial - General Service	26,029,425	26,146,652	26,712,414
Resale	14,896	122,936	509,467
Interdepartmental	76,836	19,093	19,318
Total CCF Sales	47,540,616	48,731,410	50,094,962
OPERATING REVENUE/CUSTOMER			
Residential	\$ 209.48	\$ 217.84	\$ 179.70
Commercial - General Service	2,039.29	2,047.51	1,680.91
Resale	11,113.30	21,293.42	47,588.89
Fire Protection	954.32	954.53	787.98
Interdepartmental	2,372.24	1,136.71	912.02
OPERATING REVENUE/CCF*			
Residential	\$ 2.242	\$ 2.205	\$ 1.797
Commercial - General Service	1.616	1.612	1.312
Resale	8.953	2.078	1.121
Interdepartmental	1.544	2.917	2.455
CCF/CUSTOMER			
Residential	93.42	98.79	99.99
Commercial - General Service	1,262.03	1,270.49	1,281.54
Resale	1,241.33	10,244.67	42,455.58
Interdepartmental	1,536.72	389.65	371.50

*See graph on M-7.

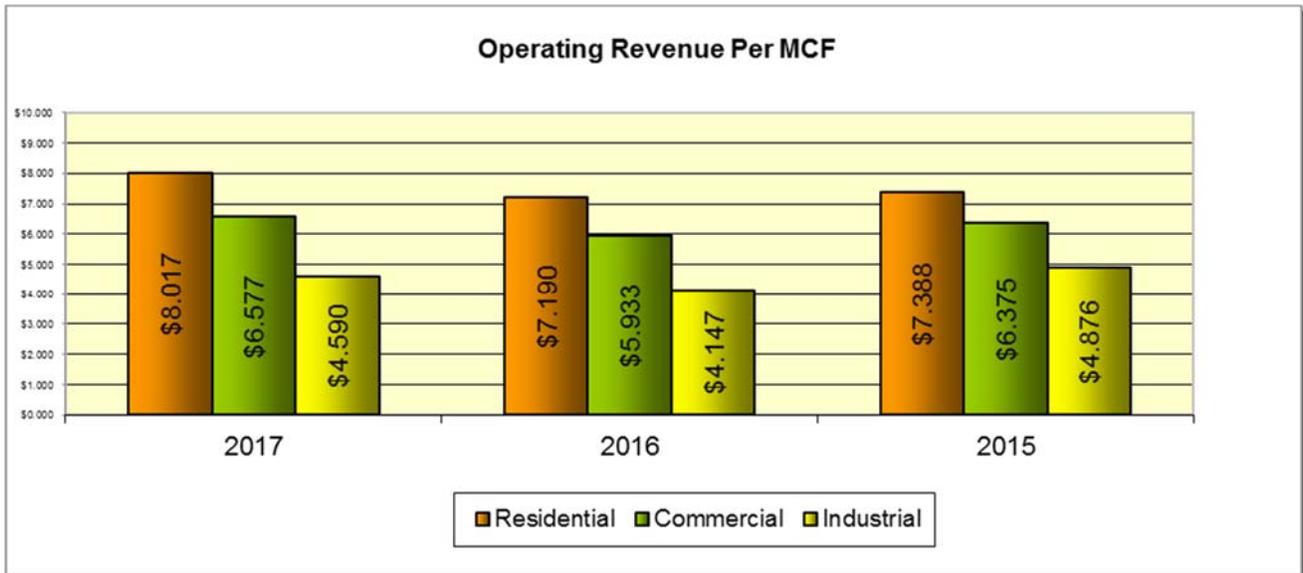


GRAPHS

Electric Division

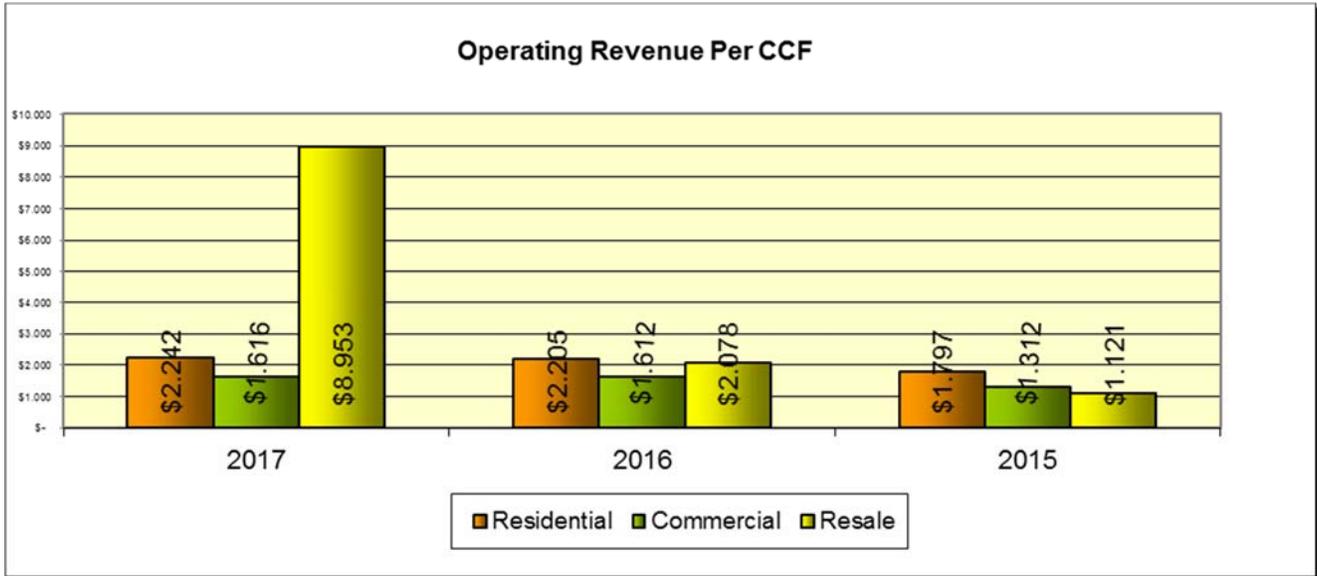


Gas Division





Water Division





Bond Ratings

MLGW's Electric Division, Gas Division and Water Division own strong bond ratings. In 2017 all three divisions issued debt to fund a portion of their respective capital improvement programs.

During 2017, the Electric Division issued \$90 million in debt and the series was assigned ratings of AA and Aa2 by Standard and Poor's (S&P) and Moody's Investors Service (Moody's), respectively. Moody's affirmed the senior-lien underlying rating at Aa2 and S&P downgraded the senior-lien rating from AA+ to AA. The Electric Division has total debt outstanding of \$312,685 as of December 31, 2017. MLGW's debt service coverages are 22.98 and 1.65 for the senior and total composite liens, respectively. These coverages are well above the 1.2 and the 1.0 required by the Electric Division bond covenant for the senior lien and subordinate lien debt, respectively.

The Gas Division issued \$40 million in debt during 2017. The Gas Division's series was assigned AA- and Aa1 ratings by S&P and Moody's, respectively. Both S&P and Moody's affirmed the underlying ratings at AA- and Aa1, respectively. The Gas Division has total debt outstanding of \$78,725 as of December 31, 2017. The Gas Division's debt service coverage is 7.39. This coverage is well above the 1.2 required by the Gas Division bond covenant.

The Water Division issued \$25 million in debt during 2017. This series was assigned AAA and Aa1 ratings by S&P and Moody's, respectively and the agencies affirmed the underlying series at the same ratings. The Water Division has debt outstanding of \$67,170 as of December 31, 2017. The Water Division's debt service coverage is 5.57. This coverage is well above the 1.2 required by the Water Division bond covenant.

The following tables show MLGW bond ratings and debt administration for the Electric, Gas and Water Divisions as of December 31, 2017:

Figure 1: Bond Ratings and Debt Administration for the Electric, Gas and Water Divisions

MLGW Bond Ratings				Debt Administration (In Thousands)		
	S&P	Moody's	Fitch		Outstanding Balance	Coverage
Electric Series				Electric Senior	\$192,310	22.98
2008	AA-	Aa2	AA+	Electric Subordinate	\$120,375	
2010	AA-	Aa2	AA+	Electric Composite		
2014	AA	Aa2		Coverage Ratio	\$312,685	1.65
2016	AA	Aa2				
2017	AA	Aa2				
Gas Series				Gas	\$78,725	7.39
2016	AA-	Aa1				
2017	AA-	Aa1				
Water Series				Water	\$67,170	5.57
2014	AAA	Aa1				
2016	AAA	Aa1				
2017	AAA	Aa1				



Analysis of the Electric Division's Statements of Net Position

Condensed financial information comparing the Electric Division's net position for the past three fiscal years is presented below:

Table 1
Electric Division Condensed Statements of Net Position
December 31
(In Thousands)

	<u>2017</u>	<u>2016</u>	<u>FY17 - FY16</u> <u>Percentage</u> <u>Change</u>	<u>2015</u>	<u>FY16 - FY15</u> <u>Percentage</u> <u>Change</u>
Current assets (excluding restricted funds)	\$ 494,833	\$ 487,560	1.5%	\$ 524,914	-7.1%
Restricted assets	104,747	67,923	54.2%	64,361	5.5%
Other assets	13,987	11,210	24.8%	4,325	159.2%
Prepaid power cost - long-term	-	112,821	-100.0%	232,517	-51.5%
Utility plant	1,109,598	1,079,463	2.8%	1,041,753	3.6%
Total assets	<u>1,723,165</u>	<u>1,758,977</u>	<u>-2.0%</u>	<u>1,867,870</u>	<u>-5.8%</u>
Deferred outflows of resources					
Employer Pension Contribution	12,790	12,271	4.2%	12,271	-
Pension liability experience	870	1,088	-20.0%	-	-
Pension investment earnings experience	29,506	39,341	-25.0%	-	-
Accumulated decrease in fair value of hedging derivatives	-	-	-	40	-
Unamortized balance of refunded debt	409	1,499	-72.7%	3,509	-57.3%
Total assets and deferred outflows	<u>1,766,740</u>	<u>1,813,176</u>	<u>-2.6%</u>	<u>1,883,690</u>	<u>-3.7%</u>
Current liabilities payable from current assets	271,737	276,460	-1.7%	301,365	-8.3%
Current liabilities payable from restricted assets	35,513	33,587	5.7%	33,092	1.5%
Long-term debt	213,179	243,701	-12.5%	325,747	-25.2%
Non-current liabilities	72,160	81,955	-12.0%	29,556	177.3%
Total liabilities	<u>592,589</u>	<u>635,703</u>	<u>-6.8%</u>	<u>689,760</u>	<u>-7.8%</u>
Deferred inflows of resources					
Pension liability experience	10,093	6,252	61.4%	7,815	-20.0%
Pension changes of assumptions	6,346	8,462	-25.0%	10,577	-20.0%
Pension investment earnings experience	5,245	197	2562.4%	262	-24.8%
Total liabilities and deferred inflows	<u>614,273</u>	<u>650,614</u>	<u>-5.6%</u>	<u>708,414</u>	<u>-8.2%</u>
Net position:					
Net investment in capital assets	892,669	958,213	-6.8%	964,812	-0.7%
Restricted	52,963	19,155	176.5%	18,534	3.4%
Unrestricted	206,835	185,194	11.7%	191,930	-3.5%
Total Net position	<u>\$ 1,152,467</u>	<u>\$ 1,162,562</u>	<u>-0.9%</u>	<u>\$ 1,175,276</u>	<u>-1.1%</u>



Assets

2017 Compared to 2016:

As of December 31, 2017, total assets and deferred outflows were \$1.77 billion, a decrease of \$46.4 million, or 2.6%, compared to December 31, 2016. This decrease is primarily due to a decrease in prepaid power cost (long-term) of \$112.8 million (see Note 12) and a decrease in pension investment earnings experience of \$9.8 million, partially offset by an increase in restricted assets of \$36.8 million due primarily to the increase in proceeds due to the issuance of the Series 2017 revenue bonds of \$33.1 million, an increase in net utility plant of \$30.1 million, an increase in current assets of \$7.3 million, and an increase in other assets of \$2.8 million. The increase in current assets is due, in part, to a decrease of \$10.6 million in the allowance for doubtful accounts related to a customer account settlement agreement and an increase in inventories of \$7.1 million, offset by a decrease in cash and cash equivalents of \$8.3 million and a decrease in investments of \$7.2 million.

2016 Compared to 2015:

As of December 31, 2016, total assets and deferred outflows were \$1.81 billion, a decrease of \$70.5 million, or 3.7%, compared to December 31, 2015. This decrease is primarily due to a decrease in prepaid power cost (long-term) of \$119.7 million due to amortization (see Note 12), a decrease in current assets (excluding restricted funds) of \$37.4 million, and a decrease in the deferred unamortized balance of refunding debt for Series 2010 Bonds of \$2.0 million, partially offset by an increase in pension investment earnings experience of \$39.3 million, net utility plant of \$37.7 million resulting from additions to electric plant in-service, other assets of \$6.9 million, restricted assets of \$3.6 million and pension liability experience of \$1.1 million. The decrease in current assets is primarily the result of a decrease in cash and cash equivalents of \$47.1 million due, in part, to the timing of the in lieu of tax payments and transfers to the City paid in 2016, a decrease in investments of \$2.9 million and a decrease in inventories of \$1.5 million, offset by increases in unbilled revenues of \$6.3 million due, in part, to delayed customer billings as a result from the transitional issues associated with the mass deployment of smart meters, accounts receivable less allowance for doubtful accounts of \$4.1 million, and prepaid power costs of \$2.6 million.

Capital Assets and Construction Activities

2017 Compared to 2016:

The Electric Division's utility plant assets, net of accumulated depreciation were \$1.11 billion as of December 31, 2017, an increase of 2.8% over fiscal year 2016. During 2017, the Electric Division expended \$101.4 million on construction activities and capital purchases, an increase of \$7.2 million, or 7.6%, compared to fiscal year 2016. Major Electric Division construction activities included the purchase of meters and metering equipment (\$27.0 million), substation and transmission projects (\$10.3 million), the purchase of distribution and network transformers (\$6.7 million), purchase of transportation and power operated equipment (\$6.0 million), street and leased outdoor lighting (\$5.6 million), data processing equipment and upgrades (\$3.8 million), and extensions to serve new customers (\$9.5 million). Other significant Electric Division capital expenditures consisted of the replacement of feeder and defective cable (\$3.0 million), new circuits out of substations (\$2.2 million), and building and structures (\$1.4 million).



2016 Compared to 2015:

The Electric Division's utility plant assets, net of accumulated depreciation were \$1.08 billion as of December 31, 2016, an increase of 3.6% over fiscal year 2015. During 2016, the Electric Division expended \$94.2 million on construction activities and capital purchases, an increase of \$23.5 million, or 33.3%, compared to fiscal year 2015. Major Electric Division construction activities included the purchase of meters and metering equipment (\$21.8 million), substation and transmission projects (\$16.4 million), data processing equipment and upgrades (\$8.8 million), extensions to serve new customers (\$8.0 million), street and leased outdoor lighting (\$7.2 million), the purchase of distribution and network transformers (\$6.9 million), smart meter telecommunication infrastructure (\$4.1 million), and the purchase of transportation and power operated equipment (\$4.1 million). Other significant Electric Division capital expenditures consisted of the replacement of poles (\$2.6 million), replacement of feeder and defective cable (\$2.0 million), communication network improvements (\$1.5 million), and new circuits out of substations (\$0.9 million).

Liabilities

2017 Compared to 2016:

As of December 31, 2017, total liabilities and deferred inflows were \$614.3 million, representing a \$36.3 million (5.6%) decrease compared to \$650.6 million at December 31, 2016. These decreases are attributable to decreases in long-term debt of \$30.5 million, non-current liabilities of \$9.8 million due to a decrease in the net pension liability-long term of \$10.2 million, current liabilities payable from current assets of \$4.7 million, and pension changes of assumptions of \$2.1 million, offset in part by increases in pension investment earnings experience of \$5.0 million and pension liability experience of \$3.8 million. The decrease in long-term debt is due to a reclassification of the balance of long-term debt for the Series 2008 and Series 2010 Bonds to the current portion of debt of \$120.4 million, offset by an increase in the long-term portion due to the issuance of Series 2017 Bonds of \$87.1 million and an increase in premium amortization of \$6.6 million (see Note 11).

2016 Compared to 2015:

As of December 31, 2016, total liabilities and deferred inflows were \$650.6 million, representing a \$57.8 million (8.2%) decrease compared to \$708.4 million at December 31, 2015. These decreases are attributable to decreases in long-term debt of \$82.0 million, current liabilities payable from current assets of \$24.9 million due to a decrease in accrued taxes (payment in lieu of taxes and transfers) of \$35.1 million, pension changes of assumptions of \$2.1 million, and pension liability experience of \$1.6 million, offset in part by an increase in non-current liabilities of \$52.4 million due to an increase in the net pension liability-long term of \$47.9 million and an increase in customer deposits of \$2.4 million. The decrease in long-term debt is due to a reclassification of a portion of long-term debt to the current portion of debt of \$117.5 million, offset by an increase in the long-term portion of the issuance of Series 2016 Bonds of \$38.7 million and an increase in premium amortization of \$0.9 million (see Note 11).

Net Position

2017 Compared to 2016:

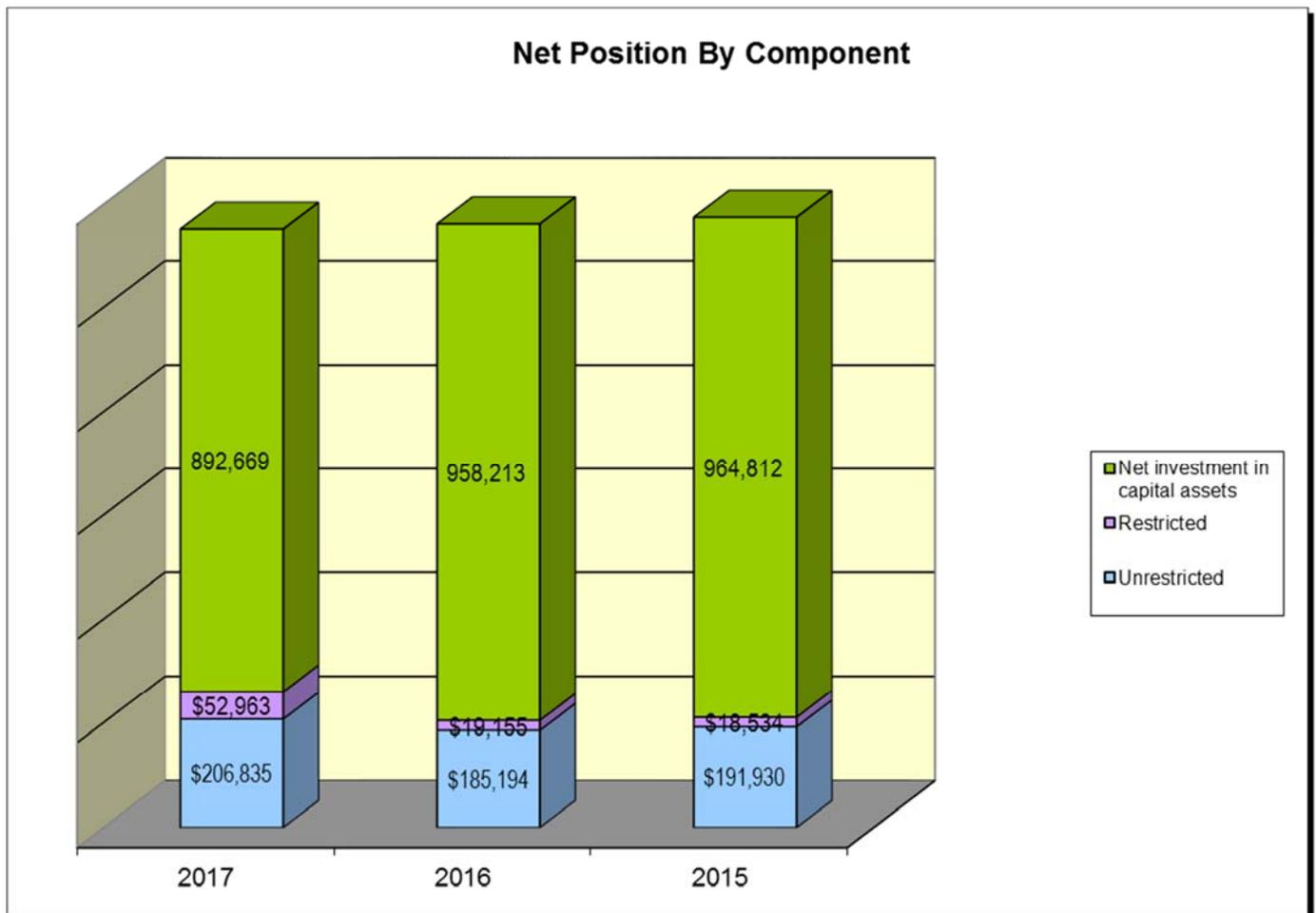
As of December 31, 2017 the Electric Division's total net position (total assets and deferred outflows of resources less total liabilities and deferred inflows of resources) was \$1.15 billion, a decrease of \$10.1 million, or 0.9%, compared to December 31, 2016. The decrease was due to a decrease in net investment in capital assets of \$65.5 million, offset by an increase in restricted net position of \$33.8 million due to the issuance of the Series 2017 Bonds and an increase in unrestricted net position (used to finance day-to-day operations) of \$21.6 million. Seventy-seven percent of the net position was related to net investment in capital assets.



2016 Compared to 2015:

As of December 31, 2016, the Electric Division's total net position (total assets and deferred outflows of resources less total liabilities and deferred inflows of resources) was \$1.16 billion, a decrease of \$12.7 million, or 1.1%, compared to December 31, 2015. The decrease was due to a decrease in unrestricted net position (used to finance day-to-day operations) of \$6.7 million and a decrease in net investment in capital assets of \$6.6 million. Eighty-two percent of the net position was related to net investment in capital assets.

Figure 2: Electric Division's Net Position (in thousands):





Analysis of the Electric Division's Statements of Revenues, Expenses and Changes in Net Position

Condensed financial information comparing the Electric Division's revenues, expenses and changes in net position for the past three fiscal years is presented below:

Table 2
 Electric Division
 Condensed Statements of Revenues, Expenses and Changes in Net Position
 Years Ended December 31, 2017, 2016, and 2015

	<u>2017</u>	<u>2016</u>	<u>FY17 - FY16 Percentage Change</u>	<u>2015</u>	<u>FY16 - FY15 Percentage Change</u>
Revenues:					
Operating revenues	\$ 1,234,074	\$ 1,249,535	-1.2%	\$ 1,268,561	-1.5%
Non-operating revenues	47,353	50,222	-5.7%	53,165	-5.5%
Total revenues	<u>1,281,427</u>	<u>1,299,757</u>	<u>-1.4%</u>	<u>1,321,726</u>	<u>-1.7%</u>
Expenses:					
Depreciation expense	54,148	50,902	6.4%	48,778	4.3%
Purchased power	991,526	1,018,157	-2.6%	1,015,978	0.2%
Other operating expense	191,135	187,927	1.7%	177,704	5.8%
Non-operating expense	13,032	15,491	-15.9%	19,011	-18.5%
Total expenses	<u>1,249,841</u>	<u>1,272,477</u>	<u>-1.8%</u>	<u>1,261,471</u>	<u>0.9%</u>
Income before contributions in aid of construction and transfers	31,586	27,280	15.8%	60,255	-54.7%
Contributions in aid of construction	27,553	10,445	163.8%	13,837	-24.5%
Reduction of plant costs recovered through contributions in aid of construction	(27,553)	(10,445)	-163.8%	(13,837)	24.5%
Transfers to City of Memphis	(41,681)	(39,994)	4.2%	(36,697)	9.0%
Change in net position	<u>\$ (10,095)</u>	<u>\$ (12,714)</u>	<u>20.6%</u>	<u>\$ 23,558</u>	<u>-154.0%</u>
Net position, beginning of year	\$ 1,162,562	\$ 1,175,276	-1.1%	\$ 1,163,074	1.0%
Change in method of accounting for pension	-	-	-	(11,356)	-
Change in net position	(10,095)	(12,714)	20.6%	23,558	-154.0%
Net position, end of year	<u>\$ 1,152,467</u>	<u>\$ 1,162,562</u>	<u>-0.9%</u>	<u>\$ 1,175,276</u>	<u>-1.1%</u>

Change in Net Position

2017 Compared to 2016:

The change in net position is a loss of \$10.1 million, up \$2.6 million from a loss of \$12.7 million at December 31, 2016. This increase is primarily due to an increase in operating margin (operating revenue less power cost) of \$11.2 million and a decrease in non-operating expense of \$2.5 million, offset by an increase in depreciation expense of \$3.2 million, an increase in other operating expense of \$3.2 million, a decrease in non-operating revenues of \$2.9 million and an increase in Transfers to the City of Memphis of \$1.7 million.



2016 Compared to 2015:

The change in net position is a loss of \$12.7 million, down \$36.3 million from \$23.6 million at December 31, 2015. This decrease is primarily due to a decrease in operating margin (operating revenue less power cost) of \$21.2 million, an increase in other operating expense of \$10.2 million, an increase in Transfer to the City of \$3.3 million, a decrease in non-operating revenues of \$2.9 million and an increase in depreciation expense of \$2.1 million, offset by a decrease in non-operating expense of \$3.5 million.

Revenues

2017 Compared to 2016:

Total revenues were \$1.28 billion for fiscal year 2017, a decrease of \$18.3 million, or 1.4%, from fiscal year 2016. Operating revenues were \$1.23 billion in 2017, a decrease of \$15.5 million from 2016. The decrease in operating revenue is due primarily to lower sales volume, offset, in part, by higher power costs per unit and the Tennessee Valley Authority (“TVA”) 1.5% rate increase effective in October 2017. There was a decrease in purchased power cost of \$26.6 million due to a decrease in purchase volumes and fuel cost adjustor, offset by the TVA rate increase. Non-operating revenue decreased \$2.9 million to \$47.4 million in 2017 as a result of a decrease in other income prepay credit, related to the Electric TVA Prepay Bonds of \$4.0 million, offset by an increase in other income TVA transmission credit of \$0.6 million and an increase in investment and other income of \$0.6 million.

2016 Compared to 2015:

Total revenues were \$1.30 billion for fiscal year 2016, a decrease of \$22.0 million, or 1.7%, from fiscal year 2015. Operating revenues were \$1.25 billion in 2016, a decrease of \$19.0 million from 2015. The decrease in operating revenue is due partially to a rate decrease for residential and small commercial customers implemented in January 2016 and to lower sales volume resulting from temporary transitional issues associated with the mass deployment of smart meters, offset, in part, by the Tennessee Valley Authority (“TVA”) 1.5% rate increase effective in October 2016. There was an increase in purchased power cost of \$2.2 million due to higher purchase volumes and the TVA rate increase. Non-operating revenue decreased \$2.9 million to \$50.2 million in 2016 as a result of a decrease in other income prepay credit, related to the Electric TVA Prepay Bonds of \$3.8 million, offset by an increase in other income TVA transmission credit of \$0.8 million.

Expenses

2017 Compared to 2016:

For fiscal year 2017, total expenses were \$1.25 billion, a 1.8%, or \$22.6 million decrease from fiscal year 2016 total expenses of \$1.27 billion. This decrease was a result of a decrease in purchased power cost of \$26.6 million and a decrease in non-operating expense of \$2.5 million, offset by increases in depreciation expense of \$3.2 million and other operating expense of \$3.6 million. The decrease in non-operating expense is primarily the result of lower interest expense associated with the Series 2010 Bonds, offset, in part, by higher interest expense associated with the Series 2016 Bonds. The increase in other operating expense is due, in part, to increases in maintenance expense of \$1.9 million and operating expenses of \$1.7 million, offset by a decrease in payment in lieu of taxes (“PILOT”) of \$0.5 million.



