



HUNTSVILLE UTILITIES

ELECTRICITY • NATURAL GAS • WATER

**City of Huntsville, Alabama
Electric, Natural Gas,
and
Water Systems**

***Component Unit
Financial Statements***

September 30, 2017 and 2016



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INDEPENDENT AUDITORS' REPORT

To the Boards of Directors of
City of Huntsville Electric, Natural Gas, and Water Systems
Huntsville, AL

Report on the Financial Statements

We have audited the accompanying financial statements of the City of Huntsville Electric, Natural Gas, and Water Systems (the "Utilities"), component units of the City of Huntsville, Alabama, as of and for the year ended September 30, 2017, and the related notes to the financial statements, which collectively comprise the Utilities' basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. 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 entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the 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.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Utilities, as of September 30, 2017, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Prior Period Financial Statements

The financial statements of the Utilities as of September 30, 2016, were audited by other auditors whose report dated December 23, 2016, expressed an unmodified opinion on those statements.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3 through 10, and the schedules of changes in the net pension liability and employer contributions for the defined benefit plan on pages 51 through 56 and schedule of funding progress for the retiree health plan on page 57 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Board's basic financial statements. The Supplementary Information on pages 58 through 69 is presented for purposes of additional analysis and is not a required part of the basic financial statements. The Supplementary Information has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Carr, Riggs & Ingram, L.L.C.

CARR, RIGGS & INGRAM, L.L.C.

Enterprise, Alabama

February 14, 2018



The following Management Discussion and Analysis (MD&A) for Huntsville Utilities (Utilities) is intended as an introduction and should be read in conjunction with the financial statements and the notes that follow this section.

Overview of the Financial Statements

The Utilities financial statements are comprised of the Statements of Net Position; the Statements of Revenues, Expenses and Changes in Net Position; the Statements of Cash Flow; and the accompanying notes. This report also contains required supplementary 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 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, 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 affords the readers a better historical perspective and assist in assessing the current financial status and trends of the Utilities. The highlights present a three-year comparison beginning with the current year and preceding two years for the electric, gas and water systems.

The Utilities is a Component Unit of the City of Huntsville, Alabama. The Utilities' statements are provided to the City of Huntsville and reformatted to conform to the City's format for Component Units. The City of Huntsville incorporates the Utilities statements ending September 30 into its statements ending September 30.

By City Ordinance, the Utilities is required to account separately for its electric, natural gas and water systems. Costs are allocated to the three systems in a manner that ensures results of operations and changes in financial position are presented fairly and consistently from year to year.



City of Huntsville Electric System
Table A-1
Condensed Statements of Net Position
(In Thousands)

	2017	2016	2015
Assets			
Current and other assets	\$ 167,789	\$ 140,851	\$ 143,739
Capital assets (net)	292,054	248,722	239,364
Total assets	459,843	389,573	383,103
Deferred Outflows of Resources			
Deferred Pension and Debt Refunding	5,934	4,104	2,114
Total Assets and Deferred Outflows of Resources	\$ 465,777	\$ 393,677	\$ 385,217
Liabilities			
Current and other liabilities	\$ 53,333	\$ 64,499	\$ 54,223
Long-term liabilities	163,673	89,383	91,130
Total liabilities	217,006	153,882	145,353
Deferred Inflows of Resources			
Deferred Pension Plan Earnings Difference	-	-	962
Net Position			
Invested in capital assets, net of related debt	197,991	216,085	204,063
Restricted assets	47,021	7,161	7,072
Unrestricted assets	3,759	16,549	27,767
Total net position	248,771	239,795	238,902
Total Liabilities, Deferred Inflows of Resources and Net Position	\$ 465,777	\$ 393,677	\$ 385,217

2017 Compared to 2016:

As of September 30, 2017, the Electric System's total assets and deferred outflows of resources were \$466 million, an increase of 18%, compared to September 30, 2016. This is primarily due to a net increase in acquisition and construction of capital assets of \$43 million as well as issuance of revenue warrants in the amount of \$80 million. As of September 30, 2017, the Electric System's liabilities were \$217 million, an increase of 41%, compared to September 30, 2016. The Series 2017 Warrants were issued for the purpose of (i) paying the costs of various public capital improvements to the system, (ii) refunding the City's Electric System Revenue Refunding Warrants, Series 2007, dated December 1, 2007, now outstanding in the aggregate principal amount of \$4,140,000 (the "Series 2007 Warrants"), (iii) refunding the City's Electric System Revenue Warrants, Series 2011, dated December 21, 2011, now outstanding in the aggregate principal amount of \$23,335,000 (the "Series 2011 Warrants"), and (iiii) paying the costs of issuing the Series 2017 Warrants. As of September 30, 2017, the Electric System's net position was \$249 million, an increase of \$9 million or 3.7%, compared to September 30, 2016. This increase is due primarily to the operating income of \$9.5 million.



2016 Compared to 2015:

As of September 30, 2016, the Electric System's total assets and deferred outflows of resources were \$394 million, an increase of 2.3%, compared to September 30, 2015. This is primarily due to a net increase in acquisition and construction of capital assets of \$9 million. The Electric System's net cash provided by operating activities decreased \$3 million. As of September 30, 2016, the Electric System's liabilities were \$154 million, an increase of 5.9%, compared to September 30, 2015. As of September 30, 2016 the Electric System's net position was \$240 million, an increase of \$1 million or .4%, compared to September 30, 2015. This increase is due primarily to the operating income of \$.9 million.

City of Huntsville Electric System

Table A-2

Condensed Statement of Revenues, Expenses and Changes in Net Position
(In Thousands)

	2017	2016	2015
Operating revenues	\$ 486,073	\$ 480,401	\$ 491,778
Non-operating revenues	97	534	298
Total revenues	486,170	480,935	492,076
Operating expense	446,830	448,436	461,681
Depreciation expense	17,039	19,101	18,540
Non-operating expense	2,028	1,068	1,581
Total expenses	465,897	468,605	481,802
Income before transfers	20,273	12,330	10,274
Transfers out – tax equivalents	(11,297)	(11,437)	(11,866)
Change in net position	8,976	893	(1,592)
Beginning net position	239,795	238,902	240,494
Ending net position	\$ 248,771	\$ 239,795	\$ 238,902

2017 Compared to 2016:

As of September 30, 2017, the Electric System's total revenues were \$486 million, an increase of 1.1%, compared to September 30, 2016. This increase is primarily due to a rate increase which increased the margin on sales by 1%. The Electric System's total operating expenses were \$466 million which was 0.6% decrease from the previous year. This is primarily due to a decrease in depreciation of \$2.1 million, a 10.8% decrease from the previous year.



2016 Compared to 2015:

As of September 30, 2016 the Electric System's total revenues were \$481 million, a decrease of 2.3%, compared to September 30, 2015. This decrease is primarily due to a decrease in kwh sold of 2.6% which is due to weather. The Electric System's operating expenses were \$469 million which was 2.7% decrease from the previous year. This is primarily due to a decrease in purchased energy of \$14 million, a 3.4% decrease from the previous year.

City of Huntsville Gas System

Table B-1

Condensed Statements of Net Position

(In Thousands)

	2017	2016	2015
Assets			
Current and other assets	\$ 25,969	\$ 38,680	\$ 49,650
Capital assets (net)	116,408	111,727	104,633
Total assets	142,377	150,407	154,283
Deferred Outflows of Resources			
Deferred Pension	5,738	4,798	2,553
Total Assets and Deferred Outflows of Resources	\$ 148,115	\$ 155,205	\$ 156,836
Liabilities			
Current Liabilities	\$ 4,942	\$ 5,903	\$ 6,381
Long-term debt outstanding	35,924	40,095	36,144
Total liabilities	40,866	45,998	42,525
Deferred Inflows of Resources			
Deferred Pension Plan Earnings Difference	-	-	1,438
Net Position			
Invested in capital assets, net of related debt	116,409	111,727	104,633
Restricted	-	-	-
Unrestricted	(9,160)	(2,520)	8,240
Total net position	107,249	109,207	112,873
Total Liabilities, Deferred Inflows of Resources and Net Position	\$ 148,115	\$ 155,205	\$ 156,836

2017 Compared to 2016:

As of September 30, 2017, the Gas System's total assets and deferred outflows of resources were \$148 million, a decrease of 4.5%, compared to September 30, 2016. This decrease is primarily due to the reallocation of customer deposits to the Electric System. As of September 30, 2017, the Gas System's total liabilities were \$41 million, a decrease of 11.2%, compared to September 30, 2016. This decrease is primarily due to the reallocation of customer deposits to the Electric System. As of September 30, 2017 the Gas System's net position is \$107 million, a decrease of 1.8%, compared to September 30, 2016. This decrease is primarily due to the operating loss of \$2 million which was due to warmer than normal winter weather.



2016 Compared to 2015:

As of September 30, 2016, the Gas System's total assets and deferred outflows of resources were \$155 million, a decrease of 1%, compared to September 30, 2015. This is primarily due to the decrease in customer cash deposits \$5.6 million which were reallocated to the Electric System. The long term debt is the Gas System's pension plan (\$31M) and the Customer Deposits (\$10.8M). As of September 30, 2016, the Gas System's total liabilities were \$46 million, an increase of 8.2%, compared to September 30, 2015. As of September 30, 2016, the Gas System's net position is \$109 million, a decrease of 3.2%, compared to September 30, 2015. This decrease is primarily due to the operating loss of \$2.1 million which was due to warmer than normal winter weather.

City of Huntsville Gas System

Table B-2

Condensed Statement of Revenues, Expenses and Change in Net Position
(In Thousands)

	2017	2016	2015
Operating revenues	\$ 35,467	\$ 37,623	\$ 47,161
Non-operating revenues	(13)	117	199
Total revenues	35,454	37,740	47,360
Depreciation expense	4,421	4,619	4,444
Operating expense	33,049	35,165	38,579
Non-operating expense	(1,529)	63	419
Total expenses	35,941	39,847	43,442
Income (loss) before contributions and transfers	(487)	(2,107)	3,918
Capital contributions	511	550	898
Transfers out - tax equivalents	(1,982)	(2,109)	(2,663)
Change in net position	(1,958)	(3,666)	2,153
Beginning net position	109,207	112,873	110,720
Ending net position	\$ 107,249	\$ 109,207	\$ 112,873

2017 Compared to 2016:

As of September 30, 2017, the Gas System's total revenues were \$35.5 million, a decrease of 6.1%, compared to September 30, 2016. This is primarily due to a decrease in natural gas MCF sold of 6.7% because of the warmer than normal winter weather.