2016 Compared to 2015:

For fiscal year 2016, total expenses were \$1.27 billion, a 0.9%, or \$11.0 million, increase from fiscal year 2015 total expenses of \$1.26 billion. This increase was a result of an increase in other operating expense of \$10.2 million, purchased power cost of \$2.2 million and depreciation expense of \$2.1 million, offset by a decrease in non-operating expense of \$3.5 million. The decrease in non-operating expense is primarily the result of lower interest expense associated with the Series 2010 Bonds. The increase in other operating expense is due, in part, to increases in operating expenses of \$10.5 million and maintenance expense of \$0.6 million, offset by a decrease in payment in lieu of taxes ("PILOT") of \$0.9 million.

Contributions in aid of construction

2017 Compared to 2016:

Contributions in aid of construction ("CIAC") were \$27.5 million for fiscal year 2017, an increase of \$17.1 million, or 163.8%, from fiscal year 2016. This increase was mainly the result of increases in grant funds of \$9.6 million, construction activity of \$6.4 million, and cancelled contracts of \$1.4 million, offset by a decrease in claims of \$1.2 million.

2016 Compared to 2015:

Contributions in aid of construction ("CIAC") were \$10.4 million for fiscal year 2016, a decrease of \$3.4 million, or 24.5%, from fiscal year 2015. This decrease was mainly the result of decreases in economic development projects of \$2.4 million, cancelled contracts of \$1.8 million, and grants of \$1.1 million, offset by an increase in damage to a substation of \$1.1 million.

Transfers to the City of Memphis

2017 Compared to 2016:

MLGW's transfer to the City of Memphis is based on the formula provided by the May 29, 1987 TVA Power Contract Amendment (Supp. No. 8). The formula includes a maximum property tax equivalency calculation plus 4% of operating revenue less power costs (three-year average). Transfers to the City represent the Electric Division's in lieu of tax payment. The transfer for 2017 increased by \$1.7 million. An increase of \$1.9 million was due to increased net plant investment, offset by \$0.2 million decrease due to a decrease in three-year average revenues.

2016 Compared to 2015:

MLGW's transfer to the City of Memphis is based on the formula provided by the May 29, 1987 TVA Power Contract Amendment (Supp. No. 8). The formula includes a maximum property tax equivalency calculation plus 4% of operating revenue less power costs (three-year average). Transfers to the city represent the Electric Division's in lieu of tax payment. The transfer for 2016 increased by \$3.3 million due to an increase in net plant investment of \$3.1 million and an increase in three-year average revenues of \$0.2 million.



Analysis of the Gas Division's Statements of Net Position

Condensed financial information comparing the Gas Division's net position for the past three fiscal years is presented below:

Table 3
Gas Division Condensed Statements of Net Position
December 31
(In Thousands)

	<u>2017</u>	<u>2016</u>	<u>FY17 - FY16</u> <u>Percentage</u> <u>Change</u>	<u>2015</u>	<u>FY16 - FY15</u> <u>Percentage</u> <u>Change</u>
Current assets (excluding restricted funds)	\$ 152,994	\$ 136,737	11.9%	\$ 160,636	-14.9%
Restricted assets	30,991	49,261	-37.1%	22,122	122.7%
Other assets	17,575	10,478	67.7%	745	1306.4%
Utility plant	400,150	383,630	4.3%	363,741	5.5%
Total assets	601,710	580,106	3.7%	547,244	6.0%
Deferred outflows of resources					
Employer Pension Contribution	5,784	5,473	5.7%	5,473	-
Pension liability experience	388	485	-20.0%	-	-
Pension investment earnings experience	13,159	17,546	-25.0%	-	-
Accumulated decrease in fair value of hedging derivatives	-	-	-	617	-
Total assets and deferred outflows	621,041	603,610	2.9%	553,334	9.1%
Current liabilities payable from current assets	41,439	52,361	-20.9%	58,483	-10.5%
Current liabilities payable from restricted assets	7,978	8,304	-3.9%	8,386	-1.0%
Long-term debt	89,988	46,591	93.1%	-	-
Non-current liabilities	28,724	34,234	-16.1%	8,618	297.2%
Total liabilities	168,129	141,490	18.8%	75,487	87.4%
Deferred Inflows of Resources					
Pension liability experience	4,502	2,788	61.5%	3,485	-20.0%
Pension changes of assumptions	2,830	3,774	-25.0%	4,717	-20.0%
Pension investment earnings experience	2,339	88	2558.0%	117	-24.8%
Accumulated decrease in fair value of hedging derivatives	18	9	100.0%	-	-
Total liabilities and deferred inflows	177,818	148,149	20.0%	83,806	76.8%
Net position:					
Net investment in capital assets	308,334	336,148	-8.3%	363,742	-7.6%
Restricted	19,662	37,409	-47.4%	10,012	273.6%
Unrestricted	115,227	81,904	40.7%	95,774	-14.5%
Total Net position	\$ 443,223	\$ 455,461	-2.7%	\$ 469,528	-3.0%



Assets

2017 Compared to 2016:

As of December 31, 2017 total assets and deferred outflows were \$621.0 million, an increase of \$17.4 million, or 2.9%, compared to December 31, 2016. This increase is due, in part, to increases in net utility plant of \$16.5 million, current assets (excluding restricted funds) of \$16.3 million and other assets of \$7.1 million, offset, in part, by a decrease in restricted assets of \$18.3 million and a decrease in pension investment earnings experience of \$4.4 million. Current assets increased due, in part, to increases in unbilled revenue of \$4.5 million, cash and cash equivalents of \$4.3 million and investments of \$4.1 million. The decrease in restricted assets is due to depleting the Series 2016 revenue bond proceeds used for capital expenditures of \$27.7 million, offset by an increase in proceeds due to the issuance of the Series 2017 revenue bonds of \$10.0 million.

2016 Compared to 2015:

As of December 31, 2016 total assets and deferred outflows were \$603.6 million, an increase of \$50.3 million, or 9.1%, compared to December 31, 2015. This increase is due, in part, to an increase in restricted assets of \$27.1 million due to the issuance of Series 2016 Bonds, net utility plant of \$19.9 million, pension investment earnings experience of \$17.5 million, and other assets of \$9.7 million, offset by a decrease in current assets (excluding restricted funds) of \$23.9 million. Current assets decreased due to a decrease in cash and cash equivalents of \$25.2 million due, in part, to a decrease in natural gas sales and margin (revenue less gas costs).

Capital Assets and Construction Activities

2017 Compared to 2016:

The Gas Division's utility plant assets, net of accumulated depreciation were \$400.2 million as of December 31, 2017, an increase of 4.3% over fiscal 2016. During 2017, the Gas Division expended \$47.0 million on construction activities and equipment purchases, an increase of \$4.2 million or 9.8% compared to fiscal year 2016. Major Gas Division construction activities included the purchase of meters and metering equipment (\$29.0 million), cast iron replacement (\$3.2 million), and purchase of transportation and power operated equipment (\$2.9 million). Other significant Gas Division expenditures included street improvements (\$2.4 million), data processing projects (\$1.5 million), maintenance of transmission pipelines and facilities (\$1.1 million), and building upgrades to various MLGW facilities (\$1.0 million).

2016 Compared to 2015:

The Gas Division's utility plant assets, net of accumulated depreciation were \$383.6 million as of December 31, 2016, an increase of 5.5% over fiscal 2015. During 2016, the Gas Division expended \$42.8 million on construction activities and equipment purchases, an increase of \$13.5 million, or 45.8%, compared to fiscal year 2015. Major Gas Division construction activities included the purchase of meters and metering equipment (\$20.0 million), the replacement of the MLGW mainframe system (\$7.5 million), retrofitting of cast iron and steel taps (\$4.7 million), and the purchase of transportation and power operated equipment (\$2.9 million). Other significant Gas Division expenditures included pipeline integrity (\$1.8 million), extensions to serve new customer (\$1.5 million), purchase of right-of-way and property (\$0.7 million), alternative fueling infrastructure (\$0.7 million), and building upgrades to various MLGW facilities (\$0.5 million).



Liabilities

2017 Compared to 2016:

At December 31, 2017, total liabilities and deferred inflows were \$177.8 million, representing a \$29.7 million (20.0%) increase compared to \$148.1 million at December 31, 2016. This increase is due, in part, to increases in long-term debt due to the issuance of the Series 2017 Bonds of \$38.8 million, unamortized premium of \$6.0 million, pension investment earning experience of \$2.3 million, and pension liability experience of \$1.7 million, offset by a decrease in current liabilities payable from current assets of \$10.9 million due to other accounts payable and liabilities of \$7.2 million and a decrease in non-current liabilities of \$5.5 million due to the decrease in net pension liability of \$4.5 million.

2016 Compared to 2015:

At December 31, 2016, total liabilities and deferred inflows were \$148.1 million, representing a \$64.3 million (76.8%) increase compared to \$83.8 million at December 31, 2015. This increase is due, in part, to increases in long-term debt due to the issuance of Series 2016 Bonds of \$46.6 million and non-current liabilities of \$25.6 million due, in part, to the net pension liability of \$21.3 million, offset by a decrease in current liabilities payable from current assets of \$6.1 million and a decrease in pension changes of assumptions of \$0.9 million. The decrease in current liabilities payable from current assets is due to a decrease in accrued taxes (PILOT and transfers) of \$10.9 million and a decrease in other accounts payable and liabilities of \$9.2 million, offset by an increase in accounts payable-purchased gas of \$13.4 million.

Net Position

2017 Compared to 2016:

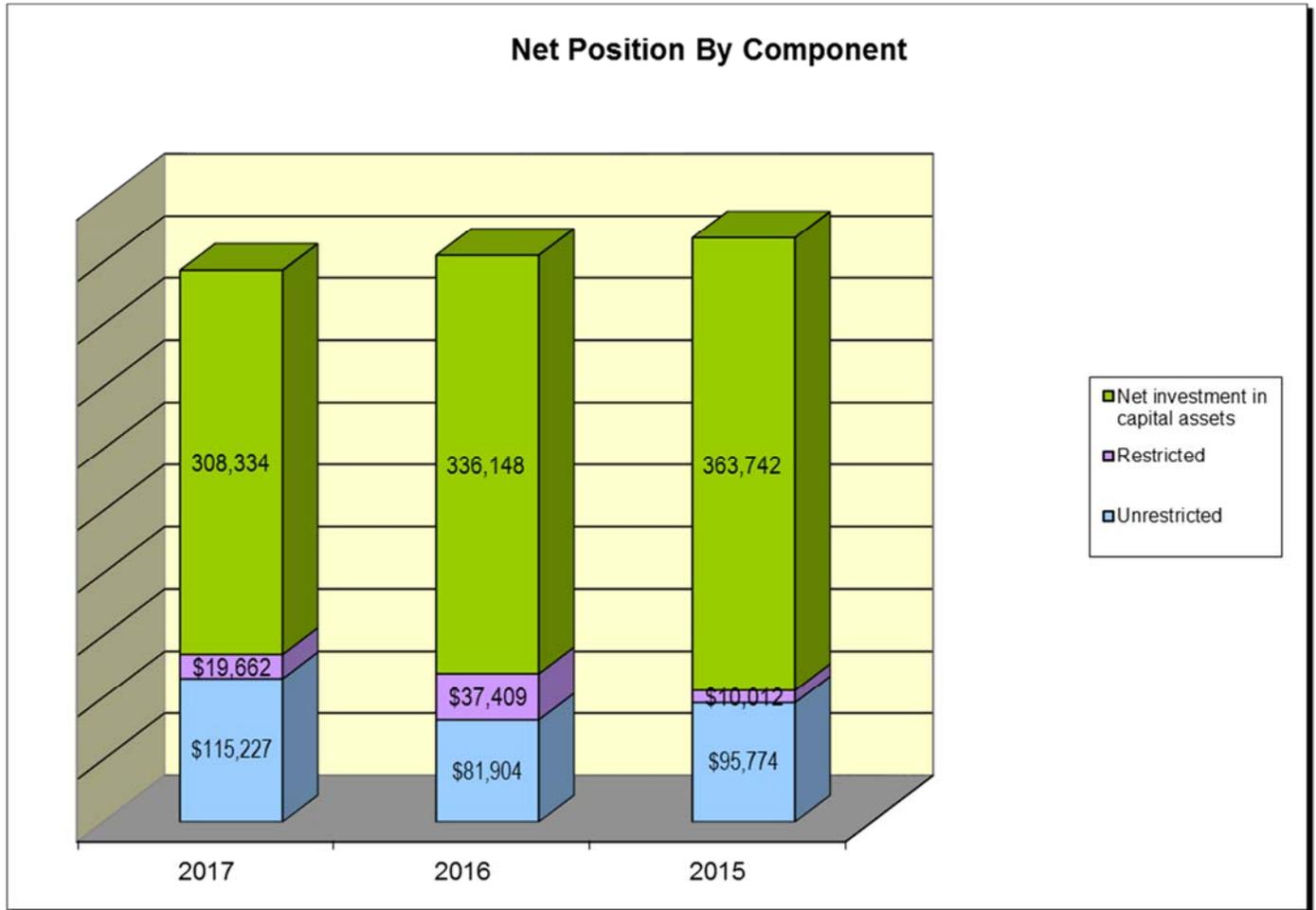
As of December 31, 2017, the Gas Division's total net position (total assets and deferred outflows of resources less total liabilities and deferred inflows of resources) was \$443.2 million, a decrease of \$12.2 million, or 2.7%, from December 31, 2016. The decrease is due, in part, to a decrease in net investment in capital assets of \$27.8 million and a decrease in restricted net position of \$17.7 million due to depleting the Series 2016 bond proceeds used for capital expenditures and the issuance of the Series 2017 revenue bonds, offset, in part by an increase in unrestricted net position (used to finance day-to-day operations) of \$33.3 million. Seventy percent of the net position was related to net investment in capital assets.

2016 Compared to 2015:

As of December 31, 2016, the Gas Division's total net position (total assets and deferred outflows of resources less total liabilities and deferred inflows of resources) was \$455.5 million, a decrease of \$14.1 million, or 3.0%, from December 31, 2015. The decrease is due, in part, to a decrease in net investment in capital assets of \$27.6 million and a decrease in unrestricted net position (used to finance day-to-day operations) of \$13.8 million, offset, in part, by an increase in restricted net position of \$27.4 million. Seventy-four percent of the net position was related to net investment in capital assets.



Figure 3: Gas Division's Net Position (in thousands):





Analysis of the Gas Division's Statements of Revenues, Expenses and Changes in Net Position

Condensed financial information comparing the Gas Division's revenues, expenses and changes in net position for the past three fiscal years is presented below:

	2017	2016	FY17 - FY16 Percentage Change	2015	FY16 - FY15 Percentage Change
Revenues:					
Sales, service and other operating revenues	\$ 218,088	\$ 198,931	9.6%	\$ 243,525	-18.3%
Transported gas revenue	8,315	6,945	19.7%	6,380	8.9%
Non-operating revenues	<u>(186)</u>	<u>98</u>	<u>-289.8%</u>	<u>326</u>	<u>-69.9%</u>
Total revenues	<u>226,217</u>	<u>205,974</u>	<u>9.8%</u>	<u>250,231</u>	<u>-17.7%</u>
Expenses:					
Depreciation expense	18,121	15,251	18.8%	14,660	4.0%
Purchased gas	105,729	92,183	14.7%	122,973	-25.0%
Other operating expense	94,811	94,703	0.1%	89,124	6.3%
Non-operating expense	<u>1,469</u>	<u>379</u>	<u>287.6%</u>	<u>-</u>	<u>-</u>
Total expenses	<u>220,130</u>	<u>202,516</u>	<u>8.7%</u>	<u>226,757</u>	<u>-10.7%</u>
Income before contributions in aid of construction and transfers	6,087	3,458	76.0%	23,474	-85.3%
Contributions in aid of construction	3,833	38,118	-89.9%	2,316	1545.9%
Reduction of plant costs recovered through contributions in aid of construction	(3,833)	(38,118)	89.9%	(2,316)	-1545.9%
Transfers to City of Memphis	<u>(18,325)</u>	<u>(17,525)</u>	<u>4.6%</u>	<u>(16,551)</u>	<u>5.9%</u>
Change in net position	<u>\$ (12,238)</u>	<u>\$ (14,067)</u>	<u>13.0%</u>	<u>\$ 6,923</u>	<u>-303.2%</u>
Net position, beginning of year	\$ 455,461	\$ 469,528	-3.0%	\$ 467,670	0.4%
Change in method of accounting for pension	-	-	-	(5,065)	-
Change in net position	<u>(12,238)</u>	<u>(14,067)</u>	<u>13.0%</u>	<u>6,923</u>	<u>-303.2%</u>
Net position, end of year	<u>\$ 443,223</u>	<u>\$ 455,461</u>	<u>-2.7%</u>	<u>\$ 469,528</u>	<u>-3.0%</u>

Change in Net Position

2017 Compared to 2016:

The change in net position is a loss of \$12.2 million, up \$1.8 million from December 31, 2016. This increase is primarily due to an increase in operating margin (operating revenue less gas cost) of \$7.0 million, offset by lower gas sales volume, increases in depreciation expense of \$2.9 million, non-operating expense of \$1.1 million and transfers to the City of \$0.8 million.



2016 Compared to 2015:

The change in net position is a loss of \$14.1 million, down \$21.0 million from December 31, 2015. This decrease is primarily due to a decrease in operating margin (operating revenue less gas cost) of \$13.2 million resulting mainly from lower gas sales volume, an increase in other operating expense of \$5.6 million, an increase in transfers to the City of \$1.0 million, and an increase in depreciation expense of \$0.6 million.

Revenues

2017 Compared to 2016:

Total revenues were \$226.2 million for fiscal year 2017, an increase of 9.8% from fiscal year 2016. Sales, service and other operating revenues were \$218.1 million, an increase of \$19.2 million, or 9.6%, from 2016. There was an increase in gas costs that are passed along to customers by a purchase gas adjustment (“PGA”), offset by a decrease in gas sales volume. There was a corresponding increase in purchased gas cost of \$13.5 million, or 14.7%, due to higher gas cost per unit. Transported gas revenues increased \$1.4 million, or 19.7%, and non-operating revenue decreased \$0.3 million, compared to fiscal year 2016.

2016 Compared to 2015:

Total revenues were \$206.0 million for fiscal year 2016, a decrease of 17.7% from fiscal year 2015. Sales, service and other operating revenues were \$198.9 million, a decrease of \$44.6 million, or 18.3%, from 2015. There was a decrease in gas sales and lower gas costs that are passed along to customers by a purchase gas adjustment (“PGA”). There was a corresponding decrease in purchased gas cost of \$30.8 million, or 25.0%, due to lower purchased volumes and lower gas cost per unit. Transported gas revenue increased \$0.6 million, or 8.9%, and non-operating revenue decreased \$0.2 million, compared to last fiscal year.

Expenses

2017 Compared to 2016:

For fiscal year 2017, total expenses were \$220.1 million at December 31, 2017, an increase of 8.7% over fiscal year 2016 expenses of \$202.5 million. Purchased gas cost was \$105.7 million, up 14.7%, from \$92.2 million at December 31, 2016, as a result of higher gas costs per unit than last year. Depreciation expense was \$18.1 million at December 31, 2017, up \$2.9 million, or 18.8%, from \$15.3 million at December 31, 2016 and non-operating expense was \$1.5 million at December 31, 2017, an increase of \$1.1 million due to higher interest expense associated with the Series 2016 Bonds.

2016 Compared to 2015:

For fiscal year 2016, total expenses were \$202.5 million at December 31, 2016, a 10.7% decrease over fiscal year 2015 expenses of \$226.8 million. Purchased gas cost was \$92.2 million, down 25.0%, from \$123.0 million at December 31, 2015, as a result of a decrease in natural gas purchases and lower gas costs per unit than last year. Other operating expense was \$94.7 million at December 31, 2016, up \$5.6 million, or 6.3%, from \$89.1 million at December 31, 2015, primarily attributable to an increase in operation costs of \$6.2 million and an increase in PILOT of \$0.7 million, offset by a decrease in maintenance expense of \$1.3 million.



Contributions in aid of construction

2017 Compared to 2016:

CIAC were \$3.8 million for fiscal year 2017, a decrease of \$34.3 million (89.9%) from fiscal year 2016. This decrease was mainly the result of the TVA pipeline project of \$35.6 million, offset by an increase in construction activity of \$1.0 million.

2016 Compared to 2015:

CIAC were \$38.1 million for fiscal year 2016, an increase of \$35.8 million (1545.1%) from fiscal year 2015. This increase was mainly the result of the TVA pipeline project of \$36.4 million, offset by a decrease in construction activity of \$0.6 million.

Transfers to the City of Memphis

2017 Compared to 2016:

MLGW's transfer to the City of Memphis is based on the formula provided by the State of Tennessee Municipal Gas System Tax Equivalent Law of 1987. The formula includes a maximum property tax equivalency calculation plus 4% of operating revenue less power costs (three-year average). Transfers to the City represent the Gas Division's in lieu of tax payment. The transfer for 2017 increased by \$0.8 million. The transfer increased \$1.2 million primarily as a result of an increase in net plant investment, offset by a decrease of \$0.4 million due to a decrease in three-year average revenues.

2016 Compared to 2015:

MLGW's transfer to the City of Memphis is based on the formula provided by the State of Tennessee Municipal Gas System Tax Equivalent Law of 1987. The formula includes a maximum property tax equivalency calculation plus 4% of operating revenue less power costs (three-year average). Transfers to the City represent the Gas Division's in lieu of tax payment. The transfer for 2016 increased by \$1.0 million, due to an increase of \$1.1 million in net plant investment, offset by a decrease of \$0.1 million due to a decrease in three-year average revenues.



Analysis of the Water Division's Statements of Net Position

Condensed financial information comparing the Water Division's net position for the past three fiscal years is presented below:

	<u>2017</u>	<u>2016</u>	FY17 - FY16 Percentage Change	<u>2015</u>	FY16 - FY15 Percentage Change
Current assets (excluding restricted assets)	\$ 56,200	\$ 46,901	19.8%	\$ 43,790	7.1%
Restricted assets	13,395	29,756	-55.0%	13,986	112.8%
Other assets	4,935	4,012	23.0%	2,693	49.0%
Utility plant	327,788	292,880	11.9%	270,988	8.1%
Total assets	402,318	373,549	7.7%	331,457	12.7%
Deferred outflows of resources					
Employer Pension Contribution	3,804	3,634	4.7%	3,634	-
Pension liability experience	258	322	-19.9%	-	-
Pension investment earnings experience	8,739	11,652	-25.0%	-	-
Total assets and deferred outflows	415,119	389,157	6.7%	335,091	16.1%
Current liabilities payable from current assets	16,977	20,031	-15.2%	19,140	4.7%
Current liabilities payable from restricted assets	4,978	5,154	-3.4%	6,050	-14.8%
Long-term debt	70,219	45,501	54.3%	14,739	208.7%
Non-current liabilities	18,457	20,988	-12.1%	6,466	224.6%
Total liabilities	110,631	91,674	20.7%	46,395	97.6%
Deferred inflows of resources					
Pension liability experience	2,989	1,852	61.4%	2,315	-20.0%
Pension changes of assumptions	1,880	2,506	-25.0%	3,133	-20.0%
Pension investment earnings experience	1,553	58	2577.6%	78	-25.6%
Total liabilities and deferred inflows	117,053	96,090	21.8%	51,921	85.1%
Net position:					
Net investment in capital assets	255,420	246,178	3.8%	255,883	-3.8%
Restricted	7,122	23,617	-69.8%	7,100	232.6%
Unrestricted	35,524	23,272	52.6%	20,187	15.3%
Total Net position	\$ 298,066	\$ 293,067	1.7%	\$ 283,170	3.5%



Assets

2017 Compared to 2016:

As of December 31, 2017, total assets and deferred outflows were \$415.1 million, an increase of \$26.0 million compared to December 31, 2016. The increase is due, in part, to increases in net utility plant of \$35.0 million and current assets (excluding restricted assets) of \$9.3 million, offset with a decrease in restricted assets of \$16.4 million due to depleting the Series 2016 revenue bond proceeds used for capital expenditures of \$16.5 million and a decrease in the pension investment earnings experience of \$2.9 million.

2016 Compared to 2015:

As of December 31, 2016, total assets and deferred outflows were \$389.2 million, an increase of \$54.1 million compared to December 31, 2015. The increase is due, in part, to increases in net utility plant of \$21.9 million, restricted assets of \$15.8 million due, in part, to the issuance of Series 2016 Bonds, and pension investment earnings experience of \$11.7 million.

Capital Assets and Construction Activities

2017 Compared to 2016:

The Water Division's utility plant assets, net of accumulated depreciation were \$327.8 million as of December 31, 2017, an increase of 11.9% compared to December 31, 2016. During 2017, the Water Division expended \$45.0 million on construction activities and equipment purchases, an increase of \$14.0 million, or 45.2%, compared to fiscal year 2016. Major Water Division construction activities included the purchase of meters (\$22.1 million), maintenance and installation of overhead storage tanks (\$5.8 million), building upgrades and rehabilitation of various pumping stations and other MLGW buildings (\$6.1 million), and installation of new water mains (\$3.6 million). Other significant expenditures include the maintenance and construction of water production wells (\$3.3 million) and the purchase of transportation and power operated equipment (\$1.3 million).

2016 Compared to 2015:

The Water Division's utility plant assets, net of accumulated depreciation were \$292.9 million as of December 31, 2016, an increase of 8.1% as compared to December 31, 2015. During 2016, the Water Division expended \$31.0 million on construction activities and equipment purchases, an increase of \$19.4 million, or 167.2%, compared to fiscal year 2015. Major Water Division construction activities included the purchase of meters (\$13.2 million), building upgrades to various pumping stations and other MLGW buildings (\$2.9 million), extension to serve new customers (\$2.3 million), upgrades to Mallory Pumping Station (\$2.3 million), and upgrades to Davis Pumping Station (\$2.0 million). Other significant expenditures include upgrades to Allen Pumping Station (\$1.1 million), the purchase of transportation and power operated equipment (\$1.0 million), the relocation of facilities to accommodate street improvements (\$0.9 million), upgrades to Shaw Pumping Station (\$0.7 million), and upgrades to Palmer Pumping Station (\$0.5 million).



Liabilities

2017 Compared to 2016:

As of December 31, 2017, total liabilities and deferred inflows were \$117.1 million, representing an increase of \$21.0 million, or 21.8%, compared to December 31, 2016. This increase is due, in part, to an increase in long-term debt of \$24.7 million due to the issuance of Series 2017 Bonds, offset by a decrease in current liabilities payable from current assets of \$3.1 million and a decrease in non-current liabilities of \$2.5 million due to the decrease in net pension liability-long term.

2016 Compared to 2015:

As of December 31, 2016, total liabilities and deferred inflows were \$96.1 million, representing an increase of \$44.2 million, or 85.1%, compared to December 31, 2015. The increase is due, in part, to an increase in long-term debt of \$30.8 million and an increase in non-current liabilities of \$14.5 million. Long-term debt increased \$28.9 million due to the issuance of Series 2016 Bonds and \$2.5 million due to the unamortized premiums. Non-current liabilities increased \$14.2 million due to the increase in net pension liability-long term.

Net Position

2017 Compared to 2016:

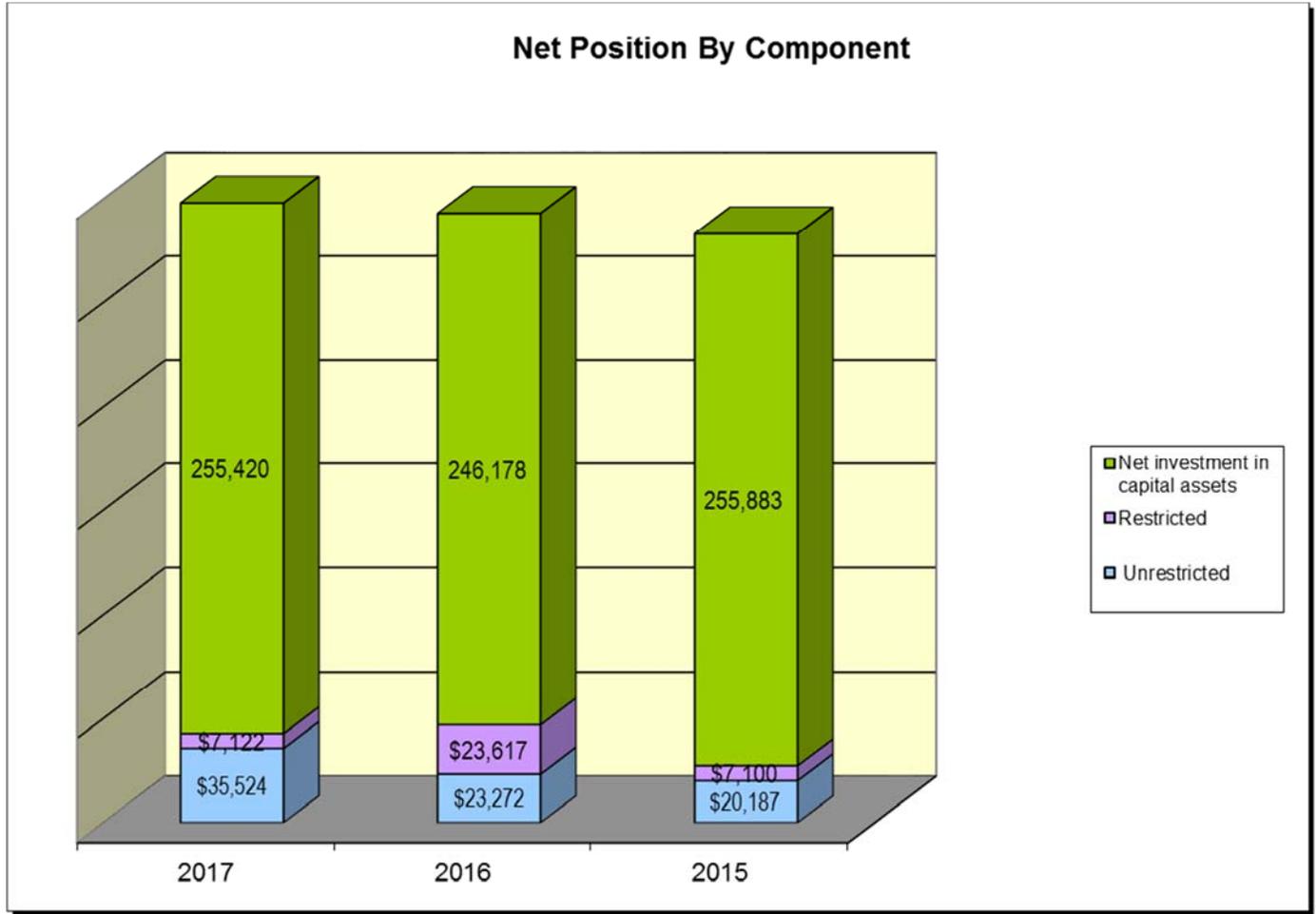
As of December 31, 2017, the Water Division's total net position (total assets and deferred outflows of resources less total liabilities and deferred inflows of resources) was \$298.1 million, an increase of \$5.0 million, or 1.7%, from December 31, 2016. The increase is due to an increase in unrestricted net position (used to finance day-to-day operations) of \$12.3 million and an increase in net investment in capital assets of \$9.2 million, offset by a decrease in restricted net position of \$16.5 million due to depleting the Series 2016 revenue bond proceeds used for capital expenditures. Eighty-six percent of the new position was related to net investments in capital assets.

2016 Compared to 2015:

As of December 31, 2016, the Water Division's total net position (total assets and deferred outflows of resources less total liabilities and deferred inflows of resources) was \$293.1 million, an increase of \$9.9 million, or 3.5%, from December 31, 2015. The increase is due to an increase in restricted net position of \$16.5 million, offset by a decrease in net investment in capital assets of \$9.7 million. Eighty-four percent of the net position was related to net investments in capital assets.



Figure 4: Water Division's Net Position (in thousands):





Analysis of the Water Division's Statements of Revenues, Expenses and Changes in Net Position

Condensed financial information comparing the Water Division's revenues, expenses and changes in net position for the past three fiscal years is presented below:

	<u>2017</u>	<u>2016</u>	FY17 - FY16 Percentage Change	<u>2015</u>	FY16 - FY15 Percentage Change
Revenues:					
Operating revenues	\$ 99,513	\$ 99,847	-0.3%	\$ 84,491	18.2%
Non-operating revenues	1,000	739	35.3%	678	9.0%
Total Revenues	<u>100,513</u>	<u>100,586</u>	<u>-0.1%</u>	<u>85,169</u>	<u>18.1%</u>
Expenses:					
Depreciation expense	8,404	7,987	5.2%	7,279	9.7%
Other operating expense	81,352	77,611	4.8%	74,604	4.0%
Non-operating expense	1,358	691	96.5%	457	51.2%
Total Expenses	<u>91,114</u>	<u>86,289</u>	<u>5.6%</u>	<u>82,340</u>	<u>4.8%</u>
Income before contributions in aid of construction and transfers	9,399	14,297	-34.3%	2,829	405.4%
Contributions in aid of construction	3,576	3,533	1.2%	3,128	13.0%
Reduction of plant costs recovered through contributions in aid of construction	(3,576)	(3,533)	-1.2%	(3,128)	-13.0%
Transfers to City of Memphis	(4,400)	(4,400)	-	(4,400)	-
Change in net position	<u>\$ 4,999</u>	<u>\$ 9,897</u>	<u>-49.5%</u>	<u>\$ (1,571)</u>	<u>730.0%</u>
Net position, beginning of year	\$ 293,067	\$ 283,170	3.5%	\$ 288,104	-1.7%
Change in method of accounting for pension	-	-	-	(3,363)	-
Change in net position	<u>4,999</u>	<u>9,897</u>	<u>-49.5%</u>	<u>(1,571)</u>	<u>730.0%</u>
Net position, end of year	<u>\$ 298,066</u>	<u>\$ 293,067</u>	<u>1.7%</u>	<u>\$ 283,170</u>	<u>3.5%</u>

Change in Net Position

2017 Compared to 2016:

As of December 31, 2017, the change in net position is \$5.0 million, down \$4.9 million from \$9.9 million at December 31, 2016. This decrease is due to increases in other operating expense of \$3.7 million, non-operating expense of \$0.7 million, and depreciation expense of \$0.4 million.



2016 Compared to 2015:

As of December 31, 2016, the change in net position is \$9.9 million, up \$11.5 million from a loss of \$1.6 million at December 31, 2015. This increase is due to an increase in operating revenues of \$15.4 million, offset by an increase in other operating expense of \$3.0 million.

Revenues

2017 Compared to 2016:

Total revenues were \$100.5 million for fiscal year 2017, a decrease of \$0.07 million compared to fiscal year 2016. Operating revenues decreased \$0.3 million due primarily to lower sales volume, offset by an increase in non-operating revenues of \$0.3 million.

2016 Compared to 2015:

Total revenues were \$100.6 million for fiscal year 2016, an increase of \$15.4 million compared to fiscal year 2015. Operating revenues increased \$15.4 million due, in part, to an increase in sales revenue as a result of a 22% rate increase effective January 2016.

Expenses

2017 Compared to 2016:

As of December 31, 2017, total expenses for the Water Division were \$91.1 million, an increase of \$4.8 million, or 5.6%, compared to fiscal year 2016. The increase resulted from an increase in other operating expense of \$3.7 million due, in part, to an increase in maintenance expenses of \$2.8 million and an increase in non-operating expense of \$0.7 million.

2016 Compared to 2015:

As of December 31, 2016, total expenses for the Water Division were \$86.3 million, an increase of \$3.9 million, or 4.8%, compared to fiscal year 2015. The increase resulted from an increase in other operating expense of \$3.0 million due, in part, to an increase in operation expenses of \$2.1 million and an increase in depreciation expense of \$0.7 million.

Contributions in aid of construction

2017 Compared to 2016:

CIAC were \$3.6 million for fiscal year 2017, an increase of 1.2% from fiscal year 2016. This increase was mainly the result of an increase in construction activity of \$0.4 million and an increase in donated easements of \$0.3 million, offset by a decrease in services of \$0.6 million.

2016 Compared to 2015:

CIAC were \$3.5 million for fiscal year 2016, an increase of \$0.4 million, or 13.0%, from fiscal year 2015. This increase was mainly the result of \$0.4 million increase in donated easements.



Transfers to the City of Memphis

The Water Division, through an agreement with the City, transfers a payment in the amount of \$2.5 million per year. The agreement is effective through the year 2028. During 2014, the Water Division was authorized and directed by City Council to make an additional annual \$1.9 million transfer payment in fiscal year 2014 through fiscal year 2017.

Additional Financial Information

This discussion is designed to provide MLGW's customers, investors and other interested parties with a general overview of the financial position and results of operations. Questions concerning any of the information provided in this report or requests for additional information should be addressed to the Manager of General Accounting, Memphis Light, Gas and Water Division, P.O. Box 430, Memphis, TN 38101, or call 901-528-4221.

Financial Statements

Required and Supplemental Information

Memphis Light, Gas and Water Division
Years ended December 31, 2017 and 2016
with Independent Auditor's Report



STATEMENTS OF NET POSITION
DECEMBER 31, 2017 AND 2016
(Dollars in Thousands)



MLGW

	Electric Division		Gas Division		Water Division	
	2017	2016	2017	2016	2017	2016
Assets						
Current assets:						
Cash and cash equivalents	\$ 105,004	\$ 113,349	\$ 44,900	\$ 40,607	\$ 16,504	\$ 12,233
Investments	85,123	92,361	35,184	31,115	13,371	9,975
Derivative financial instruments	-	-	18	9	-	-
Restricted funds - current	68,698	33,586	17,943	8,303	5,000	5,154
Accounts receivable, less allowance for doubtful accounts	97,175	81,921	37,055	36,404	16,658	17,617
Unbilled revenues	56,453	52,588	22,671	18,201	4,100	3,844
Prepaid power cost	112,822	119,697	-	-	-	-
Unrecovered purchased power/gas cost	3,350	3,229	788	225	-	-
Gas stored - gas in storage	-	-	2,329	2,586	-	-
Inventories	30,375	23,287	6,252	4,811	4,536	3,089
Prepayment - insurance	-	-	476	478	-	-
Unamortized debt expense - current	267	337	65	33	67	44
Meter replacement - current	704	428	845	337	202	99
Other current assets	3,560	363	2,411	1,931	762	-
Total current assets	563,531	521,146	170,937	145,040	61,200	52,055
Non-current assets:						
Restricted funds:						
Futures margin deposits	-	-	-	-	-	-
Insurance reserves - injuries and damages	5,941	5,385	2,689	3,026	1,637	2,121
Insurance reserves - casualties and general	19,777	19,155	9,822	9,791	7,100	7,100
Medical benefits	7,023	7,238	3,204	3,228	2,095	2,144
Customer deposits	26,674	24,888	4,795	5,219	2,123	1,615
Interest fund - revenue refunding bonds - series 2008	260	381	-	-	-	-
Interest fund - revenue refunding bonds - series 2010	230	569	-	-	-	-
Interest fund - revenue bonds - series 2014	245	250	-	-	41	41
Interest fund - revenue bonds - series 2016	147	148	147	148	76	77
Interest fund - revenue bonds - series 2017	317	-	152	-	77	-
Sinking fund - revenue refunding bonds - series 2008	5,532	2,635	-	-	-	-
Sinking fund - revenue refunding bonds - series 2010	4,838	6,958	-	-	-	-
Sinking fund - revenue bonds - series 2014	226	210	-	-	51	48
Sinking fund - revenue bonds - series 2016	113	106	113	106	99	93
Sinking fund - revenue bonds - series 2017	238	-	104	-	73	-
Construction fund - revenue bonds - series 2016	-	-	-	27,743	-	16,517
Construction fund - revenue bonds - series 2017	33,186	-	9,965	-	23	-
Total restricted funds	104,747	67,923	30,991	49,261	13,395	29,756
Less restricted funds - current	(68,698)	(33,586)	(17,943)	(8,303)	(5,000)	(5,154)
Restricted funds - non-current	36,049	34,337	13,048	40,958	8,395	24,602

See accompanying notes.

STATEMENTS OF NET POSITION
DECEMBER 31, 2017 AND 2016
(Dollars in Thousands)
(Continued)



MLGW

	Electric Division		Gas Division		Water Division	
	2017	2016	2017	2016	2017	2016
Assets						
Other assets:						
Prepaid power cost - long term	-	112,821	-	-	-	-
Prepayment - in lieu of taxes	1,715	1,739	40	40	-	-
Unamortized debt expense	1,339	974	672	352	686	456
Notes receivable	-	-	2,809	3,562	1,784	1,872
Meter Replacement-Long Term	10,933	6,918	14,054	5,820	2,465	1,217
Other prepayments	-	1,579	-	704	-	467
Total other assets	13,987	124,031	17,575	10,478	4,935	4,012
Utility plant						
Plant in service	1,876,715	1,815,044	718,073	694,303	526,462	491,517
Plant held for future use	-	-	212	212	-	-
Non-utility plant	15,345	15,345	200	200	-	-
Total utility plant	1,892,060	1,830,389	718,485	694,715	526,462	491,517
Less accumulated depreciation & amortization	(782,462)	(750,926)	(318,335)	(311,085)	(198,674)	(198,637)
Utility plant, net	1,109,598	1,079,463	400,150	383,630	327,788	292,880
Total non-current assets	1,159,634	1,237,831	430,773	435,066	341,118	321,494
Total assets	1,723,165	1,758,977	601,710	580,106	402,318	373,549
Deferred outflows of resources						
Unamortized balance of refunded debt	409	1,499	-	-	-	-
Employer pension contribution	12,790	12,271	5,784	5,473	3,804	3,634
Pension liability experience	870	1,088	388	485	258	322
Pension investment earnings experience	29,506	39,341	13,159	17,546	8,739	11,652
Total assets and deferred outflows of resources	\$ 1,766,740	\$ 1,813,176	\$ 621,041	\$ 603,610	\$ 415,119	\$ 389,157

See accompanying notes.

STATEMENTS OF NET POSITION
DECEMBER 31, 2017 AND 2016
(Dollars in Thousands)
(Continued)



MLGW

	Electric Division		Gas Division		Water Division	
	2017	2016	2017	2016	2017	2016
Liabilities						
Current liabilities:						
Accounts payable - purchased power and gas	\$ 110,516	\$ 115,691	\$ 22,378	\$ 25,950	\$ -	\$ -
Other accounts payable and liabilities	36,101	42,166	13,037	20,265	11,961	15,840
Accrued taxes	-	1,282	-	1,320	-	-
Accrued vacation	8,902	8,461	3,676	3,657	2,610	2,633
Bonds payable	116,218	108,860	2,348	1,169	2,406	1,558
Total current liabilities payable from current assets	271,737	276,460	41,439	52,361	16,977	20,031
Current liabilities payable from restricted assets:						
Insurance reserves - injuries and damages	5,941	5,385	2,689	3,026	1,637	2,121
Medical benefits	7,023	7,238	3,204	3,228	2,095	2,144
Customer deposits	10,403	9,707	1,569	1,796	828	629
Bonds payable - accrued interest	1,199	1,347	299	148	194	118
Bonds payable - principal	10,947	9,910	217	106	224	142
Total current liabilities payable from restricted assets	35,513	33,587	7,978	8,304	4,978	5,154
Total current liabilities	307,250	310,047	49,417	60,665	21,955	25,185
Non-current liabilities:						
Customer advances for construction	7,434	8,584	544	626	-	-
Customer deposits	16,271	15,182	3,226	3,423	1,295	985
LNG deposits	-	-	125	125	-	-
Reserve for unused sick leave	7,263	7,043	3,160	3,198	2,169	2,311
Revenue refunding bonds - series 2008	-	65,305	-	-	-	-
Revenue refunding bonds - series 2010	-	55,070	-	-	-	-
Revenue bonds - series 2014	60,965	63,585	-	-	12,695	13,290
Revenue bonds - series 2016	37,410	38,725	37,410	38,725	27,725	28,880
Revenue bonds - series 2017	87,145	-	38,750	-	24,120	-
Unamortized debt premium	27,659	21,016	13,828	7,866	5,679	3,331
Net pension liability	39,754	49,940	17,818	22,273	11,792	14,791
Other	1,438	1,206	3,851	4,589	3,201	2,901
Total non-current liabilities	285,339	325,656	118,712	80,825	88,676	66,489
Total liabilities	592,589	635,703	168,129	141,490	110,631	91,674
Deferred inflows of resources						
Pension liability experience	10,093	6,252	4,502	2,788	2,989	1,852
Pension changes of assumptions	6,346	8,462	2,830	3,774	1,880	2,506
Pension investment earnings experience	5,245	197	2,339	88	1,553	58
Accumulated increase in fair value of hedging derivatives	-	-	18	9	-	-
Total deferred inflows of resources	21,684	14,911	9,689	6,659	6,422	4,416
Net position						
Net investment in capital assets	892,669	958,213	308,334	336,148	255,420	246,178
Restricted	52,963	19,155	19,662	37,409	7,122	23,617
Unrestricted	206,835	185,194	115,227	81,904	35,524	23,272
Total net position	1,152,467	1,162,562	443,223	455,461	298,066	293,067
Total liabilities, deferred inflows of resources and net position	\$ 1,766,740	\$ 1,813,176	\$ 621,041	\$ 603,610	\$ 415,119	\$ 389,157

See accompanying notes.

**STATEMENTS OF REVENUES, EXPENSES
AND CHANGES IN NET POSITION
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016
(Dollars in Thousands)**



MLGW

	Electric Division		Gas Division		Water Division	
	2017	2016	2017	2016	2017	2016
Operating revenues:						
Sales and service revenues	\$ 1,205,017	\$ 1,219,587	\$ 200,679	\$ 184,874	\$ 94,697	\$ 96,236
Transported gas revenues	-	-	8,315	6,945	-	-
Other revenues	29,057	29,948	17,409	14,057	4,816	3,611
Total operating revenues	<u>1,234,074</u>	<u>1,249,535</u>	<u>226,403</u>	<u>205,876</u>	<u>99,513</u>	<u>99,847</u>
Operating expenses:						
Purchased power and gas for resale	991,526	1,018,157	105,729	92,183	-	-
Production	-	-	-	-	14,713	15,759
Operation	138,541	136,756	83,982	81,399	53,731	51,744
Maintenance	46,171	44,273	9,722	11,671	12,908	10,108
Depreciation & amortization	54,148	50,902	18,121	15,251	8,404	7,987
Payment in lieu of taxes	6,423	6,898	1,107	1,633	-	-
	<u>1,236,809</u>	<u>1,256,986</u>	<u>218,661</u>	<u>202,137</u>	<u>89,756</u>	<u>85,598</u>
Operating income (loss)	<u>(2,735)</u>	<u>(7,451)</u>	<u>7,742</u>	<u>3,739</u>	<u>9,757</u>	<u>14,249</u>
Non-operating revenues (expenses):						
Contributions in aid of construction	27,553	10,445	3,833	38,118	3,576	3,533
Reduction of plant costs recovered through contributions in aid of construction	(27,553)	(10,445)	(3,833)	(38,118)	(3,576)	(3,533)
Transmission credits	33,989	33,344	-	-	-	-
Investment and other income	4,312	3,713	(186)	98	944	691
Allowance for funds used during construction	172	279	-	-	56	48
Prepay credit	8,880	12,886	-	-	-	-
Interest expense	(13,032)	(15,491)	(1,469)	(379)	(1,358)	(691)
Total non-operating revenues (expenses)	<u>34,321</u>	<u>34,731</u>	<u>(1,655)</u>	<u>(281)</u>	<u>(358)</u>	<u>48</u>
Income before transfers	<u>31,586</u>	<u>27,280</u>	<u>6,087</u>	<u>3,458</u>	<u>9,399</u>	<u>14,297</u>
Transfers out - City of Memphis	<u>(41,681)</u>	<u>(39,994)</u>	<u>(18,325)</u>	<u>(17,525)</u>	<u>(4,400)</u>	<u>(4,400)</u>
Change in net position	<u>\$ (10,095)</u>	<u>\$ (12,714)</u>	<u>\$ (12,238)</u>	<u>\$ (14,067)</u>	<u>\$ 4,999</u>	<u>\$ 9,897</u>
Net position, beginning of year	\$ 1,162,562	\$ 1,175,276	\$ 455,461	\$ 469,528	\$ 293,067	\$ 283,170
Change in net position	(10,095)	(12,714)	(12,238)	(14,067)	4,999	9,897
Net position, end of year	<u>\$ 1,152,467</u>	<u>\$ 1,162,562</u>	<u>\$ 443,223</u>	<u>\$ 455,461</u>	<u>\$ 298,066</u>	<u>\$ 293,067</u>

See accompanying notes.

**STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016
(Dollars in Thousands)**



MLGW

	Electric Division		Gas Division		Water Division	
	2017	2016	2017	2016	2017	2016
Cash flows from operating activities:						
Receipts from customers and users	\$ 1,223,014	\$ 1,246,585	\$ 218,562	\$ 197,166	\$ 101,259	\$ 98,045
Payments to suppliers	(913,357)	(899,800)	(134,108)	(101,881)	(35,934)	(26,296)
Payments to/on behalf of employees	(108,059)	(120,997)	(66,476)	(63,049)	(44,327)	(46,493)
Payments from (to) other Division funds	(4,820)	(2,831)	(2,875)	(2,371)	(4,112)	(3,162)
Payments for taxes	(6,736)	(14,131)	(1,286)	(2,306)	-	-
Net cash provided by operating activities	190,042	208,826	13,817	27,559	16,886	22,094
Cash flows from noncapital financing activities:						
Transfers to City of Memphis	(42,963)	(67,416)	(19,645)	(27,580)	(4,400)	(5,650)
Principal payments on long-term debt	(114,975)	(117,091)	-	-	-	-
Interest expense on bonds	(11,385)	(17,113)	-	-	-	-
Net cash used in noncapital financing activities	(169,323)	(201,620)	(19,645)	(27,580)	(4,400)	(5,650)
Cash flows from capital and related financing activities:						
Purchase and construction of utility plant	(121,145)	(107,573)	(50,468)	(80,949)	(49,317)	(35,028)
Contributions in aid of construction	27,553	10,445	3,833	38,118	3,576	3,533
Advance contributions in aid of construction (TVA)	-	-	(1,268)	(10,218)	-	-
Proceeds from issuance of long-term debt	101,053	47,698	46,381	47,694	27,389	32,287
Principal payments on long-term debt	(3,795)	(2,470)	(1,275)	-	(1,700)	(569)
Interest payments on debt	(5,259)	(3,205)	(2,093)	(443)	(1,522)	(687)
Net cash provided by (used in) capital and related financing activities	(1,593)	(55,105)	(4,890)	(5,798)	(21,574)	(464)
Cash flows from investing activities:						
Sales and maturities of investments	95,710	74,240	56,274	24,836	28,316	3,232
Purchases of investments	(88,968)	(73,397)	(37,548)	(42,252)	(15,911)	(21,078)
Payments received on notes receivable	-	-	-	913	88	165
Investment income (loss) earned on investments	2,116	1,408	811	495	307	137
Net cash provided by (used in) investing activities	8,858	2,251	19,537	(16,008)	12,800	(17,544)
Increase (decrease) in cash and cash equivalents	27,984	(45,648)	8,819	(21,827)	3,712	(1,564)
Cash and cash equivalents, beginning of year	170,256	215,904	61,473	83,300	22,277	23,841
Cash and cash equivalents, end of year	\$ 198,240	\$ 170,256	\$ 70,292	\$ 61,473	\$ 25,989	\$ 22,277

See accompanying notes.

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016
(Dollars in Thousands)
(Continued)



MLGW

	Electric Division		Gas Division		Water Division	
	2017	2016	2017	2016	2017	2016
Reconciliation of operating income to net cash provided by operating activities:						
Operating income (loss)	\$ (2,735)	\$ (7,451)	\$ 7,742	\$ 3,739	\$ 9,757	\$ 14,249
Adjustments to reconcile net operating income (loss) to net cash provided by operating activities:						
Depreciation of utility plant	55,556	52,071	19,756	16,784	8,725	8,286
Transmission credits	33,989	33,344	-	-	-	-
Prepay power credits	8,880	12,886	-	-	-	-
Other income (loss)	2,197	2,305	(1,017)	(403)	637	555
(Increase) decrease in assets:						
Accounts receivable	(15,254)	(4,095)	(651)	(2,534)	959	(2,265)
Unbilled revenues	(3,865)	(6,309)	(4,470)	(4,161)	(256)	(341)
Prepaid power cost	119,695	117,078	-	-	-	-
Prepayments - in lieu of taxes	24	58	1	1	-	-
Unrecovered purchased power and gas costs	(121)	(856)	(563)	(225)	-	-
Inventories	(7,088)	1,513	(1,441)	(529)	(1,447)	134
Other assets	8,115	3,767	4,866	2,276	2,277	1,094
Increase (decrease) in liabilities:						
Accounts payable - purchased power and gas	(5,175)	12,464	(3,572)	13,412	-	-
Other accounts payable and accrued expenses	(6,046)	(5,714)	(5,958)	988	(3,877)	959
Accrued payment in lieu of taxes	-	(7,642)	1	(893)	-	-
Customer deposits	1,786	4,010	(424)	(394)	509	243
Insurance reserves	556	(28)	(337)	372	(484)	(866)
Medical benefit accrual	(215)	(992)	(24)	(443)	(49)	(294)
Other liabilities	(257)	2,417	(92)	(431)	135	340
Total adjustments	192,777	216,277	6,075	23,820	7,129	7,845
Net cash provided by operating activities	\$ 190,042	\$ 208,826	\$ 13,817	\$ 27,559	\$ 16,886	\$ 22,094
Reconciliation of cash and cash equivalents per statements of cash flows to the statements of net position:						
Restricted funds	\$ 104,747	\$ 67,923	\$30,991	\$ 49,261	\$ 13,395	\$ 29,756
Less investments included in restricted funds	(11,511)	(11,016)	(5,599)	(28,395)	(3,910)	(19,712)
Cash and cash equivalents included in restricted funds	93,236	56,907	25,392	20,866	9,485	10,044
Current assets - cash and cash equivalents	105,004	113,349	44,900	40,607	16,504	12,233
Total cash and cash equivalents	\$ 198,240	\$ 170,256	\$ 70,292	\$ 61,473	\$ 25,989	\$ 22,277

See accompanying notes.



1. Summary of Significant Accounting Policies

Organization

Memphis Light, Gas and Water Division (“MLGW”), a division of the City of Memphis, Tennessee (the “City”), was created by an amendment to the City Charter by Chapter 381 of the Private Acts of the General Assembly of Tennessee (the “Charter”), adopted March 9, 1939, as amended. MLGW is managed by its President and a five member Board of Commissioners that are nominated by the City Mayor and approved by the Memphis City Council (the “Council”). In 2017, two non-voting county-wide Advisory Board members were added to the Board of Commissioners. MLGW, through its three divisions, provides electricity, gas and water to customers in Shelby County, Tennessee, which includes the City. MLGW’s annual budget and electric, gas and water rates require the approval of the Council. MLGW must also obtain the approval of the Council before incurring certain obligations.

Basis of Presentation

The financial statements present only the Electric, Gas and Water Divisions of MLGW in conformity with accounting principles generally accepted in the United States of America that are applicable to a proprietary fund of a government unit. The accompanying financial statements present the separate financial positions, results of operations, and cash flows of each of the three divisions--Electric, Gas and Water--(the “Divisions”) of MLGW, but do not present the financial position, results of operations, or cash flows of MLGW, a division of the City of Memphis. Accordingly, the accompanying disclosures relate separately to the Divisions, as applicable, and not collectively to MLGW. Unless expressly stated, each disclosure, including references to “MLGW” herein, applies solely to each of the separate divisions on an individual basis. These statements are not intended to present the financial position of the City, the results of the City’s operations or the cash flows of the City’s funds, nor do they represent the financial position, results of operations, or cash flows of MLGW’s Retirement and Pension System discussed in Note 7 or the Other Postemployment Benefits (“OPEB”) Trust discussed in Note 8.