As of September 30, 2017, the Gas System's expenses were \$35.9 million which are down 9.8% compared to September 30, 2016 which is due to the decrease in natural gas MCF purchased of 8.7%.

**City of Huntsville Electric, Natural Gas, and Water Systems
Management's Discussion and Analysis**

Years Ending September 30, 2017 and 2016



2016 Compared to 2015:

As of September 30, 2016, the Gas System's total revenues were \$37.7 million, a decrease of 20.3%, compared to September 30, 2015. This is primarily due to a decrease in natural gas MCF sold of 17.3% because of the warmer than normal winter weather.

As of September 30, 2016, the Gas System's expenses were \$40 million which are down 8.3% compared to September 30, 2015 which is due to the decrease in natural gas MCF purchased of 14.8%.

**City of Huntsville Water System
Table C-1
Condensed Statements of Net Position
(In Thousands)**

	2017	2016	2015
Assets			
Current and other assets	\$ 77,589	\$ 93,187	\$139,384
Capital assets (net)	277,068	257,288	199,672
Total assets	354,657	350,475	339,056
Deferred Outflows of Resources			
Deferred Amount on Debt Refunding	1,388	-	-
Deferred Pension	2,763	1,699	885
Total Assets and Deferred Outflows of Resources	\$ 358,808	\$ 352,174	\$ 339,941
Liabilities			
Current Liabilities	\$ 17,830	\$ 21,656	\$ 20,596
Long-term debt outstanding	138,030	144,104	150,021
Total liabilities	155,860	165,760	170,617
Deferred Inflows of Resources			
Deferred Pension Plan Earnings Difference	-	-	487
Net Position			
Invested in capital assets, net of related debt	152,029	123,222	63,677
Restricted	14,119	31,314	95,335
Unrestricted	36,800	31,878	9,825
Total net position	202,948	186,413	168,838
Total Liabilities, Deferred Inflows of Resources and Net Position	\$ 358,808	\$ 352,173	\$339,941

2017 Compared to 2016:

As of September 30, 2017, the Water System's total assets and deferred outflows of resources were \$359 million, an increase of 2.0%, compared to September 30, 2016. This increase is primarily due to the construction of the southeast water treatment plant. As of September 30, 2017, the Water System's total liabilities were \$156 million, a decrease of \$10 million, compared to September 30, 2016. This decrease is primarily due to payments made on accounts payable - trade and long term debt. As of September 30, 2017, the Water System's net position is \$203 million, an increase of 8.9%, compared to September 30, 2016. This increase is primarily due to an increase Net Cash Provided by Operating Activities.

**City of Huntsville Electric, Natural Gas, and Water Systems
Management's Discussion and Analysis**

Years Ending September 30, 2017 and 2016



2016 Compared to 2015:

As of September 30, 2016, the Water System's current and other assets were \$93 million, a decrease of 16.7%, compared to September 30, 2015. This decrease is due to the use of funds from the revenue warrant issued for the construction of a new water treatment plant. Capital assets increased due to the construction of the southeast water treatment plant. Gallons sold increased 4.8% and a rate increase was effective October 1, 2015. As of September 30, 2016, the Water System's total liabilities were \$165.7 million, a decrease of \$5 million, compared to September 30, 2015. This decrease is primarily due to payments made on the Revenue Warrants payable. As of September 30, 2016, the Water System's net position is \$186 million, an increase of 10.4%, compared to September 30, 2015. This increase is primarily due the increase in net cash provided by operations.

City of Huntsville Water System

Table C-2

**Condensed Statement of Revenues, Expenses and Change in Net Position
(In Thousands)**

	2017	2016	2015
Operating revenues	\$ 45,758	\$ 43,132	\$ 38,497
Non-operating revenues	45	250	76
Total revenues	45,803	43,382	38,573
Depreciation expense	7,152	7,655	7,360
Operating expense	22,550	18,634	20,709
Non-operating expense	319	520	1,359
Total expenses	30,021	26,809	29,428
Income (loss) before contributions and transfers	15,782	16,573	9,145
Capital contributions	3,376	3,457	3,766
Transfers out - tax equivalents	(2,624)	(2,453)	(2,186)
Change in net position	16,534	17,577	10,725
Beginning net position	186,414	168,837	158,112
Ending net position	\$ 202,948	\$ 186,414	\$ 168,837

2017 Compared to 2016:

As of September 30, 2017, the Water System's total revenues were \$46 million, an increase of 5.6%, compared to September 30, 2016. This increase is primarily due to a rate increase that was effective October 1, 2016. This rate increase is the last of a 5 step increase to assist in paying for the construction of a new water treatment plant. As of September 30, 2017, the Water System's expenses were \$30 million. An increase of 12% compared to September 30, 2016 due to increase in distribution operating and maintenance costs. The new water treatment plant was placed in service FY 2017.



2016 Compared to 2015:

As of September 30, 2016, the Water System's total revenues were \$43 million, an increase of 12.5%, compared to September 30, 2015. This increase is primarily due to a rate increase that was effective October 1, 2015 and gallon sold increased 5.9%. As of September 30, 2016, the Water System's expenses were \$27 million. A decrease of 8.9% compared to September 30, 2015 due to decrease in operating and maintenance costs.

Wes Kelley, Chief Executive Officer

Ted Phillips, Chief Financial Officer

City of Huntsville Electric, Natural Gas, and Water Systems

Statements of Net Position

Years Ending September 30, 2017 and 2016



	Electric		Gas		Water	
	2017	2016	2017	2016	2017	2016
Assets and Deferred Outflows of Resources						
Current Assets						
Cash and Cash Equivalents	\$ 3,762	\$ 15,887	\$ 2,073	\$ 4,608	\$ 18,969	\$ 13,262
Investments	-	4,327	750	750	13,523	18,363
Cash and Cash Equivalents-Restricted						
Customer Deposits with Interest	7,270	8,676	665	1,723	868	824
Board Designated Funds						
Cash and Cash Equivalents	-	134	4,000	13,571	-	2,765
Investments	14,808	14,000	8,527	2,500	14,787	10,788
Accounts Receivable, Net Allowance for Doubtful Accounts	45,441	50,763	1,881	1,642	7,993	8,477
Inventories						
Gas	-	-	3,688	3,771	-	-
Materials and Supplies	8,371	7,195	872	1,044	1,887	1,805
Prepaid Expenses	84	74	24	26	29	29
Accrued Interest, Rent and Other Receivables	3,168	2,987	46	1	-	-
Total Current Assets	82,904	104,043	22,526	29,636	58,056	56,313
Non-Current Assets						
Restricted Assets						
Cash and Cash Equivalents						
Customer Deposits with Interest	37,390	29,408	3,443	9,044	512	4,419
Cash and Cash Equivalents	47,021	500	-	-	5,373	-
Investments						
Customer Deposits with Interest	-	-	-	-	4,034	-
Investments	-	6,661	-	-	8,746	31,314
Total Restricted	84,411	36,569	3,443	9,044	18,665	35,733
Other Assets						
Regulatory Asset - Bond Expense	474	240	-	-	868	1,141
Utility Plant						
Plant in Service	526,133	505,283	177,146	170,261	400,525	293,202
Construction in Progress	62,357	23,697	11,663	9,031	10,511	90,888
Total Utility Plant	588,490	528,980	188,809	179,292	411,036	384,090
Less: Accumulated Depreciation	(296,436)	(280,259)	(72,401)	(67,565)	(133,968)	(126,802)
Total Utility Plant - Net	292,054	248,721	116,408	111,727	277,068	257,288
Total Non-Current Assets	376,939	285,530	119,851	120,771	296,601	294,162
Total Assets	459,843	389,573	142,377	150,407	354,657	350,475
Deferred Outflows of Resources						
Deferred Debt Refunding	1,012	191	-	-	1,388	-
Deferred Pension Employer Contributions	4,922	3,913	5,738	4,798	2,763	1,699
Total Deferred Outflows of Resources	5,934	4,104	5,738	4,798	4,151	1,699
Total Assets and Deferred Outflows of Resources	\$ 465,777	\$ 393,677	\$ 148,115	\$ 155,205	\$ 358,808	\$ 352,174

See independent auditors' report and accompanying notes to financial statements.

City of Huntsville Electric, Natural Gas, and Water Systems

Statements of Net Position

Years Ending September 30, 2017 and 2016



(Continued)	Electric		Gas		Water	
	2017	2016	2017	2016	2017	2016
Liabilities and Deferred Inflows of Resources						
Current Liabilities						
Accounts Payable - Trade	\$ 37,639	\$ 46,434	\$ 1,615	\$ 1,892	\$ 2,104	\$ 5,734
Accounts Payable - Other Utility Departments	1,985	2,086	-	-	4,315	4,568
Compensated Absences	3,076	3,198	1,149	1,304	1,242	1,245
Accrued Payroll	589	574	193	185	327	297
Other Current Liabilities	1,404	455	1,320	798	721	415
Total Current Liabilities Payable from Current Assets	<u>44,693</u>	<u>52,747</u>	<u>4,277</u>	<u>4,179</u>	<u>8,709</u>	<u>12,259</u>
Current Liabilities From Restricted Assets						
Customer Deposits, Including Accrued Interest	7,270	8,676	665	1,723	868	824
Current Maturities of Long-Term Debt	910	2,620	-	-	5,935	6,280
Interest Payable	460	456	-	-	2,318	2,293
Total Liabilities Payable from Restricted Assets	<u>8,640</u>	<u>11,752</u>	<u>665</u>	<u>1,723</u>	<u>9,121</u>	<u>9,397</u>
Non-Current Liabilities						
Net Pension Liability	32,104	30,174	32,481	31,051	14,443	13,052
Customer Deposits, Including Accrued Interest	37,390	29,408	3,443	9,045	4,546	4,419
Revenue Bonds, Less Current Portion	79,440	27,475	-	-	105,590	113,810
Unamortized Bond Premium	14,739	2,326	-	-	13,451	12,823
Total Non-Current Liabilities	<u>163,673</u>	<u>89,383</u>	<u>35,924</u>	<u>40,096</u>	<u>138,030</u>	<u>144,104</u>
Total Liabilities	<u>217,006</u>	<u>153,882</u>	<u>40,866</u>	<u>45,998</u>	<u>155,860</u>	<u>165,760</u>
Net Position						
Invested in Capital Assets, Net of Related Debt	197,991	216,085	116,409	111,727	152,029	123,222
Restricted	47,021	7,161	-	-	14,119	31,314
Unrestricted	3,759	16,549	(9,160)	(2,520)	36,800	31,878
Total Net Position	<u>248,771</u>	<u>239,795</u>	<u>107,249</u>	<u>109,207</u>	<u>202,948</u>	<u>186,414</u>
Total Liabilities, Deferred Inflows and Net Position	<u>\$ 465,777</u>	<u>\$ 393,677</u>	<u>\$ 148,115</u>	<u>\$ 155,205</u>	<u>\$ 358,808</u>	<u>\$ 352,174</u>

See independent auditors' report and accompanying notes to financial statements.