Basis of Accounting

MLGW is required by state statute and the Charter to maintain separate accounting for each division and to allocate among the Divisions, on an equitable basis, joint expenses, including those related to common facilities. MLGW utilizes direct cost methods where applicable. For expenses not directly charged to a specific division, internally developed cost allocation methods are used based on the function performed. Each division is separately financed, and its indebtedness is repayable from its net revenues.

Where applicable, the Federal Energy Regulatory Commission’s (“FERC”) (Electric and Gas Divisions) and the National Association of Regulatory Utility Commissioners’ (“NARUC”) (Water Division) Uniform Systems of Accounts are used. MLGW is not subject to the jurisdiction of federal or state regulatory commissions.



1. Summary of Significant Accounting Policies (continued)

Basis of Accounting (continued)

MLGW prepares its financial statements in accordance with the provisions of GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, paragraphs 476-500, for regulated operations. These paragraphs recognize that accounting for rate regulated enterprises should reflect the relationship of costs and revenues introduced by rate regulation.

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, MLGW has recognized certain regulatory assets and regulatory liabilities in the accompanying Statements of Net Position.

In the event MLGW no longer meets the criteria for regulated operations under GASB 62, MLGW would be required to recognize the effects of any regulatory change in assets or liabilities in its Statements of Revenues, Expenses and Changes in Net Position. The following are the regulatory assets and liabilities included in the Statement of Net Position:



1. Summary of Significant Accounting Policies (continued)

Regulatory Accounting (continued)

	Electric Division		Gas Division		Water Division	
	2017	2016	2017	2016	2017	2016
Regulatory Assets:						
Current:						
Unrecovered purchased power/gas cost	\$ 3,350	\$ 3,229	\$ 788	\$ 225	\$ -	\$ -
Meter replacement	704	428	845	337	202	99
Unamortized debt expense	267	337	65	33	67	44
Total current	<u>4,321</u>	<u>3,994</u>	<u>1,698</u>	<u>595</u>	<u>269</u>	<u>143</u>
Non-Current:						
Meter replacement	10,933	6,918	14,054	5,820	2,465	1,217
Unamortized debt expense	1,339	974	672	352	686	456
Total non-current	<u>12,272</u>	<u>7,892</u>	<u>14,726</u>	<u>6,172</u>	<u>3,151</u>	<u>1,673</u>
Total Regulatory Assets	<u>\$ 16,593</u>	<u>\$ 11,886</u>	<u>\$ 16,424</u>	<u>\$ 6,767</u>	<u>\$ 3,420</u>	<u>\$ 1,816</u>
Regulatory Liabilities:						
Current:						
Purchased gas adjustment	\$ -	\$ -	\$ 1,198	\$ 2,665	\$ -	\$ -
Total Regulatory Liabilities	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 1,198</u>	<u>\$ 2,665</u>	<u>\$ -</u>	<u>\$ -</u>

Fair Value of Financial Instruments

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The carrying amounts of cash and cash equivalents, investments, restricted fund investments, accounts receivable and accounts payable are a reasonable estimate of their fair values. The estimated fair values of MLGW's other financial instruments have been determined by MLGW using available market information. All investments are carried at fair value and changes in the fair values of investments are included in investment income in the accompanying Statements of Revenues, Expenses and Changes in Net Position.

MLGW categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs.



1. Summary of Significant Accounting Policies (continued)

Fair Value of Financial Instruments (continued)

MLGW has the following recurring fair value measurements as of December 31, 2017:

- U.S. Treasury securities of \$81,571 (Level 1 inputs)
- Commercial paper of \$166,309; corporate bonds of \$531; government mortgage-backed securities of \$46,232; and U.S. Government agencies of \$46,884 (Level 2 inputs)

MLGW has the following recurring fair value measurements as of December 31, 2016:

- U.S. Treasury securities of \$132,189 (Level 1 inputs)
- Negotiable certificates of deposit of \$5,006; commercial paper of \$134,191; corporate bonds of \$1,161; government mortgage-backed securities of \$20,235; and U.S. Government agencies of \$41,140 (Level 2 inputs)
- Government mortgage-backed securities of \$4,251 (Level 3 inputs)

Cash and cash equivalents

MLGW considers all highly liquid investments with maturities of three months or less when purchased to be cash equivalents.

Accounts Receivable

Accounts receivables result from charges for both utilities and other ancillary services provided by MLGW, and include wholesale, residential, commercial, industrial and government customers in the Shelby County, Tennessee, geographic area. Accounts receivable are potentially exposed to concentrations of credit risk. As a general policy, customer deposits are required for receivables unless or until the customer has established a good credit history. Accounts receivable are stated at the amount management expects to collect from outstanding balances.

As of December 31, 2017 and 2016, accounts receivable and allowances for doubtful accounts were as follows:

	Electric Division		Gas Division		Water Division	
	2017	2016	2017	2016	2017	2016
Accounts Receivable	\$ 108,008	\$ 103,356	\$ 37,654	\$ 37,024	\$ 17,204	\$ 18,099
Allowance for doubtful accounts	(10,833)	(21,435)	(599)	(620)	(546)	(482)
Total A/R, net of allowance	\$ 97,175	\$ 81,921	\$ 37,055	\$ 36,404	\$ 16,658	\$ 17,617



1. Summary of Significant Accounting Policies (continued)

Accounts Receivable (continued)

MLGW performs a monthly analysis of outstanding trade receivables to assess the likelihood of collection. For aged receivable balances, MLGW records an allowance to adjust the trade receivable to MLGW's best estimate of the amount it will ultimately collect. Such allowances are netted against operating revenues.

MLGW's policy is to write off trade receivables after 150 days of non-payment. The bad debt amounts netted against operating revenues are as follows:

	<u>2017</u>	<u>2016</u>
Electric	\$ 5,549	\$ 6,828
Gas	1,749	1,405
Water	1,004	1,096

Unbilled Revenues

MLGW customers are spread across twenty-one different billing cycles. Each cycle can range from twenty-five to thirty-five days. The summation of these twenty-one cycles represents a revenue month. Billing cycles do not correspond to a calendar month and, thus, have days that fall into two or more calendar months. Revenue is reported on a calendar month basis. Unbilled revenue represents management's estimate of the revenue earned for days of service that have not been billed as of year-end.

Prepaid Power Cost

Electric Division prepaid power cost represents the unamortized amount of prepaid power under the prepaid electricity agreement signed with Tennessee Valley Authority ("TVA") on November 19, 2003. Under the prepay agreement, MLGW issued revenue bonds with a face value of \$1,392,170 and a premium of \$121,247 to make an upfront payment of \$1,500,000 to TVA. Under the terms of the agreement, MLGW receives a fixed discount on the monthly power purchased for the fifteen year term of the agreement. The total fixed discount under the agreement is sufficient to meet the debt service requirements and yield approximately \$13,000 in annual power cost savings. The monthly fixed discount is allocated to prepaid power cost and other income under the interest method based on the debt service requirements of the associated debt. Total prepaid power cost at December 31, 2017 and 2016 was \$112,822 and \$232,518, respectively. As it relates to debt issued to finance the cost of this transaction, the amount of interest cost incurred and charged to electric expense in 2017 and 2016 totaled \$8,873 and \$12,782, respectively. See Note 11 (Bonds) and Note 12 (Rates and Energy Supplies) for further disclosure of the revenue bonds and subsequent refinancing.



1. Summary of Significant Accounting Policies (continued)

Inventories and Stored Natural Gas

Inventories, consisting primarily of materials and supplies inventory, and stored natural gas are valued at cost using the average cost method.

Restricted Funds and Related Reserves

Certain MLGW assets are restricted for specific purposes. Legal and contractual agreements restrict amounts for debt service, refund of customer deposits, futures margin requirements, and capital improvements, while Board of Commissioners enacted provisions restrict funds for self-insurance and additional capital improvements. Restricted funds are first used for expenses when available, with the exception of the insurance reserve fund for casualties, which is used at the discretion of management depending on the severity of the catastrophe and the availability of funds.

The Electric and Gas Divisions maintain a cash margin account with its futures clearing member. The clearing member requires that a minimum cash margin be maintained based on the value of the Division's outstanding derivative positions. The minimum cash margin requirements are considered restricted and are reflected in restricted assets in the accompanying Statements of Net Position. The amounts of cash in excess of the minimum cash margin requirement are included in cash and cash equivalents.

Construction funds are generally maintained for the purpose of paying for certain repairs and capital additions and improvements. The respective bond resolutions of the Electric, Gas and Water Divisions allow for funding for future construction.

The insurance reserves for injuries and damages are maintained for estimated liabilities incurred and risks assumed on claims for injuries and damages. The insurance reserves for casualties are maintained at discretionary amounts to partially cover losses of a catastrophic nature which are not ordinarily insurable or which are not insurable on an economical basis.

Medical benefit reserves are maintained for MLGW's medical insurance program, which serves employees and retirees. The medical benefit reserves represent the estimated costs incurred but not yet paid in providing medical benefits to employees and retirees which are not insured by third party providers.

Since MLGW is self-insured for insurance and medical benefit costs, the Board of Commissioners has authorized the restriction of assets equal to the computed reserves.

Customer deposit funds are maintained for the future repayment of deposits collected from customers without adequate credit history, in accordance with MLGW's policy and the respective customer service agreement.

Bond reserve and debt service funds are restricted under the terms of the respective bond indentures to pay current bond principal and interest as these obligations become due.



1. Summary of Significant Accounting Policies (continued)

Customer Deposits

Customers that do not have adequate credit history are required to make utility deposits before services are provided. Deposits are refunded or applied toward a customer's bill after a 24-month good pay status. Deposits are allocated to the Electric, Gas and Water Divisions based upon each division's percentage of total sales revenue of the previous year-end.

Utility Plant

The costs of additions and replacements of units of property are capitalized. Costs include contracted work, direct labor and materials, allocable overhead and where applicable, allowances for borrowed funds used during construction. Donated assets are valued at acquisition value at the acquisition date. Costs are reduced by contributions in aid of construction. Upon retirement of property units, the original cost, plus removal cost, minus salvage is charged to either accumulated depreciation or accumulated amortization. The units of property adopted are related to those suggested by FERC for the Electric and Gas Divisions and NARUC for the Water Division, which allow for the reduction of plant cost recovered through contributions in aid of construction as opposed to recovery of costs through future regulatory rates.

An allowance for borrowed funds used during construction is computed at actual interest rates to the extent that major projects are financed by long-term debt. In 2017 and 2016, the amount of interest capitalized in the Electric Division was \$172 and \$279, respectively. In 2017 and 2016, the amount of interest capitalized in the Water Division was \$56 and \$48, respectively. Interest on other debt is not capitalized, as it is recovered through current revenues. The amount of interest cost incurred and charged to electric expense in 2017 and 2016 totaled \$4,159 and \$2,709, respectively. The amount of interest cost incurred and charged to gas expense in 2017 and 2016 totaled \$1,469 and \$379, respectively. The amount of interest cost incurred and charged to water expense in 2017 and 2016 totaled \$1,358 and \$691, respectively.

Depreciation and amortization are computed using the straight-line method based on estimated service lives of various classes of property at rates equivalent to annual composite rates of approximately 3.0% for the electric division, 2.7% for the gas division and 1.9% for the water division. Computations of the estimated service lives are the result of various depreciation studies and comparisons with industry standards.

For assets owned by one division, but jointly used by more than one division, the other divisions share the costs by paying rent to the owning division to cover depreciation, interest, in lieu of taxes, and transfers.

Futures, Options and Swap Contracts

The Gas Division enters into futures contracts, swaps, and options on futures contracts as cash flow hedges to manage the risk of volatility in the market price of natural gas on anticipated purchase transactions. The Electric Division enters into futures contracts, swaps, and options on futures contracts as cash flow hedges to manage the risk of volatility in the market price of unleaded gasoline and diesel



1. Summary of Significant Accounting Policies (continued)

Futures, Options and Swap Contracts (continued)

fuel on anticipated purchase transactions. The market values of the open derivative positions are reported on the Statement of Net Position as derivative financial instruments. The changes in fair market value are recognized as deferred inflows (gains) or deferred outflows (losses) until the related gas purchases are recognized in the Statement of Revenues, Expenses and Changes in Net Position.

Bond Premiums, Discounts and Issuance Costs

Bond premiums and discounts, as well as issuance costs, are deferred and amortized using the interest method over the lives of the applicable bond issues. Long-term debt is reported net of the applicable bond premium or discount. Unamortized bond issuance costs are accounted for as a regulatory asset. As such, bond issue costs are capitalized and amortized over the term of the related debt.

Net Position

Net position is classified into three components – net investment in capital assets, restricted, and unrestricted. These classifications are defined as follows:

- Net investment in capital assets – This component of net position consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. If there are significant unspent related debt proceeds at year-end, the portion of the debt attributable to the unspent proceeds is 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.
- Restricted net position – This component of net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets.
- Unrestricted net position – This component of net position is the net amount of the 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.

Revenues and Expenses

Revenues are recognized when earned which generally occurs when electricity, gas, or water is delivered to the customer. Customer meters are read and bills are rendered monthly. MLGW records an estimate for unbilled revenues earned from the dates its customers were last billed to the end of each month.

MLGW distinguishes between operating and non-operating revenues and expenses. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with an enterprise fund's principal operations. The principal operating revenues of MLGW consist of electric, gas and water sales and related activities. Non-operating revenues consist of transmission credits, the non-power cost portion of the prepaid electricity discount, investment income and other



1. Summary of Significant Accounting Policies (continued)

Revenues and Expenses (continued)

ancillary activities. Transmission credits are fees paid by the Tennessee Valley Authority for its use of the Electric Division's transmission facilities in supplying power to MLGW.

Operating expenses include the cost of purchased power and gas, water production costs, operation and maintenance expenses, depreciation on capital assets and payments in lieu of taxes. Expenses not meeting this definition are reported as non-operating expenses.

Deferred Outflows and Inflows of Resources

MLGW adheres to generally accepted accounting principles as it relates to the recognition of deferred outflows of resources and deferred inflows of resources. A deferred outflow of resources is defined as a consumption of net assets that is applicable to a future reporting period and a deferred inflow of resources is defined as an acquisition of net assets that is applicable to a future reporting period.

In accordance with GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – an Amendment of GASB Statement No. 27*, MLGW recognizes deferred outflows and inflows of resources associated with the annual measurement and recognition of MLGW's net pension liability and pension expense.

Also, in accordance with GASB Statement 53, *Accounting and Financial Reporting for Derivative Instruments*, MLGW recognizes deferred outflows and inflows of resources associated with reporting the fair value change in derivative instruments purchased as a hedge against commodity price risk.

Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Memphis Light, Gas and Water Retirement and Pension System (the "MLGW Pension Plan") and additions to and deductions from the MLGW Pension Plan's fiduciary net position have been determined on the same basis as they are reported by the MLGW Pension Plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Related Parties

MLGW conducts business with related parties as "arm's length" transactions: generally, MLGW provides utility and related services to and receives payments from these parties in the same manner as other non-related customers. Major related party entities include the City of Memphis government. For the years ending December 31, 2017 and 2016, receivables from related parties for utility construction, pole rentals and utility related services excluding utility bills were \$1,901 and \$2,219, respectively.



1. Summary of Significant Accounting Policies (continued)

Related Parties (continued)

As of December 31, 2017, the only free service provided to the City is water for fire fighting. Free water service provided to the City for public purposes is estimated to be \$44 for 2017 and \$48 for 2016.

The Electric, Gas and Water Divisions make transfers to the City. See Note 14 (Transfers to City).

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Events occurring after reporting date

Management has evaluated events and transactions that have occurred between December 31, 2017 and June 8, 2018, which is the date that the financial statements were available to be issued, for possible recognition or disclosure in the financial statements.

Reclassifications

Certain amounts in the 2016 financial statements have been reclassified to conform to the 2017 presentation.

Recent Accounting Standards

In June 2015, GASB issued Statement No. 75, *Accounting and Financial Reporting For Postemployment Benefits Other Than Pensions*. This statement replaces Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions* that compared the cost of OPEB with the period in which service was rendered. This Statement establishes standards for recognizing and measuring OPEB liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures. This statement also establishes more extensive note disclosures and required supplementary information for accounting and financial reporting requirements for state and local governments with OPEB plans. The provisions of this statement are effective for financial statements for periods beginning after June 15, 2017. MLGW has not elected early implementation of this standard and has not completed the process of evaluating the impact of the statement on its financial statements.

In November 2016, GASB issued Statement No. 83, *Certain Asset Retirement Obligations*. This Statement defines asset retirement obligations (AROs) as a legally enforceable liability associated with the retirement of a tangible capital asset and requires a government that has legal obligations to perform



1. Summary of Significant Accounting Policies (continued)

Recent Accounting Standards (continued)

future asset retirement activities related to its tangible capital assets to recognize a liability based on the guidance in this statement. The provisions of the statement are effective for financial statements for periods beginning after June 15, 2018. MLGW has not elected early implementation of this standard and has not completed the process of evaluating the impact of this statement on its financial statements.

In January 2017, GASB issued Statement No. 84, *Fiduciary Activities*. This Statement describes four fiduciary funds that should be reported, if applicable: (1) pension (and other employee benefit) trust funds, (2) investment trust funds, (3) private-purpose trust funds, and (4) custodial funds. The criteria for identifying fiduciary activities are established and the focus for the criteria is on (1) whether a government is controlling the assets of the activity and (2) the beneficiaries with whom a fiduciary relationship exists. The provisions of the statement are effective for financial statements for periods beginning after December 15, 2018. MLGW has not elected early implementation of this standard and has not completed the process of evaluating the impact of this statement on its financial statements.

In March 2017, GASB issued Statement No. 85, *Omnibus 2017*. This Statement addresses topics that are related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits). The provisions of the statement are effective for financial statements for periods beginning after June 15, 2017. MLGW has not elected early implementation of this standard and has not completed the process of evaluating the impact of the statement on its financial statements.

In May 2017, GASB issued Statement No. 86, *Certain Debt Extinguishment Issues*. This Statement improves financial reporting consistency for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources (other than the proceeds of refunding debt) are placed in an irrevocable trust for extinguishing of the debt. The provisions of the statement are effective for financial statements for periods beginning after June 15, 2017. MLGW has not elected early implementation of this standard and has not completed the process of evaluating the impact of the statement on its financial statements.

In June 2017, GASB issued Statement No. 87, *Leases*. This Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. The provisions of the statement are effective for financial statements for periods beginning after December 15, 2019. MLGW has not elected early implementation of this standard and has not completed the process of evaluating the impact of the statement on its financial statements.

In April 2018, GASB issued Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*. This Statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. The provisions of the statement are effective for financial statements for periods beginning after June 15, 2018. MLGW has not elected early implementation of this standard and has not completed the process of evaluating the impact of the statement on its financial statements.



2. Deposits and Investments

The MLGW Statement of Investment Policy has been adopted and approved by the MLGW Board of Commissioners. This policy sets forth the investment and operational policies for the management of the public funds of MLGW. The Board of Commissioners has the power to invest MLGW funds in accordance with the prudent investor rule. The Board members exercise authority and control over MLGW's investment portfolio by setting policies which MLGW's investment staff executes either internally, or through the use of external prudent experts.

Custodial Credit Risk

Deposits

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, MLGW will not be able to recover its deposits or will not be able to recover collateral securities that are in possession of an outside party. Deposits are exposed to custodial credit risk if they are not covered by depository insurance and are uncollateralized, collateralized with securities held by the pledging financial institution, or collateralized with securities held by the pledging financial institution's trust department or agent but not in the depository-government's name.

MLGW deposits consist of bank deposits. The bank deposits are insured up to \$250 by the Federal Deposit Insurance Corporation ("FDIC") and the remainder is covered by the State of Tennessee Collateral Pool; certificates of deposit must be placed directly with depository institutions.

The depository bank shall provide collateral for MLGW deposits in accordance with requirements for public funds deposits in Tennessee. The market value of the pledged securities in the collateral pool must equal at least 105% of the value of the deposit secured, less the amount protected by federal deposit insurance. As of December 31, 2017, MLGW deposits with financial institutions were \$104,521. All bank deposits were maintained in collateralized accounts or covered by federal depository insurance and were not exposed to custodial credit risk.

Investments

The investment policy governs the overall administration and investment management of the funds held in the MLGW investment portfolio. MLGW is authorized by the Board of Commissioners to invest in the following investments as authorized by state law and as it deems proper: U.S. Treasuries; U.S. government obligations; repurchase agreements; commercial paper with specified ratings; bankers' acceptances with specified ratings; bank deposits; certificates of deposit and state pool.

MLGW is prohibited from investing in the following securities: purchases on margin or short sales; investments in reverse repurchase agreements; collateralized mortgage obligations; and "exotic" derivatives such as range notes, dual index notes, inverse floating rate notes and leveraged notes, or notes linked to lagging indices or to long-term indices.



2. Deposits and Investments (continued)

Custodial Credit Risk (continued)

Investments (continued)

The following table presents the investments and maturities of MLGW's investment portfolio as of December 31, 2017:

Investment Type	Fair Value	Remaining Maturities (in Years)		
		Maturities < 1 year	Maturities 1 to 4 years	Maturities > 4 years
U.S. Treasuries	\$ 81,571	\$ 23,004	\$ 58,567	\$ -
Federal Agency (Fixed Rate)	91,024	33,702	57,322	-
Federal Agency (Callable)	2,623 ¹	2,175 ²	448 ³	-
Commercial Paper	166,309	166,309	-	-
Total Investments	\$ 341,527	\$ 225,190	\$ 116,337	\$ -

¹ \$531 of these bonds are guaranteed by the Export-Import Bank of the United States

² \$2,092 of these bonds mature in 2018, Callable in March 2018

\$83 of these bonds mature in 2018, Callable quarterly until maturity

³ This bond matures in 2019, Callable semi-annually until maturity

Custodial credit risk for investments is the risk that, in the event of failure of the counterparty to a transaction, MLGW will not be able to recover the value of its investment or collateral securities that are in the possession of another party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the government, and are held by either the counterparty, or the counterparty's trust department or agent but not in the name of MLGW. Investments in external investment pools and in money market funds are not exposed to custodial credit risks because their existence is not evidenced by securities that exist in physical or book entry form. To limit its exposure, MLGW's investment policy requires that all securities purchased by MLGW shall be held in safekeeping by a third-party custodial bank or financial institution. None of MLGW's investments at December 31, 2017 were exposed to custodial credit risk.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment in debt securities. Generally, the longer the maturity of an investment the greater the sensitivity of its fair value to changes in market interest rates. MLGW's investment policy does not limit investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates. However, the investment policy states no investment will have a maturity of greater than four years from date of purchase. As of December 31, 2017, MLGW had purchased no investments in



2. Deposits and Investments (continued)

Interest Rate Risk (continued)

debt securities that were outside of the policy. MLGW uses the segmented time distribution method of disclosure, as shown above, to identify this risk.

Some investments can be highly sensitive to changes in interest rates due to their terms or characteristics. In MLGW's investment portfolio, asset-backed and government mortgage-backed securities are most sensitive to changes in interest rates as their repayments can vary significantly with interest rate changes. These securities represent 13.5% of the total investment portfolio with a fair value of \$46,232 at year-end 2017.

Credit Risk

Credit risk is the risk that an issuer of a debt security will not fulfill its obligation. This credit risk is measured by the credit quality of investments in debt securities as described by nationally recognized statistical rating organizations. Investments in obligations of the U.S. Government or obligations explicitly guaranteed by the U.S. Government are not considered to have credit risk. MLGW debt securities that were subject to credit risk were \$166,309, or 48.7% of total investments. The debt securities mentioned above have a remaining maturity of one year or less.



2. Deposits and Investments (continued)

Credit Risk (continued)

MLGW's ratings and policy limits as of December 31, 2017 are as follows:

<u>Investment Type</u>	<u>Fair Value</u>	<u>S&P Rating</u>	<u>Moody's Rating</u>
Commercial Paper	\$ 23,653	AAA	Aaa
Commercial Paper	42,030	AA+	Aaa
Commercial Paper	20,960	AA+	Aa1
Commercial Paper	1,498	AA+	Aa2
Commercial Paper	8,488	AA	Aa2
Commercial Paper	54,200	AA-	Aa3
Commercial Paper	9,385	AA-	Aa2
Commercial Paper	6,095	A+	A1
Total credit risk debt securities	166,309		
U.S. Treasuries	81,571	AA+u	Aaa
Federal Agency (Fixed Rate)	85,002	AA+	Aaa
Federal Agency (Fixed Rate)	6,022	AA+u	Aaa
Federal Agency (Callable)	2,092	AA+	Aaa
Federal Agency (Callable)	531 ¹	AA+u	Aaa
U.S. Government and Agencies	<u>175,218</u>		
Total debt securities investments	<u>\$ 341,527</u>		

¹ These bonds are guaranteed by the Export-Import Bank of the United States



2. Deposits and Investments (continued)

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Investments in any one issuer that represent five percent or more of total investments must be disclosed by amount and issuer. Investments issued or explicitly guaranteed by the U.S. government and investments in bank deposits, external investment pools, and other pooled investments are excluded from this requirement.

In accordance with the investment policy, no more than 10% of MLGW's portfolio will be invested in the securities of any single issuer with the following exceptions: U.S. Government Obligations up to 100% of the portfolio book value for any single issuer at the date of acquisition. In addition, MLGW's investment policy seeks to diversify its portfolio by limiting the percentage of the portfolio that may be invested in any one type of instrument as follows:

U.S. Treasuries	100%	maximum
Federal Agency (Fixed Rate)	100%	maximum
Federal Agency (Callable)	50%	maximum
Repurchase Agreements	50%	maximum
Commercial Paper (Rated AA or higher)	90%	maximum
Banker's Acceptance (Rated AA or higher)	60%	maximum
Certificates of Deposit	20%	maximum
Municipal Obligations	20%	maximum
Tennessee LGIP	40%	maximum

In accordance with GASB Statement No. 40, governments should provide information about investments in any one issuer that represents 5 percent or more of total investments. As of December 31, 2017, the investments in any one issuer of commercial paper that represents 5% or more of MLGW's investments are as follows:

Issuer	Reported Amount	Percentage of Portfolio
Apple Incorporated	\$ 20,960	6.14%
Exxon Mobile Corporation	19,966	5.85%
Microsoft Corporation	19,560	5.73%
National Security Clearing Corporation	22,064	6.46%
Toyota Motor Credit Corporation	21,256	6.22%
Total	\$ 103,806	



2. Deposits and Investments (continued)

Restricted and Unrestricted Funds

Restricted funds, cash and cash equivalents, and investments consisted of the following as of December 31, 2017 and 2016:

	Electric Division		Gas Division		Water Division	
	2017	2016	2017	2016	2017	2016
Restricted fund:						
Cash and cash equivalents	\$ 93,236	\$ 56,907	\$ 25,391	\$ 20,866	\$ 9,485	\$ 10,044
Investments	11,511	11,016	5,599	28,395	3,910	19,712
Total restricted funds	<u>\$ 104,747</u>	<u>\$ 67,923</u>	<u>\$ 30,990</u>	<u>\$ 49,261</u>	<u>\$ 13,395</u>	<u>\$ 29,756</u>

	Electric Division		Gas Division		Water Division	
	2017	2016	2017	2016	2017	2016
Unrestricted fund:						
Cash and cash equivalents	\$ 105,004	\$ 113,349	\$ 44,900	\$ 40,607	\$ 16,504	\$ 12,233
Investments	85,123	92,361	35,184	31,115	13,371	9,975
Total unrestricted funds	<u>\$ 190,127</u>	<u>\$ 250,710</u>	<u>\$ 80,084</u>	<u>\$ 71,722</u>	<u>\$ 29,875</u>	<u>\$ 22,208</u>

3. Notes Receivables

In 2002, MLGW and the Valero Refining Group (“Valero”) entered into an agreement, whereby MLGW provided for the construction of two pipelines (14” and 20”) and leased them to Valero for the purpose of transporting crude oil and refinery products. The lease provided for monthly payments of principal and interest and had an initial term of 15 years, which ended October 31, 2016 and July 31, 2016, for the 14” Pipeline and the 20” Pipeline, respectively.