City of Huntsville Electric, Natural Gas, and Water Systems
Statements of Revenues, Expenses and Changes in Net Position

Years Ending September 30, 2017 and 2016



	Electric		Gas		Water	
	2017	2016	2017	2016	2017	2016
Operating Revenues						
Residential	\$ 231,572	\$ 233,655	\$ 13,816	\$ 14,912	\$ 25,277	\$ 23,382
Commercial and Industrial	236,261	230,987	19,335	20,148	14,846	14,221
Public Street and Highway Lighting	4,864	4,715	-	-	-	-
Government	-	-	-	-	2,450	2,396
Fire Hydrants	-	-	-	-	1,485	1,406
Other Operating Revenue	13,376	11,045	2,316	2,563	1,700	1,727
Total Operating Revenues	486,073	480,402	35,467	37,623	45,758	43,132
Operating Expenses						
Purchased Commodity	399,501	401,357	20,161	22,072	-	-
Purification	-	-	-	-	2,062	1,668
Pumping	-	-	-	-	4,692	4,230
Transmission	211	335	-	-	-	-
Distribution	17,169	17,922	5,155	4,853	5,259	3,849
Customer Accounting	6,311	6,025	1,066	1,040	1,449	1,376
Administrative and General	23,638	22,798	6,667	7,200	9,089	7,511
Depreciation	17,039	19,101	4,421	4,619	7,152	7,655
Total Operating Expenses	463,869	467,538	37,470	39,784	29,703	26,289
Operating Income (Loss)	22,204	12,864	(2,003)	(2,161)	16,055	16,843
Non-Operating Revenues (Expenses)						
Gain on Sale of Assets	-	101	-	47	-	21
Interest Income	97	433	(13)	70	45	229
Interest Expense	(2,244)	(1,171)	1,529	(63)	(965)	(1,138)
Amortization of Bond Discount	(63)	(70)	-	-	(57)	(65)
Amortization of Bond Premium	279	173	-	-	704	683
Total Non-Operating Revenues (Expenses)	(1,931)	(534)	1,516	54	(273)	(270)
Income (Loss) Before Transfers	20,273	12,330	(487)	(2,107)	15,782	16,573
Capital Contributions	-	-	511	550	3,376	3,457
Transfers Out - Tax Equivalent	(11,297)	(11,437)	(1,982)	(2,109)	(2,624)	(2,453)
Change in Net Position	8,976	893	(1,958)	(3,666)	16,534	17,577
Net Position - Beginning	239,795	238,902	109,207	112,873	186,414	168,837
Net Position - Ending	\$ 248,771	\$ 239,795	\$ 107,249	\$ 109,207	\$ 202,948	\$ 186,414

See independent auditors' report and accompanying notes to financial statements.

City of Huntsville Electric, Natural Gas, and Water Systems

Statements of Cash Flows

Years Ending September 30, 2017 and 2016



(Dollars in Thousands)

	Electric		Gas		Water	
	2017	2016	2017	2016	2017	2016
Cash flows from Operating Activities						
Received from Customers	\$ 491,395	\$ 472,569	\$ 35,228	\$ 37,723	\$ 46,242	\$ 41,538
Paid to Suppliers for Goods and Services	(419,017)	(411,387)	(29,420)	(25,310)	(15,549)	(11,916)
Paid to Employees for Salaries and Wages	(30,555)	(28,139)	(9,489)	(9,338)	(11,522)	(10,871)
Net Cash Provided By (Used For) Operating Activities	<u>41,823</u>	<u>33,043</u>	<u>(3,681)</u>	<u>3,075</u>	<u>19,171</u>	<u>18,751</u>
Cash flows from Non-Capital Financing Activities						
Payment in Lieu of Taxes	(11,297)	(11,437)	(1,982)	(2,109)	(2,624)	(2,453)
Net Cash Used in Non-Capital Financing Activities	<u>(11,297)</u>	<u>(11,437)</u>	<u>(1,982)</u>	<u>(2,109)</u>	<u>(2,624)</u>	<u>(2,453)</u>
Cash flows from Capital and Related Financing Activities						
Payment of Principal on Long-Term Debt	(30,095)	(2,440)	-	-	(101,375)	(2,495)
Issuance of Long Term Debt - Bond Warrants	92,745	-	-	-	94,357	-
Acquisition and Construction of Capital Assets	(60,370)	(31,015)	(9,103)	(2,667)	(26,932)	(71,431)
Capital Contributions	-	-	511	550	3,376	3,457
Interest Expense	(2,244)	(1,200)	1,529	(63)	(940)	(4,516)
Net Cash Provided By (Used For) Capital and Related Financing Activities	<u>36</u>	<u>(34,655)</u>	<u>(7,063)</u>	<u>(2,180)</u>	<u>(31,514)</u>	<u>(74,985)</u>
Cash flows from Investing Activities						
Redemption (Purchase) of Investment Securities, net	10,179	(3,941)	(6,026)	11,648	19,374	50,515
Interest Income Earned on Investments	97	433	(13)	70	45	229
Net Cash Provided By (Used For) Investing Activities	<u>10,276</u>	<u>(3,508)</u>	<u>(6,039)</u>	<u>11,718</u>	<u>19,419</u>	<u>50,744</u>
Increase (Decrease) in Cash and Cash Equivalents	<u>40,838</u>	<u>(16,557)</u>	<u>(18,765)</u>	<u>10,504</u>	<u>4,452</u>	<u>(7,943)</u>
Cash and Cash Equivalents - Beginning of Year	<u>54,605</u>	<u>71,162</u>	<u>28,946</u>	<u>18,442</u>	<u>21,270</u>	<u>29,213</u>
Cash and Cash Equivalent - End of Year	<u>\$ 95,443</u>	<u>\$ 54,605</u>	<u>\$ 10,181</u>	<u>\$ 28,946</u>	<u>\$ 25,722</u>	<u>\$ 21,270</u>

See independent auditors' report and accompanying notes to financial statements.

City of Huntsville Electric, Natural Gas, and Water Systems

Statements of Cash Flows

Years Ending September 30, 2017 and 2016



(Dollars in Thousands)

(Continued)

	Electric		Gas		Water	
	2017	2016	2017	2016	2017	2016
Reconciliation of Operating Income to Net Cash Provided						
by (Used For) Operating Activities						
Operating Income (Loss)	\$ 22,204	\$ 12,864	\$ (2,003)	\$ (2,161)	\$ 16,055	\$ 16,843
Adjustments to Reconcile Operating Income to Net Cash						
Provided By (Used For) Operating Activities:						
Depreciation and Amortization	17,039	19,101	4,421	4,619	7,152	7,655
Gain on Sale of Assets	-	101	-	47	-	21
Change in Accounts Receivable - Customer	5,322	(7,933)	(239)	54	485	(1,621)
Change in Accounts Receivable - Other	(181)	242	(44)	147	-	-
Change in Inventories	(1,176)	(546)	256	598	(81)	32
Change in Prepaid Expenses	(10)	(57)	2	(20)	-	(22)
Change in Deferred Outflow of Resources	(1,831)	(1,028)	(940)	(2,245)	(2,452)	(814)
Change in Accounts Payable	(8,576)	7,805	(277)	(315)	(3,884)	(2,376)
Change in Pension Liability	1,929	3,595	1,429	3,712	1,390	942
Change in Deferred Inflow of Resources	-	(962)	-	(1,438)	-	(487)
Change in Customer Deposits and Interest	6,576	(139)	(6,661)	250	171	106
Change in Accrued Expenses and Other Current Liabilities	527	-	375	(173)	335	(1,528)
Total Adjustments	19,619	20,179	(1,678)	5,236	3,116	1,908
Net Cash Provided By (Used For) Operating Activities	\$ 41,823	\$ 33,043	\$ (3,681)	\$ 3,075	\$ 19,171	\$ 18,751
Reconciliation of Cash and Cash Equivalents						
Current assets:						
Cash and Cash Equivalents	\$ 3,762	\$ 15,887	\$ 2,073	\$ 4,608	\$ 18,969	\$ 13,262
Board Designated Funds - Cash and cash equivalents	-	134	4,000	13,571	-	2,765
Cash and Cash Equivalents - Restricted						
Customer Deposits	7,270	8,676	665	10,767	868	5,243
Noncurrent assets:						
Cash and Cash Equivalents - Restricted						
Customer Deposits	37,390	29,408	3,443	-	512	-
Bond Trustee Funds	47,021	500	-	-	5,373	-
Total Cash and Cash Equivalents	\$ 95,443	\$ 54,605	\$ 10,181	\$ 28,946	\$ 25,722	\$ 21,270

See independent auditors' report and accompanying notes to financial statements.



Note 1 - Summary of Significant Accounting Policies

The financial statements of the City of Huntsville Electric, Natural Gas, and Water Systems (the “Utilities” or “HU”) have been prepared in accordance with Generally Accepted Accounting Principles of the United States of America (“GAAP”) as applied to government units. The Governmental Accounting Standards Board (“GASB”) is the accepted standard setting body for establishing governmental accounting and financial reporting principles. The more significant of the Utilities’ accounting principles are described below.

Reporting Entity

The definition of the reporting entity is based primarily on the notion of financial accountability. A primary government is financially accountable for agencies that make up its legal entity. It is also financially accountable for a legally separate agency if its officials appoint a voting majority of that agency’s governing body and either it is able to impose its will on that agency or there is a potential for the agency to provide specific financial benefits to, or to impose specific financial burdens on, the primary government. There are no component units which should be included as part of the financial reporting entity of the Utilities. However, the Utilities are a component unit of the City of Huntsville, Alabama.

Financial Presentation

The Utilities are operated by separate Boards for the electric, natural gas, and water systems (collectively, the “Boards”). The Boards are responsible for the day-to-day operations of the Utilities and for making recommendations to the City for major capital outlays and rate revisions. The Electric Board consists of three members appointed by the Huntsville City Council for staggered three year terms. The Natural Gas and Water Boards are made up of the same three members who serve on each Board, simultaneously. The Boards have hired a President and CEO to administer all three utilities. Financial statements are presented for each Board. The footnotes are presented separately for each Board, where applicable, and jointly for areas where common descriptions exist.

Basis of Accounting

The Utilities use the accrual basis of accounting under which revenues are recognized when earned and expenses are recognized when incurred, even though actual payment or receipt may not occur until after the period ends.

Generally Accepted Accounting Principles (GAAP) are set by the Governmental Accounting Standards Board (GASB), not the FASB as the private sector. The industry as a whole is a regulated industry that follows the Federal Energy Regulatory Commission (FERC) mandates. The Huntsville Electric System’s regulatory body is the Tennessee Valley Authority which has adopted most of these directives as published in the Federal Code of Regulations Title 18. These statements offer short and long-term financial information about their activities. The Statements of Net Position include all of the individual System’s assets and liabilities and provide information about the nature and amounts of investments in resources (assets) and the obligations to creditors (liabilities). It also provides the basis for evaluating the capital structure of the System and assessing the liquidity and financial flexibility of the System.



Note 1 – Summary of Significant Accounting Policies (Continued)

Basis of Accounting (Continued)

The Utilities 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.

Cash and Cash Equivalents

For purposes of the Statements of Cash Flows, the Utilities consider all highly liquid temporary cash investments with low interest rate risk to be cash equivalents. Cash purchases and sales of these investments generally are part of the entity's cash management activities rather than part of its operating, investing and financing activities, and details of these transactions are not reported in the Statements of Cash Flows. Restricted funds are provided for under trust indentures and are not considered cash equivalents.

The Boards have designated that cash assets be set aside in each System to fund construction and renewal and replacement activity. The designations are segregated in the Statements of Net Position as Board Designated Funds. Designations are relieved once the Board has approved expenditures from those funds. The designated balances are fully funded and are not separately stated in the net assets portion of the balance sheets at September 30, 2017 and 2016.

Investments

Investments in U.S. Treasury, government agency, and state and local government securities are recorded at fair value, as determined by quoted market prices. Investments in overnight repurchase agreements and commercial paper are recorded at cost, which approximates fair value.

Accounts Receivable - Trade

The Electric and Water Systems act as billing and collection agents for other City of Huntsville, City of Madison, and Madison County utility departments. Current earnings are charged with an allowance for doubtful accounts based on age of account. Receivables are due 15 days after the issuance of the invoice and are considered delinquent when more than 18 days past due. Accounts considered uncollectible throughout the year are charged against the allowance. The allowance for doubtful accounts was as follows:

	Electric System		Gas System		Water System	
	2017	2016	2017	2016	2017	2016
Accounts Receivable	\$ 218,403	\$282,403	\$ 2,743	\$ 21,453	\$ 77,940	\$ 37,859
Other Receivables	\$ 506,009	\$540,887	\$ 75,301	\$ 127,938	\$ -	\$ -

Materials and Supplies Inventories

Materials and supplies inventories are stated at the lower of cost (average cost) or market using the first-in, first out consumption method of inventory accounting.



Note 1 – Summary of Significant Accounting Policies (Continued)

Stored Gas Inventory

The stored inventory is reflected at the aggregate amount of the lower of cost (average cost) or market.

Fuel Management Program

In connection with the purchase of natural gas, the Natural Gas System has developed and implemented a procurement program intended to manage the risk of changes in the market place of natural gas. Pursuant to this program, the Utilities may execute fixed price and options contracts from time to time to help manage fluctuations in the market prices of natural gas.

Utility Plant

The Utilities maintain a \$5,000 capitalization threshold for equipment, land, buildings, and improvements. Utility plant and construction in progress are stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful life of the assets ranging from five to 55 years. Retirements of units of property from service are credited against plant in service at the original cost of the units and accumulated depreciation is debited at the date of retirement. Improvements that extend the useful life of the assets are capitalized and depreciated over the remaining useful life of the asset. The cost of maintenance, repairs, and replacement of minor items of property are charged to operations and maintenance accounts. An allowance for funds used during construction is capitalized during the construction period.

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, Huntsville Utilities has recognized certain regulatory assets in the accompanying Statements of Net Position. In the event Huntsville Utilities no longer meets the criteria for regulated operations under GASB Statement No. 62, Huntsville Utilities 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 included in the Statements of Net Position:

	<u>Electric System</u>		<u>Water Systems</u>	
	<u>2017</u>	<u>2016</u>	<u>2017</u>	<u>2016</u>
Regulatory Assets:				
Non-Current:				
Unamortized Debt Expense	474,020	239,755	868,031	1,140,568
Total Non-Current	<u>474,020</u>	<u>239,755</u>	<u>868,031</u>	<u>1,140,568</u>

Accounts Receivable/Payable from/to Other Utilities

Included in other receivables are amounts due from the other utility systems for services rendered to them by the Utilities. Included in the payable is cash held by the Utilities for the amounts owed to the City of Huntsville and other utilities for services rendered by them to the Utilities.



Note 1 – Summary of Significant Accounting Policies (Continued)

Revenues

Revenues are recognized from meters read on a daily basis. Service that has been rendered from the latest date of each meter-reading cycle to month end is estimated and accrued as unbilled revenue receivable.

Grants in Aid to Construction

It is the Electric System's policy not to record amounts as grants in aid of construction, in accordance with guidelines established by FERC. The substance of this accounting treatment is to reduce the cost of operating the Electric System by reducing depreciation expense.

It is the Water and Natural Gas System's policy to record grants in aid of construction and other amounts received as capital contributions in the Statements of Revenues, Expenses, and Changes in Net Position.

Amortization

Amortization of bond discounts and premiums is computed on a straight-line basis, which approximates the effective interest method over the remaining term of the outstanding bonds.

Amortization of regulatory assets is computed on a straight-line basis over the expected recovery of such costs in future rates, estimated to be 20 years.

Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect certain reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Accordingly, actual results could differ from those estimates.

Environmental Costs

Huntsville Utilities expenses, on a current basis, certain known costs incurred in complying with environmental regulations and conducting remediation activities.

Pensions

The Employees' Retirement System of Alabama (the Plan) financial statements are prepared using the economic resources measurement focus and accrual basis of accounting. Contributions are recognized as revenues when earned, pursuant to the plan requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. Expenses are recognized when the corresponding liability is incurred, regardless of when the payment is made. Investments are reported at fair value. Financial statements are prepared in accordance with requirements of the Governmental Accounting Standards Board (GASB). Under these requirements, the Plan is considered a component unit of the State of Alabama and is included in the State's Comprehensive Annual Financial Report.



Note 1 – Summary of Significant Accounting Policies (Continued)

Recent Accounting Pronouncements

GASB has issued the following pronouncements that may affect future financial position, results of operations, cash flows, or financial presentation of the Utilities upon implementation. Management has not yet evaluated the effect of implementation of these standards.

<u>GASB Statement No.</u>	<u>GASB Accounting Standard</u>	<u>Effective Fiscal Year</u>
75	<i>Account and Financial Reporting for Postemployment Benefits Other Than Pensions</i>	2018
81	<i>Irrevocable Split-Interest Agreements</i>	2018
83	<i>Certain Asset Retirement Obligations</i>	2019
84	<i>Fiduciary Activities</i>	2020
85	<i>Omnibus 2017</i>	2018
86	<i>Certain Debt Extinguishment Issues</i>	2018
87	<i>Leases</i>	2021

GASB Statement No. 75 (GASB 75) establishes standards of accounting and financial reporting, but not funding or budgetary standards, for OPEB that is provided to the employees of state and local governmental employers through OPEB Plans that are administered through trusts or equivalent arrangements meeting certain criteria. This statement also establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense/ expenditure. It replaces the requirements of Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions, as amended*, and No. 57, *OPEB Measurement by Agent Employers and Agent Multiple-Employer Plans*. For defined benefit OPEB plans the statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosure and required supplementary information are addressed. GASB 75 is effective for fiscal years beginning after June 15, 2017.

GASB Statement No. 81 (GASB 81) requires that a government that receives resources pursuant to an irrevocable split-interest agreement recognize assets, liabilities, and deferred inflows of resources at the inception of the agreement. GASB 81 also provides expanded guidance for circumstances in which the government holds the assets. The requirements of GASB 81 are effective for periods beginning after December 15, 2016.

GASB Statement 83 (GASB 83) addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this Statement. GASB 83 establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for AROs. This Statement requires that recognition occur when the liability is both incurred and reasonably estimable. The determination of when the liability is incurred should be based on the occurrence of external laws, regulations, contracts, or court judgments, together with the occurrence of an internal event that obligates a government to perform asset retirement activities. Laws and regulations may require governments to take specific actions to retire certain tangible capital assets at the end of the useful lives of those capital assets, such as decommissioning nuclear reactors and dismantling and removing sewage treatment plants. Other obligations to retire tangible capital assets may arise from contracts or court judgments. Internal obligating events include the occurrence of contamination, placing into operation a tangible capital asset that is



Note 1 – Summary of Significant Accounting Policies (Continued)

Recent Accounting Pronouncements (Continued)

required to be retired, abandoning a tangible capital asset before it is placed into operation, or acquiring a tangible capital asset that has an existing ARO. This Statement requires the measurement of an ARO to be based on the best estimate of the current value of outlays expected to be incurred.