In November 2016, MLGW and the Valero Refining Group (“Valero”) executed the secondary agreement of the expired 15 year initial term lease agreement, whereby Valero will continue to provide monthly payments under a secondary term of 30 years, ending October 31, 2046 for the 14” Pipeline and July 31, 2046 for the 20” Pipeline, subject to any early termination pursuant to the terms of the Pipeline Agreements.

Scheduled lease payments for January – June 2018 total \$383. Effective July 1, 2018 and each July 1 thereafter throughout the Secondary Term, the monthly fee applicable for the previous year for the 20” Pipeline and 14” Pipeline, respectively, shall be adjusted based on the Producer Price Index for Finished Goods (“PPI-FG”) formula per the contract.



3. Notes Receivables (continued)

The Valero lease receivable is included in notes receivables in the accompanying 2017 Gas Division's Statements of Net Position, except for the current portion of \$767, which is included in other current assets.

4. Utility Plant

Utility plant activity for the years ended December 31, 2017 and 2016 is as follows:

	Beginning Balance	Increases	Decreases	Ending Balance
Year ended December 31, 2017				
Electric Division				
Capital assets not being depreciated:				
Land	\$ 38,403	\$ 12	\$ -	\$ 38,415
Land - Non-utility	15,345	-	-	15,345
Construction in progress	102,445	80,121	(95,160)	87,406
Total capital assets not being depreciated	<u>156,193</u>	<u>80,133</u>	<u>(95,160)</u>	<u>141,166</u>
Capital assets being depreciated or amortized:				
Structures and improvements	62,940	2,945	(97)	65,788
Transmission and distribution plant equipment	1,419,307	88,195	(11,589)	1,495,913
General plant equipment	179,917	3,957	(6,766)	177,108
Intangibles: Software	12,032	53	-	12,085
Total capital assets being depreciated or amortized	<u>1,674,196</u>	<u>95,150</u>	<u>(18,452)</u>	<u>1,750,894</u>
Less accumulated depreciation and amortization	<u>(750,926)</u>	<u>(65,366)</u>	<u>33,830</u>	<u>(782,462)</u>
Total capital assets being depreciated or amortized, net	<u>923,270</u>	<u>29,784</u>	<u>15,378</u>	<u>968,432</u>
Total capital assets, net	<u>\$ 1,079,463</u>	<u>\$ 109,917</u>	<u>\$ (79,782)</u>	<u>\$ 1,109,598</u>



4. Utility Plant (continued)

	Beginning Balance	Increases	Decreases	Ending Balance
Year ended December 31, 2017				
Gas Division				
Capital assets not being depreciated:				
Land	\$ 7,313	\$ -	\$ (1)	\$ 7,312
Construction in progress	71,203	44,697	(92,475)	23,425
Plant held for future use	212	-	-	212
Total capital assets not being depreciated	<u>78,728</u>	<u>44,697</u>	<u>(92,476)</u>	<u>30,949</u>
Capital assets being depreciated or amortized:				
Structures and improvements	68,127	42	(398)	67,771
Processing and distribution plant equipment	471,442	36,490	(13,420)	494,512
General plant equipment	76,218	2,376	(7,109)	71,485
Intangibles: Software	-	53,568	-	53,568
Non-utility plant equipment	200	-	-	200
Total capital assets being depreciated or amortized	<u>615,987</u>	<u>92,476</u>	<u>(20,927)</u>	<u>687,536</u>
Less accumulated depreciation and amortization	<u>(311,085)</u>	<u>(32,682)</u>	<u>25,432</u>	<u>(318,335)</u>
Total capital assets being depreciated or amortized, net	<u>304,902</u>	<u>59,794</u>	<u>4,505</u>	<u>369,201</u>
Total capital assets, net	<u>\$ 383,630</u>	<u>\$ 104,491</u>	<u>\$ (87,971)</u>	<u>\$ 400,150</u>
	Beginning Balance	Increases	Decreases	Ending Balance
Year ended December 31, 2017				
Water Division				
Capital assets not being depreciated:				
Land	\$ 2,372	\$ -	\$ -	\$ 2,372
Construction in progress	22,302	43,246	(39,082)	26,466
Total capital assets not being depreciated	<u>24,674</u>	<u>43,246</u>	<u>(39,082)</u>	<u>28,838</u>
Capital assets being depreciated or amortized:				
Structures and improvements	50,819	3,317	(249)	53,887
Pumping, transmission and distribution plant equipment	376,572	35,644	(4,861)	407,355
General plant equipment	39,679	121	(4,155)	35,645
Intangibles: Software	2,177	-	-	2,177
Total capital assets being depreciated or amortized	<u>469,247</u>	<u>39,082</u>	<u>(9,265)</u>	<u>499,064</u>
Less accumulated depreciation and amortization	<u>(198,637)</u>	<u>(11,439)</u>	<u>11,402</u>	<u>(198,674)</u>
Less acquisition adjustment	<u>(2,404)</u>	<u>964</u>	<u>-</u>	<u>(1,440)</u>
Total capital assets being depreciated or amortized, net	<u>268,206</u>	<u>28,607</u>	<u>2,137</u>	<u>298,950</u>
Total capital assets, net	<u>\$ 292,880</u>	<u>\$ 71,853</u>	<u>\$ (36,945)</u>	<u>\$ 327,788</u>



4. Utility Plant (continued)

	<u>Beginning Balance</u>	<u>Increases</u>	<u>Decreases</u>	<u>Ending Balance</u>
Year ended December 31, 2016				
Electric Division				
Capital assets not being depreciated:				
Land	\$ 38,390	\$ 13	\$ -	\$ 38,403
Land - Non-utility	15,345	-	-	15,345
Construction in progress	91,430	94,226	(83,211)	\$ 102,445
Total capital assets not being depreciated	145,165	94,239	(83,211)	156,193
Capital assets being depreciated or amortized:				
Structures and improvements	62,206	744	(10)	62,940
Transmission and distribution plant equipment	1,377,852	58,222	(16,767)	1,419,307
General plant equipment	159,677	20,990	(750)	179,917
Intangibles: Software	8,790	3,242	-	12,032
Total capital assets being depreciated or amortized	1,608,525	83,198	(17,527)	1,674,196
Less accumulated depreciation and amortization	(711,937)	(60,623)	21,634	(750,926)
Total capital assets being depreciated or amortized, net	896,588	22,575	4,107	923,270
Total capital assets, net	<u>\$ 1,041,753</u>	<u>\$ 116,814</u>	<u>\$ (79,104)</u>	<u>\$ 1,079,463</u>

	<u>Beginning Balance</u>	<u>Increases</u>	<u>Decreases</u>	<u>Ending Balance</u>
Year ended December 31, 2016				
Gas Division				
Capital assets not being depreciated:				
Land	\$ 7,533	\$ -	\$ (220)	\$ 7,313
Construction in progress	61,184	43,032	(33,013)	71,203
Plant held for future use	212	-	-	212
Total capital assets not being depreciated	68,929	43,032	(33,233)	78,728
Capital assets being depreciated or amortized:				
Structures and improvements	65,175	3,078	(126)	68,127
Processing and distribution plant equipment	452,195	26,286	(7,039)	471,442
General plant equipment	72,826	3,649	(257)	76,218
Non-utility plant equipment	200	-	-	200
Total capital assets being depreciated or amortized	590,396	33,013	(7,422)	615,987
Less accumulated depreciation and amortization	(295,584)	(23,040)	7,539	(311,085)
Total capital assets being depreciated or amortized, net	294,812	9,973	117	304,902
Total capital assets, net	<u>\$ 363,741</u>	<u>\$ 53,005</u>	<u>\$ (33,116)</u>	<u>\$ 383,630</u>



4. Utility Plant (continued)

	<u>Beginning Balance</u>	<u>Increases</u>	<u>Decreases</u>	<u>Ending Balance</u>
Year ended December 31, 2016				
Water Division				
Capital assets not being depreciated:				
Land	\$ 2,339	\$ 33	\$ -	\$ 2,372
Construction in progress	14,289	31,045	(23,032)	22,302
Total capital assets not being depreciated	<u>16,628</u>	<u>31,078</u>	<u>(23,032)</u>	<u>24,674</u>
Capital assets being depreciated or amortized:				
Structures and improvements	50,325	494	-	50,819
Pumping, transmission and distribution plant equipment	357,979	21,685	(3,092)	376,572
General plant equipment	38,871	820	(12)	39,679
Intangibles: Software	2,177	-	-	2,177
Total capital assets being depreciated or amortized	<u>449,352</u>	<u>22,999</u>	<u>(3,104)</u>	<u>469,247</u>
Less accumulated depreciation and amortization	(191,624)	(10,786)	3,773	(198,637)
Less acquisition adjustment	<u>(3,368)</u>	<u>964</u>	<u>-</u>	<u>(2,404)</u>
Total capital assets being depreciated or amortized, net	<u>254,360</u>	<u>13,177</u>	<u>669</u>	<u>268,206</u>
Total capital assets, net	<u>\$ 270,988</u>	<u>\$ 44,255</u>	<u>\$ (22,363)</u>	<u>\$ 292,880</u>

Total net capital asset changes include additions to construction in progress, transfers to or from other accounts, depreciation and amortization and the effects of sales, retirements, and contribution in aid of construction.

MLGW's planned construction program expenditures for 2018 are estimated as follows (unaudited):

Electric Division	\$ 112,218
Gas Division	59,711
Water Division	53,616

In June 1999, the Water Division purchased the Shelby County Water Distribution System and related assets from Shelby County, Tennessee. The difference between the purchase price and the net book value of the assets acquired (the "acquisition adjustment") is being amortized over twenty years by the Water Division.

5. Futures, Options and Swap Contracts

MLGW uses a range of derivative instruments to hedge commodity risk including futures, options, and swap contracts. The purchase and sale of futures contracts and swap contracts involve highly leveraged and rapidly fluctuating markets that can lead to significant losses for market participants. As such, market participants are required to maintain margin deposits with a Futures Commission Merchant (FCM) in order to trade in the commodity futures market. These margin deposits are required by the FCM as a



5. Futures, Options and Swap Contracts (continued)

condition of its contract to provide execution, clearing and bookkeeping services relative to the purchase and sale of commodity futures.

The FCM is not subject to state laws which govern financial institutions serving as depositories for municipal funds, but instead is governed by rules and regulations promulgated by the Federal Commodity Futures Trading Commission. The Commodity Exchange Act requires the FCM to segregate all customer transactions and assets from the FCM's proprietary activities.

Futures contracts and swap contracts are marked-to-market daily and valued at closing market prices on the valuation date. The fluctuations in the value of the futures contracts are recorded for financial statement purposes as deferred gains or losses.

MLGW's derivative instruments could be potentially exposed to concentrations of counterparty credit. MLGW's derivatives transactions are conducted directly or indirectly with the New York Mercantile Exchange ("NYMEX"). By clearing all trades through NYMEX, MLGW's exposure to counterparty credit risk for such transactions is largely minimized.

Gas Division:

The Gas Division enters into futures contracts, swaps, and options on futures contracts as cash flow hedges to manage the risk of volatility in the market price of natural gas on anticipated purchase transactions. The market values of the open derivative positions are reported on the Statements of Net Position as derivative financial instruments. MLGW maintained a margin deposit balance of \$1,473 and \$2,423 with its FCM at December 31, 2017 and 2016, respectively.

The schedule below shows the market values and notional amounts of the open futures, swaps, and options on futures contracts as of December 31, 2017 and 2016.

Type	<u>December 31, 2017</u>		<u>December 31, 2016</u>	
	<u>Market Value</u>	<u>Notional Amount</u>	<u>Market Value</u>	<u>Notional Amount</u>
Options	\$ 18	\$ 56,544	\$ 9	\$ 29,280
Total	<u>\$ 18</u>	<u>\$ 56,544</u>	<u>\$ 9</u>	<u>\$ 29,280</u>



5. Futures, Options and Swap Contracts (continued)

The schedule below reflects the deferred gains (losses) at year end associated with recording open derivative positions.

<u>Type</u>	<u>December 31, 2017</u> <u>Deferred Gains (Losses)</u>	<u>December 31, 2016</u> <u>Deferred Gains (Losses)</u>
Options	<u>(\$125)</u>	<u>\$9</u>
Total	<u>(\$125)</u>	<u>\$9</u>

Deferred costs at year end associated with gains (losses) on closed derivative positions are shown below.

<u>Type</u>	<u>December 31, 2017</u> <u>Deferred Gains (Losses)</u>	<u>December 31, 2016</u> <u>Deferred Gains (Losses)</u>
Options	<u>(\$211)</u>	<u>(\$539)</u>
Total	<u>(\$211)</u>	<u>(\$539)</u>

The deferred gains (losses) at year end for the open derivative positions are reported on the Statement of Net Position as deferred inflows of resources and deferred outflows of resources, respectively. The deferred gains and losses derived from closed derivative positions are reported as other current assets and liabilities, respectively.

Electric Division:

The Electric Division enters into swap contracts to manage the risk of volatility in the market price of unleaded and diesel fuel on anticipated purchase transactions. The balance in MLGW's FCM fuel margin at December 31, 2017 and 2016 was (\$278) and (\$278), respectively.

6. Deferred Compensation Plan

MLGW offers its employees a voluntary compensation plan under Internal Revenue Code Section 457. The plan, available to all full-time MLGW employees, permits them to defer a portion of their salaries until future years. The deferred compensation paid through payroll deduction is not available to employees until termination, retirement, death, or unforeseeable emergency.

The plan provides that assets or income of the plan shall be used for the exclusive purpose of providing benefits for participants and their beneficiaries or defraying reasonable expenses of administration of the plan. Since the assets of the amended plan are held in custodial and annuity accounts for the exclusive benefit of plan participants, the related assets of the plan are not reflected in MLGW's Statements of Net Position.



7. Employee Retirement System

Plan Description

Memphis Light, Gas and Water Retirement and Pension System (the “MLGW Pension Plan”) is a single-employer defined benefit pension plan administered by the MLGW Pension Board. The plan covers permanent, full-time employees and appointed commissioners who opt to participate. MLGW issues a separate audited financial report for the MLGW Pension Plan that includes financial statements and required supplementary information. That report may be obtained by writing to Manager, Risk Management, P. O. Box 430, Memphis, TN 38101.

Benefits Provided

The MLGW Pension Plan provides death and disability benefits as well as retirement benefits. MLGW Pension Plan members hired prior to January 1, 2014 who attain the age of fifty-five and retire on or after ten years of creditable service, or attain the age of seventy and retire on or after five years of creditable service, or attain twenty-five years of creditable service regardless of age are entitled to an annual retirement allowance computed by multiplying the applicable percentage for the age of retirement times the number of years of creditable service, which equals the benefit percentage, times the final average compensation.

MLGW Pension Plan members hired on or after January 1, 2014 who attain the age of sixty and retire on or after ten years of creditable service, or attain the age of seventy and retire on or after five years of creditable service, or attain the age of fifty-five with twenty-five years of creditable service are entitled to an annual retirement allowance computed by multiplying the applicable percentage for the age of retirement times the number of years of creditable service, which equals the benefit percentage, times the final average compensation.

Effective January 1, 2001, the following table is the applicable benefit percentage for each year of creditable service at the applicable retirement age under the MLGW Pension Plan:

<u>Retirement Age</u>	<u>Benefit Percentage For Each Year of Creditable Service</u>
59 1/2 and less	2.25%
60	2.30%
61	2.40%
62 and older	2.50%

Final average compensation is the member’s basic earnings (which includes member contributions pursuant to Section 414(h) and Section 457 of the Internal Revenue Code (the “Code”) for the three consecutive years of creditable service if less than 30 years, two consecutive years if more than 30 years and one year if 35 or more years of creditable service during which the compensation was the highest)



7. Employee Retirement System (continued)

Benefits Provided (continued)

plus work out of classification pay, shift differential pay, and automobile allowance for such employees designated by Resolution of the Board of Commissioners.

The annual retirement allowance shall not exceed 85% of the member’s final average compensation. The 2017 minimum monthly retirement benefit for all members is the greater of \$50 per month per year of service or \$500.

Cost of Living Adjustments

As of July 1 of each plan year, each retired participant who (1) has attained age 56 on such date and (2) has been terminated from the employment of the Division for at least one year, shall be entitled to an increase in the amount of his monthly benefit under the MLGW Pension Plan equal to the cost of living adjustment.

A surviving spouse or handicapped child receiving death benefits shall be entitled to a cost of living adjustment if the surviving spouse or handicapped child has attained age 56 and the deceased participant has separated from service at least one year prior to July 1.

The cost of living adjustment shall be equal to the product of the monthly benefit payable to the participant, the surviving spouse, or handicapped child under the MLGW Pension Plan for the immediately preceding plan year multiplied by the applicable percentage increase in the Consumer Price Index (CPI) for the immediately preceding calendar year.

The applicable percentage increase shall be determined based on the age of the participant, surviving spouse, or handicapped child as of the first day of July of the plan year in which the adjustment is made as follows:

<u>Age</u>	<u>Percentage of CPI Increase</u>
56-58	30%
59-61	60%
62 and older, and all Disabled Participants	75%

The cost of living adjustment for any retired participant, surviving spouse, or handicapped child in any plan year shall not exceed 5% of the retired participant’s, surviving spouse’s, or handicapped child’s benefit under the MLGW Pension Plan for the immediately preceding plan year. Under no circumstances



7. Employee Retirement System (continued)

Cost of Living Adjustments (continued)

shall the cost of living adjustment result in a decrease in the benefit of a retired participant, surviving spouse, or handicapped child.

Net Pension Liability

The net pension liability is the difference between the actuarial present value of projected pension benefit payments attributable to employees' past service and the Plan's fiduciary net position. MLGW's net pension liability was measured as of December 31, 2016 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2017.

Employees Covered

Plan membership consisted of the following participants as of December 31, 2016 and 2015:

	<u>2016</u>	<u>2015</u>
Retirees and beneficiaries receiving benefits	2,643	2,617
Participants inactive during year ended December 31 with vested rights	44	44
Active members fully vested	1,074	1,116
Active members not vested	<u>1,536</u>	<u>1,427</u>
Total	<u><u>5,297</u></u>	<u><u>5,204</u></u>

Contributions

The contribution requirements of pension plan members and MLGW are established and may be amended and approved by the MLGW Pension Board, the MLGW Board of Commissioners and the Memphis City Council. Pension plan members are required to contribute 8% of their annual covered salary. Under Article III, Section 3.2 of the pension plan, MLGW shall contribute to the pension fund such amounts as from time to time are estimated by the actuary. MLGW also funds the 8% pension plan member's contributions on behalf of the president and vice presidents. For 2016, MLGW contributed 13.21% of the annual covered payroll. Employer contributions recognized by the MLGW Pension Plan during 2016 totaled \$21,390.



7. Employee Retirement System (continued)

Actuarial Assumptions

The actuarial assumptions used in the valuation as of December 31, 2016 are based on the results of an experience study for the period January 1, 2009 to December 31, 2013.

Inflation	2.75%
Salary increases	Inflation plus merit increases that vary by age and service ranging from 0.00% to 6.75%
Investment rate of return	7.50% including inflation, net of investment expenses
Cost-of-living adjustments	0.83% for ages 56-58 1.65% for ages 59-61 2.06% for ages 62 and older, and all disabled participants

Pre-retirement mortality rates are based on the RP-2014 Employee Mortality Table with sex-distinct rates. Healthy annuitant mortality rates are based on the RP-2014 Healthy Annuitant Mortality Table with sex-distinct rates, adjusted by a factor of 138%. Disabled annuitant mortality rates are based on the RP-2014 Disabled Retiree Mortality Table with sex-distinct rates, also adjusted by a factor of 138%. All mortality tables above are projected generationally with a modified RPEC2014 projection table using a 15-year convergence period for cohort effects and 10-year convergence period for age/period effects.

The long-term expected rate of return on pension 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 pension 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.

The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized in the following table:



7. Employee Retirement System (continued)

Actuarial Assumptions (continued)

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic Equity	39%	7.17%
International Equity	12%	8.70%
Fixed Income	29%	3.04%
Alternatives	8%	4.37%
Real Estate	10%	5.67%
Short Term Investments	2%	1.56%
Total	100%	

Discount Rate

The discount rate used to measure the total pension liability is 7.50% as of December 31, 2016. The projection of cash flows used to determine the discount rate assumes that employee contributions will be made at the current 8.00% of pay contribution rate and that MLGW contributions will equal the actuarially determined contribution. For this purpose, only employee and employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Based on those assumptions, the MLGW 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 as of December 31, 2016.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of MLGW as of December 31, 2016, calculated using the discount rate of 7.50%, as well as what MLGW's net pension liability would be if it were calculated using a discount rate that is one percentage-point lower (6.50%) or one percentage-point higher (8.50%) than the current rate:

	1% Decrease (6.50%)	Current Discount (7.50%)	1% Increase (8.50%)
Net OPEB Liability (asset) as of December 31, 2016	\$ 230,296	\$ 69,364	\$ (64,936)



7. Employee Retirement System (continued)

Pension Plan's Fiduciary Net Position

Detailed information about the MLGW Pension Plan's fiduciary net position is available in the separately issued plan financial statements. For purposes of measuring the net pension liability, all information about the pension plan's assets, deferred outflows of resources, liabilities, deferred inflows of resources, and fiduciary net position have been determined on the same basis as they are reported by the MLGW Pension Plan.

The MLGW Pension Plan's financial statements are prepared using the accrual basis of accounting in accordance with generally accepted accounting principles promulgated by the Governmental Accounting Standards Board. Investments are stated at fair value. Benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the terms of the plan.



7. Employee Retirement System (continued)

Schedule of Changes in Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a)-(b)
Balance at December 31, 2015	\$ 1,414,620	\$ 1,327,616	\$ 87,004
Changes for the Year:			
Service Costs	32,591		32,591
Interest	102,248		102,248
Differences Between Expected and Actual Experience	(11,298)		(11,298)
Changes of Assumptions	-		-
Contributions – Employer		21,390	(21,390)
Contributions – Employee		12,513	(12,513)
Net Investment Income		108,007	(108,007)
Benefit Payments / Refunds	(102,628)	(102,628)	-
Administrative Expenses		(729)	729
Net Change	20,913	38,553	(17,640)
Balance at December 31, 2016	\$ 1,435,533	\$ 1,366,169	\$ 69,364



7. Employee Retirement System (continued)

Pension expense for the year ended December 31, 2017

Service cost	\$ 32,591
Interest on Total Pension Liability	102,248
Employee contributions	(12,513)
Administrative Expenses	729
Expected return on assets	(96,871)
Expensed portion of current year period differences between expected and actual experience in Total Pension Liability	(1,883)
Expensed portion of current year period assumptions changes	-
Current year plan changes	-
Expensed portion of current year period differences between projected and actual investment earnings	(2,227)
Current year recognition of deferred inflows and outflows established in prior years	10,991
Total expense	<u>\$ 33,065</u>

Deferred outflows/inflows of resources related to pension

	Deferred Outflows of Resources	Deferred Inflows of Resources
Contributions subsequent to measurement date	\$ 22,378	\$ -
Net difference between projected and actual earnings on pension plan investments	51,404	(9,137)
Net difference between projected and actual experience in Total Pension Liability	1,516	(17,584)
Assumption changes	-	(11,056)
Total	<u>\$ 75,298</u>	<u>\$ (37,777)</u>

Note: The \$22,378 contribution made subsequent to the measurement date will be recognized as a reduction of the net pension liability in 2018.



7. Employee Retirement System (continued)

Projected recognition of deferred outflows/(inflows)

Fiscal year	Year Established	Original Balance	Original Amortization Period (Years)	Outstanding Balance at December 31, 2016	Amount		Deferred Outflows/(Inflows) Recognized in Future Years				
					Recognized During FYE	Outstanding Balance at December 31, 2017	2018	2019	2020	2021	2022 and Thereafter
Fiscal year Outflows											
Investment	2016	\$ 85,673	5.00	\$ 68,539	\$ 17,135	\$ 51,404	\$ 17,135	\$ 17,135	\$ 17,134	\$ -	\$ -
Demographic	2016	2,275	6.00	1,896	379	1,517	379	379	379	380	-
Total Outflows					\$ 17,514	\$ 52,921	\$ 17,514	\$ 17,514	\$ 17,513	\$ 380	\$ -
Fiscal year Inflows											
Investment	2017	\$ (11,136)	5.00	\$ -	\$ (2,227)	\$ (8,909)	\$ (2,227)	\$ (2,227)	\$ (2,227)	\$ (2,228)	\$ -
Demographic	2017	(11,298)	6.00	-	(1,883)	(9,415)	(1,883)	(1,883)	(1,883)	(1,883)	(1,883)
Investment	2015	(571)	5.00	(343)	(114)	(229)	(114)	(115)	-	-	-
Demographic	2015	(16,338)	6.00	(10,892)	(2,723)	(8,169)	(2,723)	(2,723)	(2,723)	-	-
Assumption	2015	(21,112)	6.00	(14,741)	(3,685)	(11,056)	(3,685)	(3,685)	(3,686)	-	-
Total Inflows					\$ (10,632)	\$ (37,778)	\$ (10,632)	\$ (10,633)	\$ (10,519)	\$ (4,111)	\$ (1,883)
Total					\$ 6,882	\$ 15,143	\$ 6,882	\$ 6,881	\$ 6,994	\$ (3,731)	\$ (1,883)

Note: In accordance with Paragraph 71 of GASB Statement 68, the difference between projected and actual earnings on investments is recognized over a closed five-year period. The difference between expected and actual total pension liability experience (noted as “Demographic” in the chart above) and the assumption changes (noted as “Assumption” in the chart above) are each recognized over a closed period equal to the average of the expected remaining service lives of all employees who are provided with pensions through the pension plan (active employees and inactive employees) determined as of the beginning of the measurement period. For 2016, the period is six years.

8. Other Postemployment Benefits

The Memphis Light, Gas and Water Division OPEB Trust (“OPEB Trust”) was established for the exclusive benefit of MLGW’s retired employees and their dependents (who meet the eligibility requirements) to fund the postemployment benefits provided through the health and welfare benefit plan. Amounts contributed to the OPEB Trust by MLGW are held in trust and are irrevocable and are for the sole and exclusive purpose of funding health and welfare benefits of the eligible participants, and the cost of operating and administering the OPEB Trust. The OPEB Trust is administered by the MLGW OPEB Committee.

Plan Description

Memphis Light, Gas and Water Division, by resolution of its Board of Commissioners, has established, adopted, and maintains a medical benefits (health and welfare) plan (the “Plan”) for its retired employees and their eligible dependents. The Plan is a single-employer defined benefit healthcare plan administered by MLGW. MLGW issues a separate audited financial report for the OPEB Trust that includes financial statements and required supplementary information. That report may be obtained by writing to: Manager, General Accounting, P.O. Box 430, Memphis, Tennessee 38101-0430.



8. Other Postemployment Benefits (continued)

Plan Description (continued)

The Plan provides postemployment coverage for health care, life insurance, accident/death and dismemberment (AD&D), medical, and prescription drugs to eligible retirees and their dependents. Benefits are payable to retirees and their spouses for their lifetime. Qualified dependents will continue to receive benefits as long as they are qualified under the Plan. Dental, dependent life insurance, cancer, accident, and long-term care benefits are available, but are 100% paid by the retiree.

Employees retired under the MLGW Pension Plan, or disabled with five years of service at any age, or disabled in the line of duty at any age with no years of service restriction, are eligible for OPEB benefits. Health care benefits are also offered to qualifying survivors of active employees who are eligible to retire at the time of death.

Funding Policy

The contribution requirements of plan members and MLGW are established and may be amended by the MLGW Board of Commissioners. Retiree and spouse contribution rates are periodically reset and are currently at 25% of costs for medical and drug benefits. For life insurance and AD&D, retirees contribute 40% of the cost.