The best estimate should include probability weighting of all potential outcomes, when such information is available or can be obtained at reasonable cost. If probability weighting is not feasible at reasonable cost, the most likely amount should be used. This Statement requires that a deferred outflow of resources associated with an ARO be measured at the amount of the corresponding liability upon initial measurement. This Statement requires the current value of a government's AROs to be adjusted for the effects of general inflation or deflation at least annually. In addition, it requires a government to evaluate all relevant factors at least annually to determine whether the effects of one or more of the factors are expected to significantly change the estimated asset retirement outlays. A government should remeasure an ARO only when the result of the evaluation indicates there is a significant change in the estimated outlays. The deferred outflows of resources should be reduced and recognized as outflows of resources (for example, as an expense) in a systematic and rational manner over the estimated useful life of the tangible capital asset. A government may have a minority share (less than 50 percent) of ownership interest in a jointly owned tangible capital asset in which a nongovernmental entity is the majority owner and reports its ARO in accordance with the guidance of another recognized accounting standards setter. Additionally, a government may have a minority share of ownership interest in a jointly owned tangible capital asset in which no joint owner has a majority ownership, and a nongovernmental joint owner that has operational responsibility for the jointly owned tangible capital asset reports the associated ARO in accordance with the guidance of another recognized accounting standards setter. In both situations, the government's minority share of an ARO should be reported using the measurement produced by the nongovernmental majority owner or the nongovernmental minority owner that has operational responsibility, without adjustment to conform to the liability measurement and recognition requirements of this Statement. In some cases, governments are legally required to provide funding or other financial assurance for their performance of asset retirement activities. This Statement requires disclosure of how those funding and assurance requirements are being met by a government, as well as the amount of any assets restricted for payment of the government's AROs, if not separately displayed in the financial statements. This Statement also requires disclosure of information about the nature of a government's AROs, the methods and assumptions used for the estimates of the liabilities, and the estimated remaining useful life of the associated tangible capital assets. If an ARO (or portions thereof) has been incurred by a government but is not yet recognized because it is not reasonably estimable, the government is required to disclose that fact and the reasons therefor. This Statement requires similar disclosures for a government's minority shares of AROs. The requirements for this Statement are effective for reporting periods beginning after June 15, 2018.

GASB Statement 84 (GASB 84) establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and postemployment benefit arrangements that are fiduciary activities. An activity meeting the criteria should be reported in a fiduciary fund in the basic financial statements. Governments with activities meeting the criteria should present a statement of fiduciary net position and a statement of changes in fiduciary net position. An exception to that requirement is provided for a business-type activity that normally expects to hold custodial assets for three months or less. This Statement describes four fiduciary funds that should be reported, if applicable: (1) pension (and other employee benefit)



Note 1 – Summary of Significant Accounting Policies (Continued)

Recent Accounting Pronouncements (Continued)

trust funds, (2) investment trust funds, (3) private-purpose trust funds, and (4) custodial funds. Custodial funds generally should report fiduciary activities that are not held in a trust or equivalent arrangement that meets specific criteria. This Statement also provides for recognition of a liability to the beneficiaries in a fiduciary fund when an event has occurred that compels the government to disburse fiduciary resources.

Events that compel a government to disburse fiduciary resources occur when a demand for the resources has been made or when no further action, approval, or condition is required to be taken or met by the beneficiary to release the assets. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018.

GASB Statement 85 (GASB 85) addresses practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits [OPEB]). The requirements of GASB 85 are effective for reporting periods beginning after June 15, 2017.

GASB Statement 86 (GASB 86) improves the consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources - resources other than the proceeds of refunding debt - are placed in an irrevocable trust for the sole purpose of extinguishing debt. This Statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to financial statements for debt that is defeased in substance. The requirements of GASB 86 are effective for reporting periods beginning after June 15, 2017.

The objective of GASB Statement 87 (GASB 87) is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The requirements of GASB 87 are effective for reporting periods beginning after December 15, 2019.

Note 2 – Cash, Cash Equivalents, and Investments

At September 30, 2017 and 2016, all cash and cash equivalents of the Utilities are entirely insured or collateralized as provided by the Security for Alabama Funds Enhancement Act ("SAFE") as prescribed in section 41-14A of the code of the state of Alabama with a Qualified Public Fund Depository. Funds held by the banks' trust departments or agents are invested in U.S. governmental securities or are secured by U.S. government securities.

City of Huntsville Electric, Natural Gas, and Water Systems
Notes to Financial Statements

Years Ending September 30, 2017 and 2016



Note 2 – Cash, Cash Equivalents, and Investments (Continued)

A summary of cash and investments for the years ended September 30, 2017 and 2016 are as follows:

<u>2017</u>	Electric System	Natural Gas System	Water System
Carrying amounts of:			
Cash and Cash Equivalents			
Unrestricted	\$ 3,761,643	\$ 2,073,427	\$ 18,969,166
Customer Deposits - Restricted	44,660,085	4,107,466	1,380,325
Bond - Restricted	47,021,462	-	5,373,183
Board Designated	-	4,000,000	-
Investments			
Unrestricted	-	750,000	13,522,987
Customer Deposits - Restricted	-	-	4,034,035
Board Designated	14,808,482	8,526,669	14,787,110
Bond - Restricted	-	-	8,746,172
Total	\$ 110,251,672	\$ 19,457,562	\$ 66,812,978
Cash and Cash Equivalents			
Unrestricted	\$ 3,761,643	\$ 2,073,427	\$ 18,969,166
Customer Deposits - Restricted	44,660,085	4,107,466	1,380,325
Bond Funds - Restricted	47,021,462	-	5,373,184
Investments			
	-	750,000	13,522,987
Investments - Bond - Restricted			
Customer Deposits	-	-	4,034,035
Bond Construction Funds	-	-	-
Sinking Funds	-	-	2,944,058
Debt Service Reserve Funds	-	-	5,802,114
Board Designated Accounts			
Cash and Cash Equivalents			
Insurance Fund	-	-	-
Worker's Comp Fund	-	-	-
Construction Fund	-	4,000,000	-
Renewal and Replacement Fund	-	-	-
Investments			
Insurance Fund	1,553,584	1,000,604	1,002,941
Worker's Comp Fund	2,000,000	2,000,000	1,787,540
Construction Fund	9,091,270	3,018,713	5,705,434
Emergency Fund	2,163,628	-	-
Rate Stabilization Fund	-	2,507,352	-
System Development	-	-	6,291,195
Total	\$ 110,251,672	\$ 19,457,562	\$ 66,812,978

City of Huntsville Electric, Natural Gas, and Water Systems
Notes to Financial Statements

Years Ending September 30, 2017 and 2016



Note 2 – Cash, Cash Equivalents, and Investments (Continued)

<u>2016</u>	Electric System	Natural Gas System	Water System
Carrying amounts of:			
Cash and Cash Equivalents			
Unrestricted	\$ 15,887,392	\$ 4,607,117	\$ 13,262,506
Customer Deposits - Restricted	38,084,045	10,768,178	5,243,407
Bond - Restricted	500,000	-	
Board Designated	134,182	13,571,462	2,765,454
Investments			
Unrestricted	4,326,494	750,000	18,362,775
Board Designated	13,999,586	2,500,000	10,787,611
Bond - Restricted	6,661,186	-	31,314,001
Total	\$ 79,592,885	\$ 32,196,757	\$ 81,735,754
Cash and Cash Equivalents			
Unrestricted	\$ 15,887,392	\$ 4,607,117	\$ 13,262,506
Customer Deposits - Restricted	38,084,045	10,768,178	5,243,407
Bond Funds - Restricted	500,000	-	-
Investments	4,326,494	750,000	18,362,775
Investments - Bond - Restricted			
Bond Construction Funds	-	-	19,836,183
Sinking Funds	2,642,352	-	3,015,246
Debt Service Reserve Funds	4,018,834	-	8,462,573
Board Designated Accounts			
Cash and Cash Equivalents			
Insurance Fund	-	997,670	1,000,000
Worker's Comp Fund	-	1,995,760	1,752,414
Construction Fund	-	10,578,032	3,681
Renewal and Replacement Fund	134,182	-	9,358
Investments			
Insurance Fund	1,506,796	-	-
Worker's Comp Fund	1,996,618	-	-
Construction Fund	8,584,772	-	5,385,106
Emergency Fund	1,911,400	-	-
Rate Stabilization Fund	-	2,500,000	-
System Development	-	-	5,402,505
Total	\$ 79,592,885	\$ 32,196,757	\$ 81,735,754

City of Huntsville Electric, Natural Gas, and Water Systems
Notes to Financial Statements

Years Ending September 30, 2017 and 2016



Note 2 – Cash, Cash Equivalents, and Investments (Continued)

At September 30, 2017, the Utilities had the following investments:

Investment	Fair Value	Maturity			Rating	Agency	Level
		<1	1-5	6-10			
Money Market Funds	\$ 11,917,011	\$ 11,917,011	\$ -	\$ -	not rated		-
Certificate of Deposits	1,500,000	1,500,000	-	-	not rated		-
US Treasuries	8,879,554	-	8,879,554	-	not rated		L1
US Treasuries	4,714,677	4,714,677	-	-	not rated		-
US Treasuries	1,179,031	-	1,179,031	-	not rated		L1
US Government Agencies	30,141,065	2,009,390	28,131,675	-	AA+	S&P	L1
US Government Agencies	6,844,116	-	6,844,116	-	AA-	S&P	L1
Totals	\$ 65,175,454	\$ 20,141,078	\$ 45,034,376	\$ -			

At September 30, 2016, the Utilities had the following investments:

Investment	Maturity				Total
	<1	1-5	6-10		
Money Market Funds - U.S. Treasury Obligations	\$ 33,094,275	\$ 42,414,888	\$ 4,058,170	\$ -	\$ 79,567,332
Certificate of Deposits	1,750,358	-	-	-	1,750,358
United States Treasury Note	-	7,383,963	-	-	7,383,963
Totals	\$ 34,844,633	\$ 49,798,851	\$ 4,058,170	\$ -	\$ 88,701,654

Interest Rate risk - is the risk of fixed-maturity investments fluctuating in response to changes in market interest rates. The Utilities manages its exposure to declines in fair values by limiting the weighted average maturity of its investment portfolio in the bond funds to such stated maturities as will assure the availability of cash sufficient to pay, on a timely basis, the interest, and principal of the bonds coming due.