Prior to 2017, the Board of Commissioners has set the employer contribution rate based on the annual required contribution (“ARC”), an amount actuarially determined in accordance with the parameters of GASB Codification Section P50: *Postemployment Benefits Other Than Pension Benefits – Employer Reporting*. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities of the plan over a period not to exceed thirty years. In 2017, the employer contribution rate was based on the ARC, not to exceed the approved budget for OPEB funding. For fiscal year 2017, employer contributions were \$46,338, including \$1,154 accrued in 2016, but paid in 2017. For fiscal year 2016, employer contributions were \$41,343. In 2017, plan members receiving benefits contributed \$6,452 through their required contribution of \$64.62 to \$526.64 (dollars) per month depending on the coverage (employee only, employee and spouse, or family) and the health plan selected. In 2016, plan members receiving benefits contributed \$6,811 through their required contribution of \$79.70 to \$521.42 (dollars) per month.

Annual OPEB Cost and Net OPEB Obligation

An actuarial valuation of MLGW’s postemployment welfare benefit program was performed for the Plan as of December 31, 2017. MLGW’s annual other postemployment benefit (OPEB) cost (expense) is calculated based on the annual required contribution (ARC).



8. Other Postemployment Benefits (continued)

Annual OPEB Cost and Net OPEB Obligation (continued)

The following table presents the OPEB cost for the year, the amount contributed to the plan, and changes in the net OPEB obligation as of December 31, 2017 and 2016:

	<u>2017</u>	<u>2016</u>
Annual required contribution	\$ 46,978	\$ 45,289
Interest on net OPEB obligation	87	(206)
Adjustment to annual required contribution	<u>(70)</u>	<u>164</u>
Annual OPEB cost	46,995	45,247
Contributions made	<u>(46,338)</u>	<u>(41,343)</u>
Change in net OPEB (asset) obligation	657	3,904
Net OPEB (asset) obligation at beginning of fiscal year	1,154	(2,750)
Net OPEB (asset) obligation at end of fiscal year	<u>\$ 1,811</u>	<u>\$ 1,154</u>

MLGW's annual OPEB cost, the percentage of annual OPEB cost contributed to the Plan, and the net OPEB (asset) obligation for fiscal year 2017 and the two preceding years were as follows:

<u>Fiscal Year Ended</u>	<u>Annual OPEB Cost</u>	<u>Percentage of Annual OPEB Cost Contributed</u>	<u>Net OPEB Obligation (Asset)</u>	<u>Employer Contributions</u>
December 31, 2017	\$ 46,995	98.6%	\$ 1,811	46,338
December 31, 2016	45,247	91.4%	1,154	41,343
December 31, 2015	38,176	100.7%	(2,750)	38,438

Funded Status and Funding Progress

As of December 31, 2017, the most recent actuarial valuation date, the plan was 62.21% funded. The actuarial accrued liability ("AAL") for benefits was \$653,587 and the actuarial value of assets was \$406,591, resulting in an unfunded actuarial accrued liability ("UAAL") of \$246,997. The covered payroll (annual payroll of active employees covered by the Plan) was \$167,221, and the ratio of the UAAL to the covered payroll was 147.7%.



8. Other Postemployment Benefits (continued)

Funded Status and Funding Progress (continued)

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear trend information indicating whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Actuarial Methods and Assumptions

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of calculations. Actuarial methods and significant assumptions were as follows:



8. Other Postemployment Benefits (continued)

Actuarial Methods and Assumptions (continued)

Valuation Date	December 31, 2017
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level percent of pay, closed, 30 years
Remaining Amortization Period	29 years as of December 31, 2016
Asset Valuation Method	Market value of assets less unrecognized returns in each of the last five years (applied prospectively beginning with 2014). Unrecognized return is equal to the difference between the actual market return and expected market return, and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the market value.
Actuarial Assumptions:	
Investment Rate of Return	7.50%
Inflation Rate	2.75%
Projected Salary Increases	Inflation plus merit increases that vary by age and service
Medical Cost Trend Rate	7.00% graded to 4.50% over 10 years
Drug Cost Trend Rate	9.00% grading to 4.50% over 10 years

9. Pollution Remediation Obligation

MLGW has a contract with a state licensed environmental remediation company. The liabilities to remove asbestos, mold and lead from various substations and equipment because of imminent danger were derived from the environmental remediation contractor's estimate. These estimates assume no expected change orders.

MLGW annually evaluates current conditions, remediation plan updates and changes in legal or regulatory requirements to revise MLGW's estimated liability. Regulatory accounts are used to capture the net effect of the changes in estimates for each Division. See Note 1 (Regulatory Accounting).



9. Pollution Remediation Obligation (continued)

The schedule below shows the balances as of December 31, 2017 and 2016 for the lead pollution liability from various substations and equipment by Division:

	<u>12/31/2017</u>	<u>12/31/2016</u>
Electric		
Lead	<u>\$ 719</u>	<u>\$ 721</u>
Total Electric	<u>719</u>	<u>721</u>
Gas		
Lead	<u>276</u>	<u>276</u>
Total Gas	<u>276</u>	<u>276</u>
Water		
Lead	<u>3,200</u>	<u>3,201</u>
Total Water	<u>3,200</u>	<u>3,201</u>
Total Liability	<u>\$ 4,195</u>	<u>\$ 4,198</u>

10. Risk Management

MLGW is exposed to various risks of loss related to active and retiree medical claims; injuries to workers; torts; theft of, damage to, and destruction of assets; errors and omissions; environmental damages; and natural disasters.

MLGW is self-insured for health and medical benefits and for injuries and damages including workers compensation and general liability claims. The Tennessee Governmental Tort Liability Act, TCA 29-20-101, et al, (the "Act") applies to all tort actions against MLGW arising in the state of Tennessee. The Act establishes statutory limits of liability and MLGW is immune from any award or judgment for death, bodily injury or property damage in excess of the limits as set forth in the Act.

Pursuant to the Act, the current limits of liability for personal injuries are \$300 per person and \$700 for two or more persons per accident. The liability for property damage is limited to \$100 per accident.

MLGW purchases insurance to address the risks of loss associated with the following: property damage; employee travel; out-of-state automobile travel; employee dishonesty; forgery; computer fraud; counterfeiting; damage to leased or rented equipment; and worker injuries exceeding MLGW's retained risk of loss.



10. Risk Management (continued)

MLGW has established insurance reserves for the estimated liabilities, including an accrual for incurred but not reported claims, resulting from medical benefits and injuries and damages claims as established by a third party administrator and MLGW's Legal Department. The medical benefits reserve and the costs and charges to the reserve are allocated to each division based on a standard administrative and general cost allocation.

MLGW is party to various lawsuits filed against it in the normal course of business (see Note 15).

The changes in the self-insurance reserves for medical benefits and injuries and damages for the years ended December 31, 2017 and 2016 are as follows:

	<u>Medical Benefits</u>			<u>Injuries and Damages</u>		
	<u>Electric Division</u>	<u>Gas Division</u>	<u>Water Division</u>	<u>Electric Division</u>	<u>Gas Division</u>	<u>Water Division</u>
Balance -- December 31, 2015	\$ 8,230	\$ 3,670	\$ 2,437	\$ 5,413	\$ 2,653	\$ 2,988
Payments	(43,299)	(19,311)	(12,823)	(1,973)	(635)	(566)
Incurred claims expense	42,307	18,869	12,530	1,945	1,008	(301)
Balance -- December 31, 2016	7,238	3,228	2,144	5,385	3,026	2,121
Payments	(43,095)	(19,444)	(12,810)	(2,310)	(977)	(876)
Incurred claims expense	42,880	19,420	12,761	2,866	640	392
Balance -- December 31, 2017	<u>\$ 7,023</u>	<u>\$ 3,204</u>	<u>\$ 2,095</u>	<u>\$ 5,941</u>	<u>\$ 2,689</u>	<u>\$ 1,637</u>



11. Bonds

Bonds as of December 31, 2017 and 2016 consist of the following:

	<u>Interest Rates</u>	<u>2017</u>	<u>2016</u>
Electric Division:			
Electric System Revenue Bonds:			
Series 2008, due serially 2017-2018	4.00 - 5.00%	\$ 65,305	\$ 96,930
Series 2010, due serially 2016-2018	3.00 - 5.00%	55,070	138,420
Series 2014, due serially 2016-2034	2.00 - 5.00%	63,585	66,105
Series 2016, due serially 2017-2036	3.00 - 5.00%	38,725	40,000
Series 2017, due serially 2018-2037	3.00 - 5.00%	90,000	-
Premium on revenue bonds		27,659	21,016
Total		<u>340,344</u>	<u>362,471</u>
Less: current portion of bonds payable		<u>(127,165)</u>	<u>(118,770)</u>
		<u>\$ 213,179</u>	<u>\$ 243,701</u>
Gas Division:			
Gas System Revenue Bonds:			
Series 2016, due serially 2017-2036	3.00 - 5.00%	\$ 38,725	\$ 40,000
Series 2017, due serially 2018-2037	3.00 - 5.00%	40,000	-
Premium on revenue bonds		13,828	7,866
Total		<u>92,553</u>	<u>47,866</u>
Less: current portion of bonds payable		<u>(2,565)</u>	<u>(1,275)</u>
		<u>\$ 89,988</u>	<u>\$ 46,591</u>
Water Division:			
Water System Revenue Bonds:			
Series 2014, due serially 2016-2034	2.00 - 5.00%	\$ 13,290	\$ 13,870
Series 2016, due serially 2017-2036	2.00 - 4.00%	28,880	30,000
Series 2017, due serially 2018-2037	2.00 - 5.00%	25,000	-
Premium on revenue bonds		5,679	3,331
Total		<u>72,849</u>	<u>47,201</u>
Less: current portion of bonds payable		<u>(2,630)</u>	<u>(1,700)</u>
		<u>\$ 70,219</u>	<u>\$ 45,501</u>



11. Bonds (continued)

Principal payments on bonds are due annually on December 1. Debt service requirements as of December 31, 2017 are as follows:

	<u>Electric Division</u>	
	<u>Principal</u>	<u>Interest</u>
2018	\$ 127,165	\$ 14,126
2019	7,040	8,186
2020 - 2024	39,965	36,159
2025 - 2029	50,655	25,464
2030 - 2034	63,450	12,666
2035 - 2037	24,410	1,669
Total	<u>\$ 312,685</u>	<u>\$ 98,270</u>

	<u>Gas Division</u>	
	<u>Principal</u>	<u>Interest</u>
2018	\$ 2,565	\$ 3,560
2019	2,660	3,470
2020 - 2024	15,220	15,427
2025 - 2029	19,400	11,240
2030 - 2034	24,585	6,058
2035 - 2037	14,295	1,040
Total	<u>\$ 78,725</u>	<u>\$ 40,795</u>



11. Bonds (continued)

	<u>Water Division</u>	
	<u>Principal</u>	<u>Interest</u>
2018	\$ 2,630	\$ 2,300
2019	2,680	2,247
2020 - 2024	14,580	10,061
2025 - 2029	17,330	7,311
2030 - 2034	20,935	3,707
2035 - 2037	9,015	503
Total	<u>\$ 67,170</u>	<u>\$ 26,129</u>

MLGW, at its option, may redeem bonds prior to maturity at premiums and prices specified in the indentures. The Series 2008 and Series 2010 bonds are subject to mandatory redemption upon early termination of the Supplement to the Power Contract (“Supplement”) with TVA as discussed in Note 12.

Bonds are secured by the pledge of the respective division’s revenues, by funds established by the bond resolutions and, in certain circumstances, proceeds from the sale of certain division assets.

The estimated fair value of long-term debt for the Electric, Gas, and Water Divisions based on quoted market prices (including accrued interest) are as follows as of December 31, 2017 and 2016:

	<u>2017</u>	<u>2016</u>
Electric Division	<u>\$ 341,948</u>	<u>\$ 367,243</u>
	<u>2017</u>	<u>2016</u>
Gas Division	<u>\$ 90,623</u>	<u>\$ 45,078</u>
	<u>2017</u>	<u>2016</u>
Water Division	<u>\$ 72,179</u>	<u>\$ 45,159</u>

During 2017, the Electric Division issued \$90,000 of Series 2017 revenue bonds to finance the costs of acquiring, expanding and/or improving the Electric Division and to pay certain costs of issuance with respect to the Series 2017 Electric Division Bonds. The first principal payment will be made December 1, 2018, and thereafter will be made annually with a final maturity date of December 1, 2037. The Series 2017 revenue bonds bear interest at annual fixed rates ranging from 3.00% to 5.00%.



11. Bonds (continued)

During 2017, the Gas Division issued \$40,000 of Series 2017 revenue bonds to finance the costs of acquiring, expanding and/or improving the Gas Division and to pay certain costs of issuance with respect to the Series 2017 Gas Division Bonds. The first principal payment will be made December 1, 2018, and thereafter will be made annually with a final maturity date of December 1, 2037. The Series 2017 revenue bonds bear interest at annual fixed rates ranging from 3.00% to 5.00%.

During 2017, the Water Division issued \$25,000 of Series 2017 revenue bonds to finance the costs of acquiring, expanding and/or improving the Water Division and to pay certain costs of issuance with respect to the Series 2017 Water Division Bonds. The first principal payment will be made December 1, 2018, and thereafter will be made annually with a final maturity date of December 1, 2037. The Series 2017 revenue bonds bear interest at annual fixed rates ranging from 2.00% to 5.00%.

During 2016, the Electric Division issued \$40,000 of Series 2016 revenue bonds to finance the costs of acquiring, expanding and/or improving the Electric Division and to pay certain costs of issuance with respect to the Series 2016 Electric Division Bonds. The first principal payment will be made December 1, 2017, and thereafter will be made annually with a final maturity date of December 1, 2036. The Series 2016 revenue bonds bear interest at annual fixed rates ranging from 3.00% to 5.00%. In addition, the Electric Division redeemed early the remaining principal balance of the Series 2003A bonds totaling \$4,170.

During 2016, the Gas Division issued \$40,000 of Series 2016 revenue bonds to finance the costs of acquiring, expanding and/or improving the Gas Division and to pay certain costs of issuance with respect to the Series 2016 Gas Division Bonds. The first principal payment will be made December 1, 2017, and thereafter will be made annually with a final maturity date of December 1, 2036. The Series 2016 revenue bonds bear interest at annual fixed rates ranging from 3.00% to 5.00%.

During 2016, the Water Division issued \$30,000 of Series 2016 revenue bonds to finance the costs of acquiring, expanding and/or improving the Water Division and to pay certain costs of issuance with respect to the Series 2016 Water Division Bonds. The first principal payment will be made December 1, 2017, and thereafter will be made annually with a final maturity date of December 1, 2036. The Series 2016 revenue bonds bear interest at annual fixed rates ranging from 2.00% to 4.00%.

During 2014, the Electric Division issued \$71,000 of Series 2014 revenue bonds to finance the costs of acquiring, expanding and/or improving the Electric Division and to pay certain costs of issuance with respect to the Series 2014 Electric Division Bonds. The first principal payment was made December 1, 2015, and thereafter will be made annually with a final maturity date of December 1, 2034. The Series 2014 revenue bonds bear interest at annual fixed rates ranging from 2.00% to 5.00%.

During 2014, the Water Division issued \$15,000 of Series 2014 revenue bonds to finance the costs of acquiring, expanding and/or improving the Water Division and to pay certain costs of issuance with respect to the Series 2014 Water Division Bonds. The first principal payment was made December 1, 2015, and thereafter will be made annually with a final maturity date of December 1, 2034. The Series 2014 revenue bonds bear interest at annual fixed rates ranging from 2.00% to 5.00%.



11. Bonds (continued)

During 2010, the Electric Division issued \$460,050 of Series 2010 bonds to advance refund a portion of the outstanding Electric System Subordinate Revenue Bonds, Series 2003A, and to pay certain costs of issuance of the Series 2010 Bonds. The refunding was undertaken to reduce total future debt service payments. The 2010 Series Bonds have a net present value benefit of \$16,541, with a cash savings of \$18,809 over the life of the bonds. The first principal payment was made December 1, 2014, and thereafter will be made annually with a final maturity date of December 1, 2018. The Series 2010 Bonds bear interest at annual fixed rates ranging from 3.00% to 5.00%. The Series 2010 Bonds are not subject to optional redemption, but will be subject to extraordinary redemption prior to maturity.

During 2008, the Electric Division issued \$96,930 in revenue bonds to refund \$100,000 of Series 2003B revenue bonds. The refunding was undertaken to convert the 2003B auction rate securities into fixed rate securities of the same maturity. The Series 2008 revenue bonds bear interest at annual fixed rates ranging from 4.00% to 5.00%.

During 2003, the Electric Division issued \$1,292,170 of Series 2003A and \$100,000 of Series 2003B revenue bonds to prepay future power purchases from TVA under the Supplement. See Note 12. The Series 2003B revenue bonds were auction rate securities that bore interest for 35-day auction periods. The Series 2003B revenue bonds were refunded in 2008, as discussed above.

MLGW's Electric Division bond covenants require that for Series 2008 and 2010 Bonds the ratio of net revenues to principal and interest for any fiscal year will equal at least 100%. The Series 2014, 2016, and 2017 Bonds require that the ratio of net revenues to principal and interest for any fiscal year will equal at least 120%. The composite electric bonds debt service coverage as of December 31, 2017 was 1.65.

MLGW's Gas Division bond covenants require that for Series 2016 and 2017 Bonds the ratio of net revenues to principal and interest for any fiscal year will equal at least 120%. The composite gas bonds debt service coverage as of December 31, 2017 was 7.39.

MLGW's Water Division bond covenants require that for Series 2014, 2016 and 2017 Bonds the ratio of net revenues to principal and interest for any fiscal year will equal at least 120%. The composite water bonds debt service coverage as of December 31, 2017 was 5.57.



11. Bonds (continued)

Long-term debt activity for the years ended December 31, 2017 and 2016 was as follows:

	<u>Beginning Balance</u>	<u>Increases</u>	<u>Decreases</u>	<u>Ending Balance</u>
Year ended December 31, 2017:				
Electric Division				
Bonds payable:				
Revenue bonds	\$ 341,455	\$ 90,000	\$ (118,770)	\$ 312,685
Premium on revenue bonds	<u>21,016</u>	<u>11,700</u>	<u>(5,057)</u>	<u>27,659</u>
Total bonds payable	<u>\$ 362,471</u>	<u>\$ 101,700</u>	<u>\$ (123,827)</u>	<u>\$ 340,344</u>
Gas Division				
Bonds payable:				
Revenue bonds	\$ 40,000	\$ 40,000	\$ (1,275)	\$ 78,725
Premium on revenue bonds	<u>7,866</u>	<u>6,775</u>	<u>(813)</u>	<u>13,828</u>
Total bonds payable	<u>\$ 47,866</u>	<u>\$ 46,775</u>	<u>\$ (2,088)</u>	<u>\$ 92,553</u>
Water Division				
Bonds payable:				
Revenue bonds	\$ 43,870	\$ 25,000	\$ (1,700)	\$ 67,170
Premium on revenue bonds	<u>3,331</u>	<u>2,693</u>	<u>(345)</u>	<u>5,679</u>
Total bonds payable	<u>\$ 47,201</u>	<u>\$ 27,693</u>	<u>\$ (2,045)</u>	<u>\$ 72,849</u>
Year ended December 31, 2016:				
Electric Division				
Bonds payable:				
Revenue bonds	\$ 421,030	\$ 40,000	\$ (119,575)	\$ 341,455
Premium on revenue bonds	<u>20,122</u>	<u>8,089</u>	<u>(7,195)</u>	<u>21,016</u>
Total bonds payable	<u>\$ 441,152</u>	<u>\$ 48,089</u>	<u>\$ (126,770)</u>	<u>\$ 362,471</u>
Gas Division				
Bonds payable:				
Revenue bonds	\$ -	\$ 40,000	\$ -	\$ 40,000
Premium on revenue bonds	<u>-</u>	<u>8,089</u>	<u>(223)</u>	<u>7,866</u>
Total bonds payable	<u>\$ -</u>	<u>\$ 48,089</u>	<u>\$ (223)</u>	<u>\$ 47,866</u>



11. Bonds (continued)

Water Division

Bonds payable:

Revenue bonds	\$ 14,440	\$ 30,000	\$ (570)	\$ 43,870
Premium on revenue bonds	869	2,608	(146)	3,331
Total bonds payable	<u>\$ 15,309</u>	<u>\$ 32,608</u>	<u>\$ (716)</u>	<u>\$ 47,201</u>

12. Rates and Energy Supplies

Rates

Electric, gas and water rates are established by MLGW and rate changes are subject to approval by the City Council. The City Council has approved mechanisms for pass-through of wholesale electric rate changes from TVA and natural gas price changes from suppliers without requiring additional specific approval.

TVA implemented a rate adjustment effective with the October 2017 revenue month, increasing the cost of wholesale power (excluding fuel and purchased power) purchased by MLGW by approximately 2.44%. MLGW implemented changes to retail rate schedules effective with meters read on or after September 29, 2017, to recover the increased cost of wholesale power from its retail customers. The retail effect across all customer classes was approximately 1.50%.

An electric rate restructure was effective with meters read on or after January 3, 2017, and was applicable to Residential Schedules RS, RS-TOU and Small General Service Schedule GSA Part 1, MSA and TGSA. This rate restructure was approved on November 1, 2016 by the City Council as part of the 2017 MLGW Budget. The retail effect was revenue neutral across these customer classes.

TVA implemented a rate adjustment effective with the October 2016 revenue month, increasing the cost of wholesale power (excluding fuel and purchased power) purchased by MLGW by approximately 2.48%. MLGW implemented changes to its retail rate schedules effective with meters read on or after September 30, 2016, to recover the increased cost of wholesale power from its retail customers. The retail effect across all customer classes was approximately 1.50%.

An electric rate decrease was effective with meters read on or after January 4, 2016, and was applicable to Residential Schedules RS, RS-TOU and Small General Service Schedule GSA Part 1. This rate decrease was approved on December 1, 2015 by the City Council as part of the 2016 MLGW Budget. The retail effect is approximately a 2.91% annual decrease for these customers.

MLGW retail electric rates are adjusted for TVA's Fuel Cost Adjustor ("FCA"). The FCA is a variable wholesale energy rate that can fluctuate each month with TVA's cost of fuel for electricity generation and purchased power costs. The FCA affects energy (per kilowatt-hour) charges for all retail customers.



12. Rates and Energy Supplies (continued)

Rates (continued)

MLGW retail electric rates are also adjusted by a Power Cost Adjustment (“PCA”). The PCA is a component added to the monthly FCA and recovers the shortfall in power cost due to changes in load factor. The PCA is a quarterly fixed rate adjustment applied to energy charges for retail customers with demands less than 5,000 kilowatts. The PCA was approved on November 19, 2013 by the City Council as part of the 2014 MLGW Budget. MLGW implemented the PCA for meters read on or after January 2, 2014.

MLGW gas rate schedules are developed using a projected price of natural gas and related gas storage and transportation charges. Retail natural gas rates are adjusted monthly for the Purchased Gas Adjustment (“PGA”) rider. A PGA is applied to customer bills to reflect the difference between the actual cost of gas, storage and transportation in a given month and the projected levels built into the base rate schedule.

A gas rate restructure was effective with meters read on or after January 4, 2016 and was applicable to all Service Schedules. This restructure was required due to customer migration among rate classes and was approved on December 1, 2015 by the City Council as part of the 2016 MLGW Budget. The retail impact across all customer classes is intended to be revenue neutral.

A water rate increase was approved on December 1, 2015 by the City Council as part of the 2016 MLGW Budget. This rate increase was required due to increased general operating expenses, capital expenditures associated with system improvements and reductions in funds available to pay items. MLGW implemented new water rate schedules for meters read on or after January 4, 2016. The retail impact was a 22.0% increase for all customer classes.

Energy Supplies

TVA currently supplies all of MLGW’s electric power requirements pursuant to a power contract. On November 19, 2003, MLGW entered into a Supplement to the Power Contract with TVA under which MLGW made a prepayment of \$1,500,000 to TVA for capacity and related energy. In exchange for the prepayment and a commitment by MLGW to purchase a minimum amount of electric power from TVA over the term of the Supplement (15 years), TVA will supply a specified amount of electricity and provide a fixed credit to its wholesale power rates otherwise in effect. To finance the prepayment, MLGW issued the Series 2003A and Series 2003B Bonds. Subsequently, MLGW has refinanced portions of the bonds originally issued for the prepayment. In 2008, the Series 2003B bonds were refunded by the Series 2008 bonds. In 2010, the callable portion of the 2003A Series bonds was refunded by the Series 2010 bonds. In 2016, the remaining principal balance of the Series 2003A bonds was redeemed early. See also Note 1 (Prepaid Power Cost) and Note 11 (Bonds).

Under the terms of the TVA power contract, MLGW may terminate its supply arrangement with TVA upon five years’ prior written notice. TVA may terminate on not less than ten years’ prior written notice.



12. Rates and Energy Supplies (continued)

Energy Supplies (continued)

MLGW purchases natural gas from multiple suppliers on multiple pipelines in order to minimize operational and performance risk. MLGW has short-term purchase commitments which are normally for one year or less.

MLGW and the Tennessee Energy Acquisition Corporation (“TEAC”) entered into a 20 year gas purchase contract beginning January 1, 2007 with volume commitments for the term. In November 2006, Public Energy Authority of Kentucky, Inc. (“PEAK”) and MLGW entered into a 5 year gas purchase contract with volume commitments for the term. In October 2011, PEAK and MLGW renewed, for a second term, a 5 year gas purchase contract with volume commitments for the term. This purchase contract began November 1, 2011 and ended June 30, 2016. Both TEAC and PEAK deals are paid monthly after the gas is received by MLGW for its customers, and therefore these deals present no increased cash flow risk compared to normal physical gas purchases.

13. Federal Grant Contributions

In December 2011, FEMA announced approval of the April 4, 2011 Storm Restoration project, contract Edison #E 34101-0000008735, under the Public Assistance Grant Award for costs incurred during the FEMA-1978-DR-TN program. In December 2014 all work on the last restoration project was completed; and MLGW increased the receivable by \$44 in order to realize the entire amount contracted with FEMA in 2011 of \$2,733. In 2015 however, MLGW decreased the receivable by \$55 representing project under runs that are currently being processed and pending de-obligation by FEMA. There was no activity on this grant in 2016. In June 2017, MLGW received the final payment of \$828. The schedule below summarizes the grant activity:

Electric	2017	2016	2015	2014	2013	2012	2011
Total Expenditures	\$ -	\$ -	\$ (74)	\$ 59	\$ 209	\$ 87	\$ 3,289
Eligible Reimbursement	-	-	(55)	44	157	65	2,467
Reimbursement Received	828	-	-	-	-	1,850	-
Receivable Balance	\$ -	\$ (828)	\$ (828)	\$ (883)	\$ (839)	\$ (682)	\$ (2,467)

In June 2017, MLGW applied for a disaster assistance grant for the restoration work done after the May 2017 storm. In June 2017, FEMA awarded grant contract Edison #E 34101-0000023718 for the project under the Public Assistance Grant Award program for costs incurred during FEMA-4320-DR-TN. The award was \$12,744, of which \$12,728 is being federally funded to the Electric Division and \$16 to the Gas Division. Total eligible cost of restoration work for this disaster as submitted to FEMA field officer in January 2018 was \$16,992. Eligible cost submitted for the Electric Division was \$16,970 and \$22 for the Gas Division.



13. Federal Grant Contributions (continued)

Electric	2017
Total Expenditures	\$ 16,970
Eligible Reimbursement	(12,728)
Reimbursement Received	-
Receivable Balance	\$ (12,728)
Gas	2017
Total Expenditures	\$ 22
Eligible Reimbursement	(16)
Reimbursement Received	-
Receivable Balance	\$ (16)

14. Transfers to City

The Electric, Gas and Water Divisions make transfers to the City.

The Electric Division transfer is based on the formula provided by the May 29, 1987, TVA Power Contract Amendment (Supp. No. 8). The formula includes a property tax equivalency calculation plus 4% of operating revenue less power costs (three-year average). The Division pays the amount requested by the City not exceeding this formula.

The Gas Division transfer is based on the formula provided by the Municipal Gas System Tax Equivalent Law of 1987. The formula includes a property tax equivalency calculation plus 4% of operating revenue less gas costs (three-year average). The Division pays the amount requested by the City not exceeding this formula.