Credit risk - in the Utilities' bond indentures for the outstanding Electric System Revenue Warrants and the Water System Revenue Warrants, limit the investments of the various restricted bond funds to the following: (a) securities that are direct obligations of the United States and any securities that are with respect to which the payment of the principal thereof and the interest thereon is unconditionally and irrevocably guaranteed by the United States; (b) custodial receipts evidencing ownership in United States Treasury obligations; and (c) demand or time deposits in domestic banks rated no less than "AA" by Standard & Poor's Ratings Services or "Aa" by Moody's Investors Service.

At September 30, 2017 and 2016, the Utilities' investments other than the restricted bond funds consisted of Money Market Funds - U.S. Treasury Obligations with no maturity, U.S. Treasury Notes and Certificates of Deposits with various due dates. In addition, the Utilities have invested in a repurchase agreement which is collateralized by U.S. Treasury Obligations.

Custodial Credit risk - For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the Utilities will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. Each of the investments listed above are in the possession of an outside party.



Note 2 – Cash, Cash Equivalents, and Investments (Continued)

GASB Codification Section 3100: *Fair Value Measurements*, establishes a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

The three levels of the fair value hierarchy under the codification are described as follows:

Level 1 (L1): Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the plan has the ability to access.

Level 2 (L2): Inputs to the valuation methodology include

- quoted prices for similar assets or liabilities in active markets;
- quoted prices for identical or similar assets or liabilities in inactive markets;
- inputs other than quoted prices that are observable for the asset or liability;
- inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 (L3): Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

The following is a description of the valuation methodologies used for assets measured at fair value:

Equities: Valued at quoted market prices.

Mutual funds: Valued at quoted market prices.

US Real Estate Investment: Valued at net asset value.

Fixed income funds: Valued using pricing models maximizing the use of observable inputs for similar securities. This includes basing value on yield currently available on comparable securities of issuers with similar credit ratings.

There have been no changes in the methodologies used at September 30, 2017.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Foundation believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Concentration of Credit risk - Concentration of credit risk is the risk of loss attributable to the quantity of the Utilities' investment in a single issuer. Investments in single issuers that equal or exceed 5% of total investments have a reportable concentration of credit risk. Each of the investments listed above as held by a trustee represent greater than 5% of total investments.



Note 3 – Utility Plant in Service

Capital asset activity by System for fiscal years 2017 and 2016 is as follows:

Electric System

	Balance 9/30/2016	Increases	Decreases	Balance 9/30/2017
Land and land rights	\$ 4,759,767	\$ 174,761	\$ -	\$ 4,934,528
Structures and improvements	449,120,316	20,586,147	(1,660,786)	468,045,677
Furniture, fixtures and other	51,403,099	2,654,615	(905,218)	53,152,495
Total	505,283,182	23,415,522	(2,566,004)	526,132,700
Less accumulated depreciation	(280,258,641)	(18,743,665)	2,566,004	(296,436,301)
Construction in progress	23,697,171	51,028,207	(12,368,339)	62,357,039
Total	\$ 248,721,712	\$ 55,700,065	\$ (12,368,339)	\$ 292,053,438

Electric System

	Balance 9/30/2015	Increases	Decreases	Balance 9/30/2016
Land and land rights	\$ 4,759,767	\$ -	\$ -	\$ 4,759,767
Structures and improvements	438,245,817	12,451,154	(1,576,655)	449,120,316
Furniture, fixtures and other	47,571,956	4,829,606	(998,463)	51,403,099
Total	490,577,540	17,280,760	(2,575,118)	505,283,182
Less accumulated depreciation	(262,274,640)	(20,559,119)	2,575,118	(280,258,641)
Construction in progress	11,061,289	18,873,478	(6,237,596)	23,697,171
Total	\$ 239,364,189	\$ 15,595,119	\$ (6,237,596)	\$ 248,721,712

Natural Gas System

	Balance 9/30/2016	Increases	Decreases	Balance 9/30/2017
Land and land rights	\$ 1,803,038	\$ -	\$ -	\$ 1,803,038
Structures and improvements	154,864,579	6,837,865	(98,059)	161,604,385
Furniture, equipment and other	13,593,183	243,504	(98,258)	13,738,429
Total	170,260,800	7,081,369	(196,317)	177,145,852
Less accumulated depreciation	(67,564,831)	(5,032,260)	196,317	(72,400,774)
Construction in progress	9,030,538	5,521,827	(2,888,787)	11,663,578
Total	\$ 111,726,507	\$ 7,570,936	\$ (2,888,787)	\$ 116,408,656



Note 3 – Utility Plant in Service (Continued)

Natural Gas System

	Balance 9/30/2015	Increases	Decreases	Balance 9/30/2016
Land and land rights	\$ 1,803,038	\$ -	\$ -	\$ 1,803,038
Structures and improvements	147,408,741	7,771,117	(315,279)	154,864,579
Furniture, equipment and other	12,868,572	1,159,223	(434,612)	13,593,183
Total	162,080,351	8,930,340	(749,891)	170,260,800
Less accumulated depreciation	(63,062,331)	(5,252,391)	749,891	(67,564,831)
Construction in progress	5,615,017	7,403,964	(3,988,443)	9,030,538
	<u>\$ 104,633,037</u>	<u>\$ 11,081,912</u>	<u>\$ (3,988,443)</u>	<u>\$ 111,726,507</u>

Water System

	Balance 9/30/2016	Increases	Decreases	Balance 9/30/2017
Land and land rights	\$ 1,845,971	\$ -	\$ -	\$ 1,845,971
Structures and improvements	277,210,822	107,526,059	(374,145)	384,362,736
Furniture, equipment and other	14,145,342	240,303	(69,847)	14,315,798
Total	293,202,135	107,766,362	(443,992)	400,524,505
Less accumulated depreciation	(126,802,025)	(7,610,277)	443,992	(133,968,310)
Construction in progress	90,887,687	21,992,527	(102,369,033)	10,511,181
	<u>\$ 257,287,797</u>	<u>\$ 122,148,612</u>	<u>\$ (102,369,033)</u>	<u>\$ 277,067,375</u>

	Balance 9/30/2015	Increases	Decreases	Balance 9/30/2016
Land and land rights	\$ 1,845,971	\$ -	\$ -	\$ 1,845,971
Structures and improvements	263,700,338	14,150,039	(639,554)	277,210,823
Furniture, equipment and other	13,529,173	780,516	(164,347)	14,145,342
Total	279,075,482	14,930,555	(803,901)	293,202,136
Less accumulated depreciation	(119,500,314)	(8,105,612)	803,901	(126,802,025)
Construction in progress	40,096,660	59,871,907	(9,080,880)	90,887,687
	<u>\$ 199,671,828</u>	<u>\$ 66,696,850</u>	<u>\$ (9,080,880)</u>	<u>\$ 257,287,798</u>

Note 4 – Long-Term Debt

The Utilities have numerous outstanding debt obligations. A summary of the current year principal activity and a detailed description of each debt instrument follows.



Note 4 – Long-Term Debt (Continued)

Principal activity for the year 2017:

	9/30/2016	Increases	Decreases	9/30/2017
Electric Systems	\$ 30,095,000	\$ 80,350,000	\$ 30,095,000	\$ 80,350,000
Natural Gas Systems	-	-	-	-
Water Systems	120,090,000	-	8,565,000	111,525,000
Totals	\$ 150,185,000	\$ 80,350,000	\$ 38,660,000	\$ 191,875,000

Principal activity for the year 2016:

	9/30/2015	Increases	Decreases	9/30/2016
Electric Systems	\$ 32,625,000	\$ -	\$ 2,530,000	\$ 30,095,000
Natural Gas Systems	-	-	-	-
Water Systems	122,585,000	-	2,495,000	120,090,000
Totals	\$ 155,210,000	\$ -	\$ 5,025,000	\$ 150,185,000

Electric System

City of Huntsville, Alabama Electric System Revenue and Term Warrants, Series 2017 A - Electric System Revenue Warrants, Series 2017 A, were issued in the original amount of \$59,160,000. The warrants mature serially on December 1 each year and bear interest according to stated maturity dates as follows:

Bond Issue				
Series 2017-A				
Fiscal Year	Principal	Interest	Rate	
2018	\$ -	\$ 2,497,867	5.00%	
2019	-	2,958,000	5.00%	
2020	1,795,000	2,913,125	5.00%	
2021	1,890,000	2,821,000	5.00%	
2022	1,985,000	2,724,125	5.00%	
2023	1,615,000	2,634,125	5.00%	
2024	2,170,000	2,539,500	5.00%	
2025	2,280,000	2,428,250	5.00%	
2026	2,400,000	2,311,250	5.00%	
2027	2,520,000	2,188,250	5.00%	
2028	2,650,000	2,059,000	5.00%	
2029	2,785,000	1,923,125	5.00%	
2030	2,930,000	1,780,250	5.00%	
2031	3,080,000	1,630,000	5.00%	
2032	3,240,000	1,472,000	5.00%	
2033	3,405,000	1,305,875	5.00%	
2034	3,580,000	1,131,250	5.00%	
2035	3,760,000	947,750	5.00%	
2036	3,955,000	754,875	5.00%	
2037	4,155,000	552,125	5.00%	
2038	4,370,000	339,000	5.00%	
2039	4,595,000	114,875	5.00%	
	\$ 59,160,000	\$ 40,025,617		
Current	-			
	\$ 59,160,000			



Note 4 – Long-Term Debt (Continued)

The 2017-A issue contained issuance cost of \$364,297 that are classified as regulatory asset and amortized over 20 years. At September 30, 2017, the unamortized regulatory asset is \$345,099. The 2017-A issue also contained a premium of \$11,204,297 that is being amortized over 20 years. At September 30, 2017, the unamortized premium is \$11,110,928. The 2017-A Warrants are secured by the net revenues from the operations of the Electric System after payment of operating expenses. The 2017-A Warrants were issued to pay for the costs of capital improvements to the Electric System..

Optional Redemption: Those of the Series 2017-A Warrants having a stated maturity on and after December 1, 2027, shall be subject to redemption and payment, at the option of the City, on June 1, 2027, and on any date thereafter, as a whole or in part (but if redeemed in part, only in installments of \$5,000 or any integral multiple thereof with those of the maturities to be redeemed to be selected by the City, and if less than all the Series 2017-A Warrants of a single maturity are to be redeemed, those (or portions thereof)) of that maturity to be redeemed to be selected by the Trustee by lot), at and for Redemption Price with respects to each such Series 2017-A Warrants (or potion thereof) redeemed equal to the principal amount redeemed, plus accrued interest to the Redemption Date.