The Water Division through an agreement with the City, transfers a payment in the amount of \$2,500 per year. This agreement is effective through the year 2028. Additionally, in July 2014, the city directed MLGW to pay \$1,900 to the City's general fund for each of MLGW's fiscal years 2015, 2016 and 2017 on or about April 30th of said years.

15. Commitments and Contingencies

The Electric and Gas Divisions have derivative contracts and agreements that are exchange traded exclusively on public exchanges thereby eliminating counterparty credit risk. The counterparty to any derivative transaction on an exchange is either the Chicago Mercantile Exchange ("CME"), which is the parent of the NYMEX, or the Intercontinental Exchange ("ICE"). The exposure to credit loss in the event of nonperformance by the other party is represented by the fair values of the open derivative contracts. However, there is no counterparty financial risk for contracts transacted through the NYMEX or the ICE.



15. Commitments and Contingencies (continued)

MLGW pays a Transfer to the City and in lieu of taxes to Shelby County Government and the incorporated towns of Shelby County for the Electric and Gas Divisions based on the Tennessee Municipal Electric and Gas System Tax Equivalent Laws of 1987. MLGW pays a Transfer to the City for the Water Division based upon an agreement with the City, which calls for a payment of \$2,500 for each of the fiscal years through 2028. An additional \$1,900 incremental payment to the city has been approved for fiscal years 2014 through 2017; bringing the total water payment to the city to \$4,400.

MLGW is party to various legal proceedings incidental to its business. In the opinion of management, MLGW's liability, if any, in all pending litigation or other proceedings, taken as a whole after consideration of amounts accrued, insurance coverage, or other indemnification arrangements, will not have a material adverse effect on its financial position or results of operations.

See Note 12 for discussions of MLGW's power contract with TVA and gas purchase commitments.

REQUIRED SCHEDULE OF CHANGES IN NET PENSION LIABILITY
DECEMBER 31, 2017
(Dollars in Thousands)



MLGW

	2016	2015	2014	2013
Total pension liability				
Service cost	\$ 32,591	\$ 30,139	\$ 31,786	\$ 33,122
Interest	102,248	99,940	100,436	98,818
Change of benefit terms	-	-	-	-
Differences between expected and actual experience	(11,298)	2,275	(16,338)	(14,280)
Changes in assumptions	-	-	(22,112)	-
Benefit payments, including refunds of employee contributions	(102,628)	(100,528)	(100,249)	(91,931)
Net change in total pension liability	20,913	31,825	(6,477)	25,730
Total pension liability – beginning	1,414,620	1,382,794	1,389,271	1,363,542
Total pension liability – ending (a)	\$ 1,435,533	\$ 1,414,620	\$ 1,382,794	\$ 1,389,271
Plan fiduciary net position				
Contributions – employer	\$ 21,390	\$ 21,390	\$ 26,804	\$ 30,706
Contributions – employee	12,513	12,310	11,729	12,000
Net investment income	108,007	15,231	98,931	185,707
Benefit payments including refunds of employee contributions	(102,628)	(100,528)	(100,249)	(91,931)
Administrative expense	(729)	(759)	(714)	(657)
Other	-	-	-	-
Net change in plan fiduciary net position	\$ 38,553	\$ (52,356)	\$ 36,501	\$ 135,825
Other Adjustments	-	788	-	-
Plan fiduciary net position – beginning	1,327,616	1,379,184	1,342,683	1,206,858
Plan fiduciary net position – ending (b)	\$ 1,366,169	\$ 1,327,616	\$ 1,379,184	\$ 1,342,683
System's net pension liability – ending (a) – (b)	\$ 69,364	\$ 87,004	\$ 3,610	\$ 46,588
Plan fiduciary net position as a percentage of the total pension liability	95.17%	93.85%	99.74%	96.65%
Covered employee payroll	\$ 161,926	\$ 160,641	\$ 152,368	\$ 154,759
System's net pension liability as a percentage of covered employee payroll	42.84%	54.16%	2.37%	30.10%

Notes to schedule:

Benefit changes: There have been no changes in benefit provisions since GASB 68 implementation.

Change of assumptions: The assumptions were updated between December 31, 2013 and December 31, 2014 based on a five-year experience study for the period ending December 31, 2013.

Contributions: The Pension Plan's accounting for contributions changed in 2016 from an accrual basis to a cash basis.

Historical data: This schedule will be expanded in future years to include up to ten years of historical data as the data becomes available.

**REQUIRED SCHEDULE OF EMPLOYER CONTRIBUTIONS - PENSION
DECEMBER 31, 2017**



MLGW

Year Ended December 31	Actuarially Determined Contribution (ADC)	Actual Contribution in Relation to ADC	Contribution Deficiency (Excess)	Covered- Employee Payroll	Contributions as a Percentage of Covered- Employee Payroll
2007	17,217	17,230	(13)	146,830	11.73%
2008	10,541	18,467	(7,926)	150,253	12.29%
2009	22,401	21,388	1,013	154,057	13.88%
2010	27,381	27,385	(4)	153,509	17.84%
2011	26,208	26,213	(5)	154,036	17.02%
2012	30,067	30,063	4	154,347	19.48%
2013	30,705	30,706	(1)	154,759	19.84%
2014	26,812	26,804	8	152,368	17.59%
2015	21,390	21,390	-	160,641	13.32%
2016	21,390	21,390	-	161,926	13.21%



Valuation date	January 1, 2016
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of payroll, using 2.50% annual increases
Remaining amortization period	25 years remaining as of January 1, 2016
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five-year period, further adjusted, if necessary, to be within 30% of the market value.

Actuarial Assumptions:

Inflation	2.75%
Salary increases	Inflation plus merit increases that vary by age and service, ranging from 0.00% to 6.75%
Investment rate of return	7.50%, including inflation, net of investment expenses
Cost-of-living adjustments	0.83% for ages 56-58 1.65% for ages 59-61 2.06% for ages 62 and older, and all disabled participants

Other Information:

Effective January 1, 2016, the actuarially determined contribution (ADC) is calculated using a January 1 valuation date as of the beginning of the fiscal year prior to the year in which contributions are reported. Therefore, the ADC for the year ended December 31, 2016 is based on the January 1, 2015 actuarial valuation.

Please see the January 1, 2016 actuarial valuation report for a full listing of assumptions.

**REQUIRED SCHEDULE OF FUNDING PROGRESS FOR OPEB
DECEMBER 31, 2017
(Dollars in Thousands)**



MLGW

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
December 31, 2017	\$ 406,591	\$ 653,587	\$ 246,997	62.2%	\$ 167,221	147.7%
December 31, 2015	333,017	794,310	461,293	41.9%	160,641	287.2%
December 31, 2013	272,150	660,524	388,374	41.2%	154,759	251.0%

**REQUIRED SCHEDULE OF EMPLOYER CONTRIBUTIONS - OPEB
 DECEMBER 31, 2017
 (Dollars in Thousands)**



MLGW

Fiscal Year Ended	Annual OPEB Cost	Employer Contributions	Percentage of Annual OPEB Cost Contributed
December 31, 2017	\$ 46,995	\$ 46,338	98.6%
December 31, 2016	45,247	41,343	91.4%
December 31, 2015	38,176	38,438	100.7%

**SCHEDULE OF BONDS,
PRINCIPAL AND INTEREST REQUIREMENTS
DECEMBER 31, 2017
(Dollars in Thousands)**



MLGW

	Series 2008		Series 2010		Series 2014		Series 2016		Series 2017	
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
Electric Division:										
2018	\$ 65,305	\$ 3,043	\$ 55,070	\$ 2,653	\$ 2,620	\$ 2,891	\$ 1,315	\$ 1,735	\$ 2,855	\$ 3,805
2019	-	-	-	-	2,725	2,786	1,370	1,683	2,945	3,717
2020	-	-	-	-	2,810	2,704	1,425	1,628	3,060	3,599
2021	-	-	-	-	2,920	2,592	1,480	1,571	3,215	3,446
2022	-	-	-	-	3,040	2,475	1,555	1,497	3,375	3,285
2023	-	-	-	-	3,160	2,354	1,630	1,419	3,545	3,117
2024	-	-	-	-	3,315	2,196	1,715	1,338	3,720	2,939
2025	-	-	-	-	3,485	2,030	1,800	1,252	3,905	2,753
2026	-	-	-	-	3,655	1,856	1,890	1,162	4,100	2,558
2027	-	-	-	-	3,840	1,673	1,985	1,067	4,305	2,353
2028	-	-	-	-	3,995	1,519	2,085	968	4,520	2,138
2029	-	-	-	-	4,155	1,359	2,185	864	4,750	1,912
2030	-	-	-	-	4,320	1,193	2,295	755	4,985	1,674
2031	-	-	-	-	4,535	977	2,410	640	5,235	1,425
2032	-	-	-	-	4,760	751	2,510	543	5,420	1,242
2033	-	-	-	-	5,000	513	2,610	443	5,605	1,052
2034	-	-	-	-	5,250	261	2,710	339	5,805	856
2035	-	-	-	-	-	-	2,820	230	6,005	653
2036	-	-	-	-	-	-	2,935	117	6,215	443
2037	-	-	-	-	-	-	-	-	6,435	226
Total	\$ 65,305	\$ 3,043	\$ 55,070	\$ 2,653	\$ 63,585	\$ 30,130	\$ 38,725	\$ 19,251	\$ 90,000	\$ 43,193

**SCHEDULE OF BONDS,
PRINCIPAL AND INTEREST REQUIREMENTS
DECEMBER 31, 2017
(Dollars in Thousands)**



MLGW

	Series 2016		Series 2017	
	Principal	Interest	Principal	Interest
Gas				
Division:				
2018	\$ 1,315	\$ 1,735	\$ 1,250	\$ 1,825
2019	1,370	1,682	1,290	1,788
2020	1,425	1,628	1,340	1,736
2021	1,480	1,571	1,410	1,669
2022	1,555	1,497	1,480	1,598
2023	1,630	1,419	1,555	1,525
2024	1,715	1,338	1,630	1,446
2025	1,800	1,252	1,710	1,365
2026	1,890	1,162	1,800	1,280
2027	1,985	1,067	1,885	1,190
2028	2,085	968	1,980	1,096
2029	2,185	864	2,080	996
2030	2,295	755	2,185	892
2031	2,410	640	2,295	783
2032	2,510	543	2,410	669
2033	2,610	443	2,530	548
2034	2,710	339	2,630	446
2035	2,820	230	2,735	342
2036	2,935	117	2,845	233
2037	-	-	2,960	118
Total	<u>\$ 38,725</u>	<u>\$ 19,250</u>	<u>\$ 40,000</u>	<u>\$ 21,545</u>

**SCHEDULE OF BONDS,
PRINCIPAL AND INTEREST REQUIREMENTS
DECEMBER 31, 2017
(Dollars in Thousands)**



MLGW

	Series 2014		Series 2016		Series 2017	
	Principal	Interest	Principal	Interest	Principal	Interest
Water Division:						
2018	\$ 595	\$ 481	\$ 1,155	\$ 890	\$ 880	\$ 930
2019	605	469	1,180	867	895	911
2020	620	457	1,215	832	915	893
2021	635	438	1,250	795	940	866
2022	655	419	1,275	770	970	838
2023	680	393	1,315	732	1,000	808
2024	715	359	1,355	693	1,040	768
2025	740	338	1,395	652	1,080	726
2026	765	308	1,435	610	1,135	673
2027	790	285	1,465	581	1,190	616
2028	820	253	1,525	523	1,250	557
2029	855	221	1,585	462	1,300	506
2030	890	186	1,645	398	1,355	455
2031	925	151	1,715	333	1,405	400
2032	960	114	1,765	281	1,455	351
2033	1,000	75	1,820	228	1,515	294
2034	1,040	35	1,870	174	1,575	232
2035	-	-	1,930	117	1,640	169
2036	-	-	1,985	60	1,705	103
2037	-	-	-	-	1,755	53
Total	\$ 13,290	\$ 4,982	\$ 28,880	\$ 9,998	\$ 25,000	\$ 11,149

**SCHEDULE OF CURRENT UTILITY RATES
DECEMBER 31, 2017
(Continued)**



MLGW

Electric Division Rate Class	Base Charge	Customers
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**General Service – Schedule GSA
(cont.)**

If the higher of the customer’s currently effective contract demand or its highest billing demand during the latest 12 month period is greater than 1,000 kW:

Customer Charge:	\$300.00 per delivery point per month		
Demand Charge:	Summer	Winter	Transition
First 1,000 kW of billing demand per month:	\$12.73	\$11.80	\$11.80
Excess over 1,000 kW of billing demand per month:	\$12.57	\$11.64	\$11.64
Excess of billing demand over the higher of 2,500 kW or the customer’s contract demand per month:	\$12.57	\$11.64	\$11.64
Energy Charge:			
All kWh per month:	\$0.04466	\$0.04175	\$0.04065

Time-of-Day General Power Rate - Part A (Schedule TGSA)

1

Effective October 1, 2017.

	Summer	Non-Summer
Customer Charge:	\$300.00	\$300.00
On-peak per kW of billing demand charges per month:	\$13.06	\$12.42
Per kW charge per month for each kW, if any, by which off-peak billing demand exceeds on-peak billing demand:	\$1.66	\$1.66
Per kW charge per month for each kW, if any, of the amount by which (1) the customer’s on-peak billing demand exceeds the higher of 2,500 kW or its on-peak contract demand or (2) the customer’s off-peak billing demand exceeds the higher of 2,500 kW or its off-peak contract demand, whichever is higher	\$13.06	\$12.42
On-peak per kWh energy charge:	\$0.05511	\$0.04806
Off-peak per kWh energy charge:	\$0.03927	\$0.04047

Manufacturing Power Rate - Part A

0

(Schedule MSA)

Effective October 1, 2017.

Customer Charge:	\$300.00 per delivery point per month		
	Summer	Winter	Transition
Per kW coincident billing demand charge per month:	\$8.29	\$7.33	\$7.33
Per kW maximum billing demand charge per month:	\$4.53	\$4.53	\$4.53

**SCHEDULE OF CURRENT UTILITY RATES
DECEMBER 31, 2017
(Continued)**



MLGW

Electric Division Rate Class (cont.)	Base Charge	Customers
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**Manufacturing Power Rate - Part A
(Schedule MSA) (cont.)**

	Summer	Winter	Transition
Excess per kW charge per month by which billing demand exceeds contract demand:	\$12.82	\$11.86	\$11.86
On-peak per kWh energy charge:	\$0.06193	\$0.05137	\$0.04178
Off-peak per kWh energy charge:	\$0.03927	\$0.04107	\$0.04178

**Time Of Use General Service
(Schedule TGS)**

Effective October 1, 2017.

9

Service Charge:	\$1,500.00 per delivery point per month
TVA Administrative Charge:	\$350.00 per delivery point per month
Excess Demand:	Demand amount that exceeds the effective contract demand.
Off-Peak Block 1:	First 200 hours use of on-peak metered demand multiplied by the ratio of metered off-peak energy to metered total energy.
Off-Peak Block 2:	Next 200 hours use of on-peak metered demand multiplied by the ratio of metered off-peak energy to metered total energy.
Off-Peak Block 3:	Over 400 hours use of on-peak metered demand multiplied by the ratio of metered off-peak energy to metered total energy.

Rates applicable for delivery at:

	Transmission Voltage: 115 kV and up			
	TDGSA	TGSB	TGSC	TGSD
Summer				
On-peak billing demand per kW:	\$10.35	\$10.30	\$10.30	\$10.30
Maximum billing demand per kW:	\$5.41	\$5.41	\$4.88	\$4.63
Excess demand per kW:	\$10.35	\$10.30	\$10.30	\$10.30
On-peak energy per kWh:	\$0.07729	\$0.07409	\$0.07409	\$0.07317
Off-peak block 1 per kWh:	\$0.04562	\$0.05046	\$0.05046	\$0.04954
Off-peak block 2 per kWh:	\$0.00545	\$0.00653	\$0.00653	\$0.00452
Off-peak block 3 per kWh:	\$0.00259	\$0.00329	\$0.00329	\$0.00237
Winter				
On-peak billing demand per kW:	\$9.44	\$9.39	\$9.39	\$9.39
Maximum billing demand per kW:	\$5.41	\$5.41	\$4.88	\$4.63
Excess demand per kW:	\$9.44	\$9.39	\$9.39	\$9.39
On-peak energy per kWh:	\$0.06283	\$0.06331	\$0.06331	\$0.06239
Off-peak block 1 per kWh:	\$0.04842	\$0.05256	\$0.05256	\$0.05164
Off-peak block 2 per kWh:	\$0.00545	\$0.00653	\$0.00653	\$0.00452
Off-peak block 3 per kWh:	\$0.00259	\$0.00329	\$0.00329	\$0.00237

**SCHEDULE OF CURRENT UTILITY RATES
DECEMBER 31, 2017
(Continued)**



MLGW

Electric Division Rate Class (cont.)	Base Charge	Customers
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**Time Of Use General Service
(Schedule TGS)
(cont.)**

	Distribution Voltage: < 115 kV			
	TDGSA	TGSB	TGSC	TGSD
Rates applicable for delivery at:				
Summer				
On-peak billing demand per kW:	\$10.66	\$10.61	\$10.61	\$10.61
Maximum billing demand per kW:	\$5.53	\$5.53	\$5.00	\$4.75
Excess demand per kW:	\$10.66	\$10.61	\$10.61	\$10.61
On-peak energy per kWh:	\$0.07957	\$0.07627	\$0.07627	\$0.07535
Off-peak block 1 per kWh:	\$0.04695	\$0.05194	\$0.05194	\$0.05102
Off-peak block 2 per kWh:	\$0.00558	\$0.00669	\$0.00669	\$0.00465
Off-peak block 3 per kWh:	\$0.00263	\$0.00335	\$0.00335	\$0.00243
Winter				
On-peak billing demand per kW:	\$9.72	\$9.67	\$9.67	\$9.67
Maximum billing demand per kW:	\$5.53	\$5.53	\$5.00	\$4.75
Excess demand per kW:	\$9.72	\$9.67	\$9.67	\$9.67
On-peak energy per kWh:	\$0.06468	\$0.06517	\$0.06517	\$0.06425
Off-peak block 1 per kWh:	\$0.04983	\$0.05410	\$0.05410	\$0.05318
Off-peak block 2 per kWh:	\$0.00558	\$0.00669	\$0.00669	\$0.00465
Off-peak block 3 per kWh:	\$0.00263	\$0.00335	\$0.00335	\$0.00243

	Transmission Voltage: 115 kV and up			
	TDGSA	TGSB	TGSC	TGSD
Rates applicable for delivery at:				
Transition				
On-peak billing demand per kW:	\$9.44	\$9.39	\$9.39	\$9.39
Maximum billing demand per kW:	\$5.41	\$5.41	\$4.88	\$4.63
Excess demand per kW:	\$9.44	\$9.39	\$9.39	\$9.39
On-peak energy per kWh:	\$0.04955	\$0.05016	\$0.05016	\$0.04924
Off-peak block 1 per kWh:	\$0.04955	\$0.05016	\$0.05016	\$0.04924
Off-peak block 2 per kWh:	\$0.00545	\$0.00653	\$0.00653	\$0.00452
Off-peak block 3 per kWh:	\$0.00259	\$0.00329	\$0.00329	\$0.00237

	Distribution Voltage: < 115 kV			
	TDGSA	TGSB	TGSC	TGSD
Rates applicable for delivery at:				
Transition				
On-peak billing demand per kW:	\$9.72	\$9.67	\$9.67	\$9.67
Maximum billing demand per kW:	\$5.53	\$5.53	\$5.00	\$4.75
Excess demand per kW:	\$9.72	\$9.67	\$9.67	\$9.67
On-peak energy per kWh:	\$0.05100	\$0.05163	\$0.05163	\$0.05071
Off-peak block 1 per kWh:	\$0.05100	\$0.05163	\$0.05163	\$0.05071
Off-peak block 2 per kWh:	\$0.00558	\$0.00669	\$0.00669	\$0.00465
Off-peak block 3 per kWh:	\$0.00263	\$0.00335	\$0.00335	\$0.00243

**Time Of Use Manufacturing Service
(Schedule TMS)**

Effective October 1, 2017.

25

Service Charge: \$1,500.00 per delivery point per month

TVA Administrative Charge: \$350.00 per delivery point per month

Excess Demand: Demand amount that exceeds the effective contract demand.

**SCHEDULE OF CURRENT UTILITY RATES
DECEMBER 31, 2017
(Continued)**



MLGW

Electric Division Rate Class (cont.)	Base Charge	Customers
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**Time Of Use Manufacturing Service
(Schedule TMS)
(cont.)**

Off-Peak Block 1:	First 200 hours use of on-peak metered demand multiplied by the ratio of metered off-peak energy to metered total energy.
Off-Peak Block 2:	Next 200 hours use of on-peak metered demand multiplied by the ratio of metered off-peak energy to metered total energy.
Off-Peak Block 3:	Over 400 hours use of on-peak metered demand multiplied by the ratio of metered off-peak energy to metered total energy.

Rates applicable for delivery at:

	Transmission Voltage: 115 kV and up			
	TDMSA	TMSB	TMSC	TMSD
Summer				
On-peak billing demand per kW:	\$9.68	\$9.68	\$9.68	\$9.68
Maximum billing demand per kW:	\$3.72	\$2.49	\$1.96	\$1.70
Excess demand per kW:	\$9.68	\$9.68	\$9.68	\$9.68
On-peak energy per kWh:	\$0.05330	\$0.05545	\$0.05439	\$0.05163
Off-peak block 1 per kWh:	\$0.02967	\$0.03182	\$0.03075	\$0.02799
Off-peak block 2 per kWh:	\$0.00373	\$0.00373	\$0.00507	\$0.00287
Off-peak block 3 per kWh:	\$0.00133	\$0.00133	\$0.00507	\$0.00231
Winter				
On-peak billing demand per kW:	\$8.77	\$8.77	\$8.77	\$8.77
Maximum billing demand per kW:	\$3.72	\$2.49	\$1.96	\$1.70
Excess demand per kW:	\$8.77	\$8.77	\$8.77	\$8.77
On-peak energy per kWh:	\$0.04252	\$0.04467	\$0.04360	\$0.04084
Off-peak block 1 per kWh:	\$0.03178	\$0.03393	\$0.03285	\$0.03009
Off-peak block 2 per kWh:	\$0.00373	\$0.00373	\$0.00507	\$0.00287
Off-peak block 3 per kWh:	\$0.00133	\$0.00133	\$0.00507	\$0.00231

**SCHEDULE OF CURRENT UTILITY RATES
DECEMBER 31, 2017
(Continued)**



MLGW

Electric Division Rate Class (cont.)	Base Charge	Customers
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**Time Of Use Manufacturing Service
(Schedule TMS)
(cont.)**

Rates applicable for delivery at:

	Distribution Voltage: < 115 kV			
	TDMSA	TMSB	TMSC	TMSD
Summer				
On-peak billing demand per kW:	\$9.97	\$9.97	\$9.97	\$9.97
Maximum billing demand per kW:	\$3.79	\$2.52	\$1.99	\$1.73
Excess demand per kW:	\$9.97	\$9.97	\$9.97	\$9.97
On-peak energy per kWh:	\$0.05487	\$0.05709	\$0.05599	\$0.05317
Off-peak block 1 per kWh:	\$0.03053	\$0.03275	\$0.03165	\$0.02882
Off-peak block 2 per kWh:	\$0.00381	\$0.00381	\$0.00520	\$0.00295
Off-peak block 3 per kWh:	\$0.00134	\$0.00134	\$0.00520	\$0.00237
Winter				
On-peak billing demand per kW:	\$9.03	\$9.03	\$9.03	\$9.03
Maximum billing demand per kW:	\$3.79	\$2.52	\$1.99	\$1.73
Excess demand per kW:	\$9.03	\$9.03	\$9.03	\$9.03
On-peak energy per kWh:	\$0.04377	\$0.04598	\$0.04488	\$0.04206
Off-peak block 1 per kWh:	\$0.03271	\$0.03492	\$0.03381	\$0.03098
Off-peak block 2 per kWh:	\$0.00381	\$0.00381	\$0.00520	\$0.00295
Off-peak block 3 per kWh:	\$0.00134	\$0.00134	\$0.00520	\$0.00237

Rates applicable for delivery at:

	Transmission Voltage: 115 kV and up			
	TDMSA	TMSB	TMSC	TMSD
Transition				
On-peak billing demand per kW:	\$8.77	\$8.77	\$8.77	\$8.77
Maximum billing demand per kW:	\$3.72	\$2.49	\$1.96	\$1.70
Excess demand per kW:	\$8.77	\$8.77	\$8.77	\$8.77
On-peak energy per kWh:	\$0.03261	\$0.03475	\$0.03368	\$0.03092
Off-peak block 1 per kWh:	\$0.03261	\$0.03475	\$0.03368	\$0.03092
Off-peak block 2 per kWh:	\$0.00373	\$0.00373	\$0.00507	\$0.00287
Off-peak block 3 per kWh:	\$0.00133	\$0.00133	\$0.00507	\$0.00231

Rates applicable for delivery at:

	Distribution Voltage: < 115 kV			
	TDMSA	TMSB	TMSC	TMSD
Transition				
On-peak billing demand per kW:	\$9.03	\$9.03	\$9.03	\$9.03
Maximum billing demand per kW:	\$3.79	\$2.52	\$1.99	\$1.73
Excess demand per kW:	\$9.03	\$9.03	\$9.03	\$9.03
On-peak energy per kWh:	\$0.03356	\$0.03577	\$0.03466	\$0.03184
Off-peak block 1 per kWh:	\$0.03356	\$0.03577	\$0.03466	\$0.03184
Off-peak block 2 per kWh:	\$0.00381	\$0.00381	\$0.00520	\$0.00295
Off-peak block 3 per kWh:	\$0.00134	\$0.00134	\$0.00520	\$0.00237

**SCHEDULE OF CURRENT UTILITY RATES
DECEMBER 31, 2017
(Continued)**



MLGW

Electric Division Rate Class (cont.)	Base Charge			Customers
Drainage Pumping Station Rate (Schedule DPS)	Effective September 29, 2017.			9
Customer Charge:	\$15.52 per delivery point per month			
Energy Charge:	Summer	Winter	Transition	
All kWh per month:	\$0.03738	\$0.03431	\$0.03244	
Outdoor Lighting Rate (Schedule LS)	Effective September 29, 2017.			17,228
	Part A – Charges for street and park lighting systems, traffic signal systems, and athletic field lighting installations.			
Energy Charge:	Summer	Winter	Transition	
All kWh per month:	\$0.04792	\$0.04481	\$0.04294	
Outdoor Lighting Facilities Charge:	<p>The annual facility charge shall be 10.41% of the installed cost to the Division's electric system of the facility devoted to street and park lighting service specified in this Part A. Such installed cost shall be recomputed on July 1 of each year, or more often if substantial changes in the facilities are made. Each month, one-twelfth of the then total annual facility charge shall be billed to the customer. If any part of the facilities has not been provided at the electric system's expense or if the installed cost of any portion thereof is reflected on the books of another municipality or agency or department, the annual facility charge shall be adjusted to reflect properly the remaining cost to be borne by the electric system.</p> <p>Traffic signal systems and athletic field lighting installations shall be provided, owned, and maintained by and at the expense of the customer, except as Division may agree otherwise in accordance with the provisions of the paragraph next following in this section. The facilities necessary to provide service to such systems and installations shall be provided by and at the expense of Division's electric system, and the annual facility charge provided for first above in this section shall apply to the installed cost of such facilities.</p> <p>When so authorized by policy duly adopted by Division's governing board, traffic signal systems and athletic field lighting installations may be provided, owned and maintained by Division's electric system for the customer's benefit. In such cases Division may require reimbursement from the customer for a portion of the initial installed cost of any such system or installation and shall require payment by the customer of facility charges sufficient to cover all of Division's costs (except reimbursed costs), including appropriate overheads, of providing, owning, and maintaining such system or installation; provided that, for athletic field lighting installations, such facility charge shall in no case be less than 12% per year of such costs. Said facility charge shall be in addition to the annual facility charge on the facilities necessary to provide service to such system or installation as provided for in the preceding paragraphs.</p>			