City of Huntsville, Alabama Electric System Revenue and Term Warrants, Series 2017 B - Electric System Revenue Warrants, Series 2017 B, were issued in the original amount of \$21,190,000. The warrants mature serially on December 1 each year and bear interest according to stated maturity dates as follows:

Bond Issue				
Series 2017-B				
Fiscal Year	Principal	Interest	Rate	
2018	\$ 910,000	\$ 860,412	5.00%	
2019	1,865,000	953,725	5.00%	
2020	1,005,000	881,975	5.00%	
2021	1,050,000	830,600	5.00%	
2022	1,105,000	776,725	5.00%	
2023	1,625,000	708,475	5.00%	
2024	1,240,000	636,850	5.00%	
2025	1,300,000	573,350	5.00%	
2026	1,365,000	513,550	5.00%	
2027	1,425,000	450,625	5.00%	
2028	1,500,000	377,500	5.00%	
2029	1,575,000	300,625	5.00%	
2030	1,655,000	219,875	5.00%	
2031	1,740,000	135,000	5.00%	
2032	1,830,000	45,750	5.00%	
2033	-	-	5.00%	
2034	-	-	5.00%	
2035	-	-	5.00%	
2036	-	-	5.00%	
2037	-	-	5.00%	
2038	-	-	5.00%	
2039	-	-	5.00%	
	\$ 21,190,000	\$ 8,265,037		
Current	910,000			
	\$ 20,280,000			



Note 4 – Long-Term Debt (Continued)

The 2017-B issue contained issuance cost of \$130,370 that are classified as a regulatory asset and amortized over 15 years. At September 30, 2017, the unamortized regulatory asset is \$128,921. The 2017-B issue also contained a premium of \$3,669,067 that is being amortized over 15 years. At September 30, 2017, the unamortized premium is \$3,628,299.

Optional Redemption: Those of the Series 2017-B Warrants having stated maturity on and after December 1, 2027, shall be subject to redemption and payment, at the option of the City, on June 1, 2027, and on any date thereafter, as a whole or in part (but if redeemed in part, only in installments of \$5,000 or any integral multiple thereof with those of maturities to be redeemed to be selected by the City, and if less than all the Series 2017-B Warrants of a single maturity are to be redeemed, those (or portions thereof of that maturity to be redeemed selected by the Trustee by lot) at and for Redemption Price with respect to each such Series 2017-B Warrants (or portion thereof) redeemed equal to the principal amount redeemed, plus accrued interest to the Redemption Date.

The 2017-B Warrants were issued to advance refund \$23,335,000 of the outstanding Series 2011 Warrants and \$4,140,000 of the outstanding Series 2007 Warrants. As a result, the 2011 and 2007 series bonds are considered defeased and the Utilities has removed the liabilities from its accounts. The City deposited the proceeds along with other resources into two separate escrow funds to provide for maturing installments of principal and interest on the old warrants. These funds were subsequently invested by the trustee in U S Treasury Notes with varying maturities. The escrow funds are to provide for all installments due through and including December 1, 2017 (2007 Warrants) and December 1, 2021 (2011 Warrants). The outstanding principal on the 2011 and 2007 defeased bonds is \$23,335,000 and \$4,140,000, respectively at September 30, 2017.

As required by GASB Statement No. 23, the difference between the reacquisition price (funds required to refund the old debt) and the net carrying amount of the old debt is carried as deferred amount on debt refunding. The amounts deferred on the reacquisition of the 2011 and 2007 Warrants were \$724,573 and \$128,551, respectively. The deferred amount on the 2007 Warrants includes \$81,860 of previous unamortized issuance costs and is net of \$31,187 of an unamortized premium. The deferred amount on the 2011 Warrants includes \$99,245 of previous unamortized refunding costs and is net of \$2,150,002 of an unamortized premium. The deferred amount of the 2007 Warrants is being amortized over the remaining life of the 2007 Warrants using the straight line method. The deferred amount of the 2011 Warrants is being amortized over the life of the 2017-B Warrants. No amortization has been recorded for these deferred amounts as of September 30, 2017.

The City refunded the 2011 and 2007 Warrants to reduce the annual debt service requirements. The refunding decreased the total debt service payments over the next fifteen years by approximately \$7,350,000 and resulted in an economic gain (difference between the present values of the debt service payments on the old and new debt) for the City of approximately \$6,604,690.

Water System

City of Huntsville, Alabama Water System Revenue and Term Warrants, Series 2008

The 2008 Warrants are secured by the net revenues from the operations of the Water System after payment of the cost of its operations and maintenance and by the monies and investments on deposit in trust funds created by the Trust Indenture under which the warrants were issued.

City of Huntsville Electric, Natural Gas, and Water Systems
Notes to Financial Statements

Years Ending September 30, 2017 and 2016



Note 4 – Long-Term Debt (Continued)

As noted below, the Utilities issued series 2016 bonds to advance refund a portion of the 2008 bonds. The unamortized portions of the deferred debt refunding and bond premium were rolled into the deferred debt refunding amount for the series 2016 bonds. The following schedule includes the original bond issue, the amount refunded, and new current bond schedule.

2008 Water

Fiscal Year	Original Principal	Principal Refunded	Remaining Principal	Remaining Interest	Rate
2018	\$ 2,750,000	\$ -	\$ 2,750,000	\$ 576,675	5.00%
2019	2,885,000	1,685,000	1,200,000	439,175	5.00%
2020	880,000	515,000	365,000	379,175	5.00%
2021	925,000	540,000	385,000	360,925	5.00%
2022	970,000	565,000	405,000	341,675	5.00%
2023	1,020,000	595,000	425,000	321,425	5.00%
2024	1,075,000	630,000	445,000	300,175	5.00%
2025	1,125,000	655,000	470,000	277,925	5.00%
2026	1,175,000	685,000	490,000	256,775	5.00%
2027	1,230,000	720,000	510,000	234,725	5.00%
2028	1,290,000	755,000	535,000	211,775	5.00%
2029	1,350,000	790,000	560,000	187,700	4.50%
2030	1,415,000	825,000	590,000	162,500	4.50%
2031	1,485,000	870,000	615,000	133,000	4.50%
2032	1,560,000	910,000	650,000	102,250	4.50%
2033	1,640,000	960,000	680,000	69,750	4.50%
2034	1,725,000	1,010,000	715,000	35,750	5.00%
	\$ 24,500,000	\$ 12,710,000	\$ 11,790,000	\$ 4,391,375	
Current			2,750,000		
			\$ 9,040,000		

The remaining 2008 Warrants are secured by net revenues from the operations of the Water System after payment of the cost of its operations and maintenance and by the monies and investments on deposit in trust funds created by the Trust Indenture under which the warrants were issued.

The Series 2008 Revenue Warrants were issued to redeem the Series 1998 Warrants and to pay costs of capital improvements to the Water System. The balance of unamortized issuance cost on the 2008 Warrants is \$340,628 and \$755,900 as of September 30, 2017 and 2016 respectively. The balance of unamortized premium on the 2008 Warrants is \$403,814 and \$896,120 at September 30, 2017 and 2016, respectively.

City of Huntsville Electric, Natural Gas, and Water Systems
Notes to Financial Statements

Years Ending September 30, 2017 and 2016



Note 4 – Long-Term Debt (Continued)

City of Huntsville, Alabama Water Revenue Warrants, Series 2013 - Water System Revenue Warrants, Series 2013 were issued in the original amount of \$180,000. The warrants mature serially on August 15 each year and bear interest according to stated maturity dates as follows:

2013 Water

Fiscal Year	Principal	Interest	Rate
2018	\$ 10,000	\$ 4,263	2.75%
2019	10,000	3,988	2.75%
2020	10,000	3,713	2.75%
2021	10,000	3,438	2.75%
2022	10,000	3,163	2.75%
2023	10,000	2,888	2.75%
2024	10,000	2,613	2.75%
2025	10,000	2,338	2.75%
2026	10,000	2,063	2.75%
2027	10,000	1,788	2.75%
2028	10,000	1,513	2.75%
2029	10,000	1,238	2.75%
2030	10,000	963	2.75%
2031	10,000	688	2.75%
2032	10,000	413	2.75%
2033	10,000	138	2.75%
	\$ 160,000		
Current	10,000		
	\$ 150,000		

The interest is payable on February 15 and August 15 of each year. Each installment of principal and interest shall bear interest after its due date until paid at a per annum rate of interest equal to 2% above the Authority Trustee Prime rate. The 2013 Series Warrants maturing in 2023 shall be subject to redemption prior to their respective maturities, at the option of the Board, on August 15, 2022, and on any date thereafter, as a whole or in part, at the redemption price equal to the principal amount thereof to be redeemed plus accrued interest to the redemption date.

The 2013 Warrants are secured by the net revenues from the operations of the Water System after payment of the cost of its operations and maintenance.

The Series 2013 Revenue Warrants were issued to pay costs of the Huntsville Utilities Variable Frequency Drive Installation project.

City of Huntsville Electric, Natural Gas, and Water Systems
Notes to Financial Statements

Years Ending September 30, 2017 and 2016



Note 4 – Long-Term Debt (Continued)

City of Huntsville, Alabama Water Revenue and Term Warrants, Series 2015 - Water System Revenue Warrants, Series 2015, were issued in the original amount of \$92,810,000. The warrants mature serially on November 1 each year and bear interest according to stated maturity dates as follows:

2015 Water

Fiscal Year	Principal	Interest	Rate
2018	\$ 3,175,000	\$ 4,021,225	3.00%
2019	3,155,000	3,910,500	4.00%
2020	3,300,000	3,781,400	4.00%
2021	3,450,000	3,629,150	5.00%
2022	3,575,000	3,507,150	2.00%
2023	3,700,000	3,378,900	5.00%
2024	3,890,000	3,189,150	5.00%
2025	4,090,000	2,989,650	5.00%
2026	4,300,000	2,779,900	5.00%
2027	4,520,000	2,559,400	5.00%
2028	4,755,000	2,327,525	5.00%
2029	4,995,000	2,083,775	5.00%
2030	5,255,000	1,827,525	5.00%
2031	5,525,000	1,558,025	3.38%
2032	5,760,000	1,322,700	4.00%
2033	5,975,000	1,106,000	5.00%
2034	6,250,000	830,250	5.00%
2035	6,570,000	509,750	5.00%
2036	6,910,000	172,750	5.00%
	\$ 89,150,000		
Current	3,175,000		
	\$ 85,975,000		

The Water System issued the Series 2015 Warrants for the purpose of (i) providing funds to pay the costs of various public capital improvements to the System more particularly including the construction of a new water treatment plant, and (ii) paying the costs of issuing the Series 2015 Warrants.