**SCHEDULE OF CURRENT UTILITY RATES
DECEMBER 31, 2017
(Continued)**



MLGW

Electric Division Rate Class (cont.)	Base Charge	Customers
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**Outdoor Lighting Rate (Schedule LS)
(cont.)**

Part B – Charges for outdoor lighting for individual customers – charges per fixture per month:

(a) Type of Fixture

	Lamp Size		Rated (kWh)	Facility Charge
	(Watts)	(Lumens)		
Mercury Vapor or Incandescent	175	7,650	70	\$2.95
	250	10,400	98	\$3.49
	400	19,100	155	\$4.42
	700	33,600	266	\$5.96
	1,000	47,500	378	\$7.59

**Outdoor Lighting Rate (Schedule LS)
(cont.)**

	Lamp Size		Rated (kWh)	Facility Charge
	(Watts)	(Lumens)		
Metal Halide	175	8,300	70	\$2.95
	250	14,000	98	\$3.49
	400	22,600	155	\$4.42
	1,000	88,000	378	\$7.59
High Pressure Sodium	50	3,285	22	\$4.19
	100	8,550	42	\$4.48
	150	14,400	63	\$4.61
	200	18,900	82	\$5.01
	250	23,000	105	\$5.30
	400	45,000	165	\$6.29
LED	100	7,000	24	\$5.18
	150	9,300	31	\$5.39
	200	13,400	45	\$5.82

(b) Energy Charge:

For each lamp size under (a) above per rated kWh per month:

	Summer	Winter	Transition
All rated kWh per month:	\$0.04792	\$0.04481	\$0.04294

**SCHEDULE OF CURRENT UTILITY RATES
DECEMBER 31, 2017
(Continued)**



MLGW

Gas Division Rate Class	Base Charge	Customers
Residential G-1 & G-3	<p>Effective meters read on or after January 4, 2016</p> <p>Schedule G-1 is available for domestic use to residential customers in individual private residences or other individual dwelling units situated within the corporate limits of the City of Memphis, Tennessee. Schedule G-3 is available for domestic use to residential customers in individual private residences or other individual dwelling units situated outside the corporate limits of the City of Memphis, Tennessee.</p> <p>Service Charge: \$ 10.00 per month, plus</p> <p>Commodity Charge: First 100 ccf per month @ \$0.586 per ccf</p> <p>Excess over 100 ccf per month @ \$0.496 per ccf, plus the above rates are subject to adjustment under the provisions of the Purchased Gas Adjustment Rider.</p> <p>Minimum Bill: \$10.00 per meter per month</p>	290,766
Small General Service G-7	<p>Effective meters read on or after January 4, 2016</p> <p>This rate schedule is available for gas service to all gas customers except residential.</p> <p>Service Charge: For 0 to 425 cf meter, \$30.00 Over 426 to 1,400 cf meter, \$55.00 Over 1,400 cf meter, \$100.00 per month plus,</p> <p>Commodity Charge: All gas consumed: \$0.531 per ccf per month, plus</p> <p>The above rates are subject to adjustment under the provisions of the Purchased Gas Adjustment Rider.</p> <p>Minimum Bill: The minimum monthly bill shall be \$0.654 for each ccf of the higher of:</p> <p>(1) The maximum daily demand during the preceding eleven months, or</p> <p>(2) The daily contract demand, but in no case less than the Service charge listed above.</p>	21,247
Large General Service Firm on-peak G-8 and G-9	<p>Effective meters on or after January 4, 2016</p> <p>This rate schedule is available for gas service to all customers contracting for not less than 100 ccf of maximum daily demand.</p> <p>Demand Charge: \$0.251 ccf per month of contract demand or maximum daily demand during the twelve (12) months ending with the billing month, whichever is higher, plus</p>	430

**SCHEDULE OF CURRENT UTILITY RATES
DECEMBER 31, 2017
(Continued)**



MLGW

Gas Division Rate Class	Base Charge	Customers
Large General Service Firm on-peak G-8 and G-9 (cont.)	<p>Commodity Charge: First 200,000 ccf per month @ \$0.488 per ccf</p> <p>Excess over 200,000 ccf per month @ \$0.394 per ccf, plus</p> <p>The above rates are subject to adjustment under the provisions of the Purchased Gas Adjustment Rider.</p>	
Minimum Bill:	<p>The minimum bill shall be \$0.904 for each ccf of the higher of: (1) the maximum daily demand during the twelve (12) months ending with the billing month, or (2) the daily contract demand.</p>	
Large General Service Interruptible Off-peak G-10 and G-12	<p>Effective meters on or after January 4, 2016</p> <p>This rate schedule is available for gas service to all customers contracting for not less than 1,500 ccf of maximum daily demand and providing oil or other alternate fuel facilities approved by the Division as being adequate in design and capacity.</p> <p>Service Charge: \$500.00 per month, plus</p> <p>Commodity Charge: First 200,000 Ccf per month @ \$0.458 per ccf</p> <p>Excess over 200,000 ccf per month @ \$0.389 per ccf, plus</p> <p>The above rates are subject to adjustment under the provisions of the Purchased Gas Adjustment Rider.</p>	19
Minimum Bill:	<p>The minimum monthly bill shall be \$0.350 for each ccf of the higher of (1) the maximum daily demand during the twelve months ending with the billing month, or (2) the daily contract demand, but in no event less than the service charge.</p>	

SCHEDULE OF CURRENT UTILITY RATES
DECEMBER 31, 2017
(Continued)



MLGW

Water Division Rate Class	Base Charge	Customers
Residential – Inside City Rate	Effective meters read on or after January 4, 2016	185,371
	For water furnished to premises entirely within the corporate limits of the City of Memphis	
Commodity Charge:	All water consumed: \$1.836 per ccf per month	
Minimum Bill:	The minimum monthly bill shall be determined by the size of the meter installed, as follows:	
	5/8" meter \$7.76	
	3/4" meter \$11.20	
	1" meter \$19.87	
	1-1/2" meter \$44.71	
	2" meter \$79.48	
Residential – Outside City Rate	Effective meters read on or after January 4, 2016	23,439
	For water furnished to premises outside the corporate limits of the City of Memphis	
Commodity Charge:	All water consumed: \$2.858 per ccf per month	
Minimum Bill:	The minimum monthly bill shall be determined by the size of the meter installed, as follows:	
	5/8" meter \$10.81	
	3/4" meter \$15.54	
	1" meter \$27.66	
	1-1/2" meter \$62.20	
	2" meter \$110.57	
General Service – Inside City Rate	Effective meters read on or after January 4, 2016	19,200
	For water service to all customers within the corporate limits of the City of Memphis, except residential customers	
Commodity Charge:	Water consumed per month:	
	First 30 ccf \$2.341 per ccf	
	Next 70 ccf \$1.990 per ccf	
	Next 100 ccf \$1.514 per ccf	
	Next 400 ccf \$1.261 per ccf	
	Next 5,400 ccf \$0.981 per ccf	
	Excess over 6,000 ccf \$1.022 per ccf	

**SCHEDULE OF CURRENT UTILITY RATES
DECEMBER 31, 2017
(Continued)**



MLGW

Water Division Rate Class (cont.)	Base Charge	Customers
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**General Service – Inside City Rate
(cont.)**

Minimum Bill: The minimum monthly bill shall be determined by the size of the meter installed, as follows:

5/8" meter	\$14.87
3/4" meter	\$17.34
1" meter	\$29.72
1-1/2" meter	\$59.46
2" meter	\$123.93
3" meter	\$247.78
4" meter	\$370.53
6" meter	\$468.74
8" meter	\$566.96
10" meter	\$1,174.45
12" meter	\$1,638.73
14" meter	\$2,253.28
Battery of 2-2" meters	\$247.78
Battery of 3-2" meters	\$370.53

General Service – Outside City Rate

Effective meters read on or after January 4, 2016

851

For water service to all customers outside the corporate limits of the City of Memphis, except residential customers

Commodity Charge:

Water consumed per month:

First 30 ccf	\$3.517 per ccf
Next 70 ccf	\$2.957 per ccf
Next 100 ccf	\$2.257 per ccf
Next 400 ccf	\$1.892 per ccf
Next 5,400 ccf	\$1.485 per ccf
Excess over 6,000 ccf	\$1.541 per ccf

Minimum Bill:

The minimum monthly bill shall be determined by the size of the meter installed, as follows:

5/8" meter	\$22.73
3/4" meter	\$26.52
1" meter	\$45.47
1-1/2" meter	\$90.90
2" meter	\$189.42
3" meter	\$378.87
4" meter	\$566.19
6" meter	\$716.27
8" meter	\$866.35
10" meter	\$1,794.66
12" meter	\$2,504.14
14" meter	\$3,440.84
Battery of 2-2" meters	\$378.87
Battery of 3-2" meters	\$566.19

**SCHEDULE OF CURRENT UTILITY RATES
DECEMBER 31, 2017
(Continued)**



MLGW

Water Division Rate Class (cont.)	Base Charge	Customers												
<p>Residential – Shelby County Water Distribution System</p> <p>Effective meters read on or after January 4, 2016</p> <p>For water service within the area served by the Shelby County Water Distribution System at the time of its acquisition on June 30, 1999, for domestic uses to residential customers in individual private residences or other individual dwelling units.</p> <p>Monthly Rate: All water consumed \$2.858 per ccf per month</p> <p>Minimum Bill: The minimum monthly bill shall be determined by the size of the meter installed, as follows:</p> <table style="margin-left: 40px;"> <tr> <td>5/8" meter</td> <td style="text-align: right;">\$10.81</td> </tr> <tr> <td>3/4" meter</td> <td style="text-align: right;">\$15.54</td> </tr> <tr> <td>1" meter</td> <td style="text-align: right;">\$27.66</td> </tr> <tr> <td>1-1/2" meter</td> <td style="text-align: right;">\$62.20</td> </tr> <tr> <td>2" meter</td> <td style="text-align: right;">\$110.57</td> </tr> </table> <p>Residential customers shall be served through a single meter not larger than 2" in size.</p>	5/8" meter	\$10.81	3/4" meter	\$15.54	1" meter	\$27.66	1-1/2" meter	\$62.20	2" meter	\$110.57		18,877		
5/8" meter	\$10.81													
3/4" meter	\$15.54													
1" meter	\$27.66													
1-1/2" meter	\$62.20													
2" meter	\$110.57													
<p>Commercial - Industrial – Shelby County Water Distribution System</p> <p>Effective meters read on or after January 4, 2016</p> <p>For water service within the area served by the Shelby County Water Distribution System at the time of its acquisition on June 30, 1999, for all customers except residential customers using service exclusive for domestic use.</p> <p>Monthly Rate: Water consumed per month:</p> <table style="margin-left: 40px;"> <tr> <td>First 30 ccf</td> <td style="text-align: right;">\$3.517 per ccf</td> </tr> <tr> <td>Next 70 ccf</td> <td style="text-align: right;">\$2.957 per ccf</td> </tr> <tr> <td>Next 100 ccf</td> <td style="text-align: right;">\$2.257 per ccf</td> </tr> <tr> <td>Next 400 ccf</td> <td style="text-align: right;">\$1.892 per ccf</td> </tr> <tr> <td>Next 5,400 ccf</td> <td style="text-align: right;">\$1.485 per ccf</td> </tr> <tr> <td>Excess over 6000 ccf</td> <td style="text-align: right;">\$1.541 per ccf</td> </tr> </table>	First 30 ccf	\$3.517 per ccf	Next 70 ccf	\$2.957 per ccf	Next 100 ccf	\$2.257 per ccf	Next 400 ccf	\$1.892 per ccf	Next 5,400 ccf	\$1.485 per ccf	Excess over 6000 ccf	\$1.541 per ccf		632
First 30 ccf	\$3.517 per ccf													
Next 70 ccf	\$2.957 per ccf													
Next 100 ccf	\$2.257 per ccf													
Next 400 ccf	\$1.892 per ccf													
Next 5,400 ccf	\$1.485 per ccf													
Excess over 6000 ccf	\$1.541 per ccf													

**SCHEDULE OF CURRENT UTILITY RATES
DECEMBER 31, 2017
(Continued)**



MLGW

Water Division Rate Class (cont.)	Base Charge	Customers
Minimum Bill:	The minimum monthly bill shall be determined by the size of the meter installed, as follows:	
5/8" meter	\$22.73	
3/4" meter	\$26.52	
1" meter	\$45.47	
1-1/2" meter	\$90.90	
2" meter	\$189.42	
3" meter	\$378.87	
4" meter	\$566.19	
6" meter	\$716.27	
8" meter	\$866.35	
10" meter	\$1,794.66	
12" meter	\$2,504.14	
14" meter	\$3,440.84	

**NON-REVENUE WATER
FOR THE YEAR ENDED DECEMBER 31, 2017
(Dollars in Thousands)**



MLGW

WAS v5.0
 American Water Works Association.
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AWWA Free Water Audit Software: Reporting Worksheet

Water Audit Report for: Memphis Light, Gas and Water Division
 Reporting Year: 2017 | 1/2017 - 12/2017

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

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

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

← Enter grading in column 'E' and 'J' →

WATER SUPPLIED		Enter grading in column 'E' and 'J'		Master Meter and Supply Error Adjustments					
Volume from own sources:	+ ?	7	44,242.000	MG/Yr	+ ?				MG/Yr
Water Imported:	+ ?	n/a	0.000	MG/Yr	+ ?				MG/Yr
Water exported:	- ?	5	11.000	MG/Yr	+ ?				MG/Yr
WATER SUPPLIED:			44,231.000	MG/Yr					

AUTHORIZED CONSUMPTION		Enter grading in column 'E' and 'J'		Master Meter and Supply Error Adjustments					
Billed metered:	+ ?	7	35,649.000	MG/Yr					MG/Yr
Billed unmetered:	+ ?	n/a	0.000	MG/Yr					MG/Yr
Unbilled metered:	+ ?	5	372.000	MG/Yr					MG/Yr
Unbilled unmetered:	+ ?	9	108.000	MG/Yr					MG/Yr
AUTHORIZED CONSUMPTION:			36,129.000	MG/Yr					

WATER LOSSES (Water Supplied - Authorized Consumption)		Enter grading in column 'E' and 'J'		
Apparent Losses				
Unauthorized consumption:	+ ?		110.578	MG/Yr
Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed				
Customer metering inaccuracies:	+ ?	10	0.000	MG/Yr
Systematic data handling errors:	- ?		89.123	MG/Yr
Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed				
Apparent Losses:		199.700		MG/Yr
Real Losses (Current Annual Real Losses or CARL)				
Real Losses = Water Losses - Apparent Losses:				?
		7,902.300		MG/Yr
WATER LOSSES:			8,102.000	MG/Yr

NON-REVENUE WATER		Enter grading in column 'E' and 'J'		
NON-REVENUE WATER:		8,582.000		MG/Yr
= Water Losses + Unbilled Metered + Unbilled Unmetered				

SYSTEM DATA		Enter grading in column 'E' and 'J'		
Length of mains:	+ ?	9	4,012.8	miles
Number of active AND inactive service connections:	+ ?	6	296,020	
Service connection density:	?		74	conn./mile main
Are customer meters typically located at the curbstops or property line? <input checked="" type="checkbox"/> Yes (length of service line, beyond the property boundary, that is the responsibility of the utility)				
Average length of customer service line:	+ ?			ft
Average length of customer service line has been set to zero and a data grading score of 10 has been applied				
Average operating pressure:	+ ?	9	60.0	psi

COST DATA		Enter grading in column 'E' and 'J'		
Total annual cost of operating water system:	+ ?	10	\$95,751,752	\$/Year
Customer retail unit cost (applied to Apparent Losses):	+ ?	10	\$2.01	\$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	+ ?	10	\$195.32	\$/Million gallons <input type="checkbox"/> Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

*** YOUR SCORE IS: 77 out of 100 ***

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Volume from own sources
2: Unbilled metered
3: Billed metered

**NON-REVENUE WATER
FOR THE YEAR ENDED DECEMBER 31, 2017
(Dollars in Thousands)**



MLGW

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**AWWA Free Water Audit Software:
System Attributes and Performance Indicators**

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

Water Audit Report for:

Reporting Year:

*** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 77 out of 100 ***

System Attributes:

	Apparent Losses:	199.700	MG/yr	
	+	7,902.300	MG/yr	
	=	8,102.000	MG/yr	
?	Unavoidable Annual Real Losses (UARL):	1,447.86	MG/yr	
	Annual cost of Apparent Losses:	\$537,399		
	Annual cost of Real Losses:	\$1,543,477		Valued at Variable Production Cost

Return to Reporting Worksheet to change this assumption

Performance Indicators:

	Financial: {	Non-revenue water as percent by volume of Water Supplied:	19.4%	
		Non-revenue water as percent by cost of operating system:	2.3%	Real Losses valued at Variable Production Cost
	Operational Efficiency: {	Apparent Losses per service connection per day:	1.85	gallons/connection/day
		Real Losses per service connection per day:	73.14	gallons/connection/day
		Real Losses per length of main per day*:	N/A	
		Real Losses per service connection per day per meter (head) pressure:	1.22	gallons/connection/day/psi
		From Above, Real Losses = Current Annual Real Losses (CARL):	7,902.30	million gallons/year
	?	Infrastructure Leakage Index (ILI) [CARL/UARL]:	5.46	

* This performance indicator applies for systems with a low service connection density of less than 32 service connections/mile of pipeline

**SCHEDULE OF INSURANCE
FOR THE YEAR ENDED DECEMBER 31, 2017
(Dollars in Thousands)**



MLGW

<u>Type of Coverage</u>	<u>Amount of Coverage</u>
Property	\$ 600,000
Crime	2,500
Excess Insurance for Workers Compensation and Employers Liability	2,000
Out of State Automobile Travel	1,000
Travel Accident	1,000
Commercial Automobile	1,000
Leased Rental Equipment	300 per item 1,000 coverage limit

**SCHEDULE OF ADDITIONS AND
RETIREMENTS TO UTILITY PLANT
DECEMBER 31, 2017
(Dollars in Thousands)**



MLGW

	Electric Division	Gas Division	Water Division
Utility plant in service, December 31, 2016	\$ 1,712,599	\$ 623,099	\$ 469,215
Additions - Construction	95,160	92,475	39,082
Additions - Acquisition Adjustment	-	-	964
Retirements	(18,450)	(20,927)	(9,266)
Utility plant in service, December 31, 2017	<u>\$ 1,789,309</u>	<u>\$ 694,647</u>	<u>\$ 499,995</u>

Note: Utility plant in service balances exclude amounts for construction work in process; non-utility property and plant held for future use.



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

Independent Auditor's Report

To the Board of Commissioners and Management
Memphis Light, Gas and Water Division
Memphis, Tennessee

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Electric, Gas and Water Divisions (the "Divisions") of Memphis Light, Gas and Water Division, enterprise funds of the City of Memphis, Tennessee, as of and for the year ended December 31, 2017, and the related notes to the financial statements, which collectively comprise the Divisions' basic financial statements, and have issued our report thereon dated June 8, 2018.

Internal Control Over Financial Reporting

In planning and performing our audits of the financial statements, we considered the Divisions' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Divisions' internal control. Accordingly, we do not express an opinion on the effectiveness of the Divisions' 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 Divisions' 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 and therefore, material weaknesses or significant deficiencies may exist that have not been identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify certain deficiencies in internal control, described in the accompanying schedule of Findings and Questioned Costs as items 2017-1, 2017-2, and 2017-3 that we consider to be significant deficiencies.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Divisions' financial statements are free from material misstatement, we performed tests of the Divisions' 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*.

The Divisions' Responses to Findings

The Divisions' responses to the findings identified in our audits are included in the accompanying schedule of findings and questioned costs. The Divisions' responses were not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on them.

Purpose of this 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 Divisions' internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Divisions' internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Mayer Hoffman McCann P.C.

Memphis, Tennessee
June 8, 2018



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Report on Compliance for the Major Federal Program and Report on Internal Control Over Compliance Required by the Uniform Guidance

Independent Auditor's Report

To the Board of Commissioners and Management
Memphis Light, Gas and Water Division
Memphis, Tennessee

Report on Compliance for the Major Federal Program

We have audited the compliance of the Electric, Gas and Water Divisions (the "Divisions") of Memphis Light, Gas and Water Division, enterprise funds of the City of Memphis, Tennessee, with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on the Divisions' major federal program for the year ended December 31, 2017. The Divisions' major federal program is identified in the summary of independent 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 Divisions' 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 the 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 Divisions' compliance with those requirements and performing such other procedures as we consider 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 on the Divisions' compliance.

Opinion on the Major Federal Program

In our opinion, the Divisions complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on its major federal program for the year ended December 31, 2017.

Report on Internal Control Over Compliance

Management of the Divisions 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 Divisions' 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 federal 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 Divisions' internal control over compliance.

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

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

The image shows a handwritten signature in black ink that reads "Mayer Hoffman McCann P.C." The signature is written in a cursive, flowing style.

Memphis, Tennessee
June 8, 2018

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
 FOR THE YEAR ENDED DECEMBER 31, 2017
 (Dollars in Thousands)**



MLGW

Federal Grantor/Pass-Through Grantor Federal Awards	CFDA Number	Contract Number	Expenditures
U.S. Department of Homeland Security/ Tennessee Emergency Management	97.036	34101-0000023718	\$ 12,744
Total Federal Awards			\$ 12,744

**MLGW has not elected to use the 10% de minimis indirect cost rate.*



PRESENTATION

The accompanying Schedule of Expenditures of Federal Awards (the Schedule) presents the federal award activity of MLGW under programs of the federal government for the year ended December 31, 2017. 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* (Uniform Guidance). Because the Schedule presents only a portion of the operations of MLGW, it is not intended to and does not present the financial position, changes in net position, or cash flows of MLGW.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Expenditures reported on the Schedule are reported on the accrual basis of accounting. Such expenditures are recognized following the cost principles contained in Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, wherein certain types of expenditures are not allowable or are limited as to reimbursement.

MEMPHIS LIGHT, GAS AND WATER DIVISION

Schedule of Findings and Questioned Costs
For the Year Ended December 31, 2017

Section I - Summary of Independent Auditor's Results

Financial Statements

Type of report issued on whether the financial statements audited were prepared in accordance with accounting principles generally accepted in the United States of America (GAAP): Unmodified

Internal control over financial reporting:
Material weakness(es) identified? Yes X No
Significant deficiency(ies) identified? X Yes None reported

Noncompliance material to financial statements noted? Yes X No

Federal Awards

Internal control over major programs:
Material weakness(es) identified? Yes X No
Significant deficiency(ies) identified not considered to be material weaknesses? Yes X 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 2 CFR 200.516(a). Yes X No

Identification of major programs:

<u>CFDA Number</u>	<u>Name of Federal Program or Cluster</u>
97.036	Disaster Grants - Public Assistance (Presidentially Declared Disasters)

Dollar threshold used to distinguish between Type A and Type B programs: \$750,000

Auditee qualified as low-risk auditee: Yes X No

Section II - Financial Statement Findings

Significant Deficiencies

2017-1 Timeliness of Account Reconciliations

Criteria: Monthly reconciliations play a key role in proving the accuracy of accounting data and information included in financial statements and should, therefore, be completed accurately and on a timely basis.

MEMPHIS LIGHT, GAS AND WATER DIVISION

Schedule of Findings and Questioned Costs (Continued)
For the Year Ended December 31, 2017

Section II - Financial Statement Findings (continued)

Significant Deficiencies (continued)

2017-1 Timeliness of Account Reconciliations (continued)

Condition: Certain account reconciliations were not completed on a timely basis due to delays in finalizing the trial balances.

Cause: During 2017, the Divisions implemented a new accounting system, for which significant time was required to ensure that information was properly transferred from the previous system and that transactions were properly posted in the new system. The allocation of Division resources to addressing these challenges contributed to delays in completing monthly account reconciliations.

Potential Effect: The lack of timely reconciliations may cause significant errors in the financial records and financial statements as well as allow possible irregularities, including fraud, to exist and continue without notice.

Recommendation: We recommend that management ensure that account reconciliations are performed completely, accurately, and on a timely basis. We also recommend that these reconciliations be reviewed in a timely manner to ensure proper reconciliation between the subsidiary ledgers and the general ledger, that all reconciling items have the necessary supporting documentation, and that all transactions are recorded in the proper period.

Views of Responsible Officials and Planned Corrective Actions:

Technical difficulties with the new plant accounting subledger system caused significant delays in the year-end closing process. Completion of the year-end trial balance was delayed approximately 30 days as a result of these issues.

Finance is working with the IT Department to identify and resolve deficiencies with the new plant accounting subledger system and other financial systems. As these deficiencies are resolved and the system stabilizes, the monthly and year-end closing processing will become more efficient and predictable.

Also, as we continue to fine-tune our monthly accounting and financial reporting processes, management will make the completion and review of monthly account reconciliations a high priority for staff and supervision.

MEMPHIS LIGHT, GAS AND WATER DIVISION

Schedule of Findings and Questioned Costs (Continued)
For the Year Ended December 31, 2017

Section II - Financial Statement Findings (continued)

Significant Deficiencies (continued)

2017-2 Segregation of Accounts Payable Functions

Criteria: Internal controls over accounts payable invoice processing should ensure an appropriate segregation of duties and appropriate levels of authority.

Condition: During the past year, the Finance Division requested an invoice processing review. In January, 2018, Internal Audit completed a review of the controls over invoice processing for MLGW. The review noted that several employees with either purchase order creation, invoice processing, or check handling responsibilities had system access to add to or modify MLGW's Vendor Master File. Additionally, it was noted that eleven employees were granted MLGW Payables and MLGW Purchasing Super User Access responsibilities. Such users have full access to all accounts payable functions.

Cause: During the past year, MLGW replaced its Management Support System with additional Oracle Enterprise Business Suite Modules purchased and implemented as Project Inspire. The implementation has a major impact on invoice processing and internal controls previously established by the Finance Division. During the year of implementation, the new system was undergoing continual modifications.

Potential Effect: The opportunity to create or modify vendor files and perform multiple functions within the area of accounts payable processing is an internal control weakness which can result in unauthorized payments or a misappropriation of funds.

Recommendation: We suggest management seriously consider recommendations provided by Internal Audit in its letter dated January 18, 2018. These recommendations include evaluating and determining the persons who should have Vendor Master File update functions and Super User privileges and eliminating access to other users. Additionally, exception reports should be generated for monitoring changes to the Vendor Master File.

Views of Responsible Officials and Planned Corrective Actions:

Management will collaborate with the IT Department to improve the data security. Management will request IT Department to provide data owners a report detailing the employees with access to each Oracle Application/Ledger. The report will be available on demand and provided on a monthly basis by the IT Department.

Management will collaborate with the IT Department to develop a report for Purchasing & Contacts Department that will detail changes made to the Vendor Master File.

MEMPHIS LIGHT, GAS AND WATER DIVISION

Schedule of Findings and Questioned Costs (Continued)
For the Year Ended December 31, 2017

Section II - Financial Statement Findings (continued)

Significant Deficiencies (continued)

2017-3 Physical Security of Scrap Metal

Physical controls and monitoring of scrap metal may not be sufficient. Lack of controls and monitoring increases the risk of fraud or error. The details of this finding are confidential pursuant to Section 10-7-504, *Tennessee Code Annotated*. Responsible officials at MLGW are aware of this matter as well as our recommendations for improvement.

Views of Responsible Officials and Planned Corrective Actions:

MLGW Management promptly reported the suspected loss of scrap metal to local law enforcement authorities and is fully cooperating with a joint law enforcement task force in an ongoing investigation of the matter. Management is also reviewing the matter internally and is prepared to institute appropriate procedural changes to minimize the possibility for future such occurrences should the results of that review and the task force investigation, once released, so indicate.

Section III - Federal Award Findings and Questioned Costs

None reported.

MEMPHIS LIGHT, GAS AND WATER DIVISION

Schedule of Prior Year Audit Findings
For the Year Ended December 31, 2017

There were no prior year findings reported.