The Series 2015 Warrants bond indenture does not require the Water System to establish a reserve account but does require the Water System to establish a Warrant Fund equal to one twelfth (1/12) of the principal of the Series 2015 Warrants coming due on November 1 each year and one sixth (1/6) of the interest due each year.

The 2015 Warrants are secured by the net revenues from the operations of the Water System after payment of the cost of its operations and maintenance and by the monies and investments on deposit in trust funds created by the Trust Indenture under which the warrants were issued.

The 2015 issue contained issuance cost of \$406,698 that are classified as regulatory asset and amortized over 20 years. At September 30, 2017 and 2016, the unamortized regulatory asset is \$364,334 and \$384,669, respectively. The 2015 issue also contained a premium of \$12,610,058 that is being amortized over 20 years. At September 30, 2017 and 2016, the unamortized premium is \$11,296,510 and \$11,927,013, respectively.

City of Huntsville Electric, Natural Gas, and Water Systems
Notes to Financial Statements

Years Ending September 30, 2017 and 2016



Note 4 – Long-Term Debt (Continued)

City of Huntsville, Alabama Water Revenue and Term Warrants, Series 2016 - Water System Revenue Warrants, Series 2016, were issued in the original amount of \$10,425,000 to partially refund the Series 2008 Warrant. The warrants mature serially on November 1 each year and bear interest according to stated maturity dates as follows:

2016 Water

Fiscal Year	Principal	Interest	Rate
2018	\$ -	\$ 439,325	3.00%
2019	1,605,000	415,250	3.00%
2020	415,000	382,875	4.00%
2021	430,000	363,825	5.00%
2022	450,000	341,825	5.00%
2023	475,000	318,700	5.00%
2024	505,000	294,200	5.00%
2025	525,000	268,450	5.00%
2026	550,000	241,575	5.00%
2027	580,000	213,325	5.00%
2028	610,000	186,625	4.00%
2029	640,000	158,425	5.00%
2030	670,000	125,675	5.00%
2031	705,000	91,300	5.00%
2032	730,000	62,269	3.13%
2033	755,000	38,594	3.25%
2034	780,000	13,163	3.38%
	\$ 10,425,000		
Current	-		
	\$ 10,425,000		

Optional Redemption: Those of the Series 2016 Warrants having stated maturities on November 1, 2027, and thereafter, shall be subject to redemption and payment prior to maturity, at the option of the Issuer, as a whole or in part, on November 1, 2026, and on any date thereafter (and if in part, of such maturities as shall be selected by the Issuer, and if less than all the Series 2016 Warrants of a single maturity are to be redeemed, those to be redeemed to be selected by the Trustee by lot), , at and for a redemption price equal to the principal amount so redeemed plus accrued interest thereon to the rate fixed for redemption.

The 2016 Warrants were issued to advance refund \$12,710,000 of the outstanding Series 2008. As a result, that portion of the 2008 series bonds is considered defeased and the Utilities has removed the liability from its accounts. The City deposited the proceeds along with other resources into a separate escrow fund to provide for maturing installments of principal and interest on the old warrants. These funds were subsequently invested by the trustee in Federal Securities with varying maturities. The escrow funds are to provide for all installments due through and including May 1, 2018. The outstanding principal on the 2008 defeased bonds is \$12,710,000, at September 30, 2017.

As required by GASB Statement No. 23, the difference between the reacquisition price (funds required to refund the old debt) and the net carrying amount of the old debt is carried as deferred amount on debt refunding. The amount deferred on the reacquisition of the 2008 Warrants was \$703,877. The deferred amount on the 2008 Warrants includes \$81,860 of previous unamortized deferred refunding amount of \$386,404 and is net of



Note 4 – Long-Term Debt (Continued)

\$458,082 of an unamortized premium. The deferred amount of the 2008 Warrants is being amortized over the remaining life of the 2008 Warrants using the straight line method. Amortization of \$20,110 has been reported as part of interest expense for the fiscal year ended September 30, 2017.

The City partially refunded the 2008 Warrants to reduce the annual debt service requirements. The refunding decreased the total debt service payments over the next seventeen years by approximately \$3,550,000 and resulted in an economic gain (difference between the present values of the debt service payments on the old and new debt) for the City of approximately \$2,960,000.

The 2016 issue contained issuance cost of \$171,652 that are classified as regulatory asset and amortized over 20 years. At September 30, 2017, the unamortized regulatory asset is \$163,069. The 2016 issue also contained a premium of \$1,090,205 that is being amortized over 20 years. At September 30, 2017 and 2016, the unamortized premium is \$1,047,000.

Note 5 – Employee Benefits

The annual leave policy allows each employee to accumulate up to 35 days of annual leave. The Utilities follows the practice of accruing the dollar amount of the leave accrued per each employee on a monthly basis. Actual leave time taken is charged against this account. The sick leave policy provides that at the time of retirement, each employee will be paid 25% of the accumulated sick leave based on the employee’s average salary during the last five years. The Utilities follow the practice of accruing 25% of accumulated sick leave for the employees at year end who are vested in their sick leave. Accrued annual leave and sick leave at September 30, 2017 and 2016 are as follows:

	Accrued Annual Leave		Accrued Sick Leave	
	2017	2016	2017	2016
Electric System	2,442,996	2,445,021	633,054	753,281
Natural Gas System	764,766	833,306	384,598	470,251
Water System	851,597	829,065	390,678	415,865
Totals	4,059,359	4,107,392	1,408,330	1,639,397

Note 6 – Defined Benefit Pension Plan and Description

Plan Description

The Employees’ Retirement System of Alabama, an agency multiple-employer plan, was established October 1, 1945 under the provisions of Act 515 of the Legislature of 1945 for the purpose of providing retirement allowances and other specified benefits for state employees, State Police, and on an elective basis, to all cities, counties, towns and quasi-public organizations. The responsibility for the general administration and operation of ERS is vested in its Board of Control. The ERS Board of Control consists of 13 trustees. The Plan is administered by the Retirement Systems of Alabama (RSA). Title 36-Chapter 27 of the Code of Alabama grants the authority to establish and amend the benefit terms to the ERS Board of Control. The Plan issues a publicly available financial report that can be obtained at www.rsa-al.gov.



Note 6 – Defined Benefit Pension Plan and Description (Continued)

The ERS Board of Control consists of 13 trustees as follows:

- 1) The Governor, ex officio.
- 2) The State Treasurer, ex officio.
- 3) The State Personnel Director, ex officio.
- 4) The State Director of Finance, ex officio.
- 5) Three vested members of ERS appointed by the Governor for a term of four years, no two of whom are from the same department of state government nor from any department of which an ex officio trustee is the head.
- 6) Six members of ERS who are elected by members from the same category of ERS for a term of four years as follows:
 - a. Two retired members with one from the ranks of retired state employees and one from the ranks of retired employees of a city, county, or a public agency each of whom is an active beneficiary of ERS.
 - b. Two vested active state employees.
 - c. Two vested active employees of an employer participating in ERS pursuant to § 36-27-6.

Benefits Provided

State law establishes retirement benefits as well as death and disability benefits and any ad hoc increase in postretirement benefits for the ERS. Benefits for ERS members vest after 10 years of creditable service. State employees who retire after age 60 (52 for State Police) with 10 years or more of creditable service or with 25 years of service (regardless of age) are entitled to an annual retirement benefit, payable monthly for life. Local employees who retire after age 60 with 10 years or more of creditable service or with 25 or 30 years of service (regardless of age), depending on the particular entity's election, are entitled to an annual retirement benefit, payable monthly for life. Service and disability retirement benefits are based on a guaranteed minimum or a formula method, with the member receiving payment under the method that yields the highest monthly benefit. Under the formula method, members of the ERS (except State Police) are allowed 2.0125% of their average final compensation (highest 3 of the last 10 years) for each year of service. State Police are allowed 2.875% for each year of State Police service in computing the formula method.

Act 377 of the Legislature of 2012 established a new tier of benefits (Tier 2) for members hired on or after January 1, 2013. Tier 2 ERS members are eligible for retirement after age 62 (56 for State Police) with 10 years or more of creditable service and are entitled to an annual retirement benefit, payable monthly for life. Service and disability retirement benefits are based on a guaranteed minimum or a formula method, with the member receiving payment under the method that yields the highest monthly benefit. Under the formula method, Tier 2 members of the ERS (except State Police) are allowed 1.65% of their average final compensation (highest 5 of the last 10 years) for each year of service. State Police are allowed 2.375% for each year of state police service in computing the formula method.

Members are eligible for disability retirement if they have 10 years of credible service, are currently in-service, and determined by the RSA Medical Board to be permanently incapacitated from further performance of duty. Preretirement death benefits are calculated and paid to the beneficiary on the member's age, service credit, employment status and eligibility for retirement.



Note 6 – Defined Benefit Pension Plan and Description (Continued)

The ERS serves approximately 875 local participating employers. These participating employers include 294 cities, 65 counties, and 516 other public entities. The ERS membership includes approximately 85,874 participants. As of September 30, 2016, membership consisted of:

Retirees and beneficiaries currently receiving benefits	23,007
Terminated employees entitled to but not receiving benefits	1,155
Terminated employees not entitled to a benefit	6,654
Active Members	54,823
Post-DROP participants who are still in active service	235
Total	85,874

Contributions

Covered members of the ERS contributed 5% of earnable compensation to the ERS as required by statute until September 30, 2011. From October 1, 2011, to September 30, 2012, covered members of the ERS were required by statute to contribute 7.25% of earnable compensation. Effective October 1, 2012, covered members of the ERS are required by statute to contribute 7.50% of earnable compensation. Certified law enforcement, correctional officers, and firefighters of the ERS contributed 6% of earnable compensation as required by statute until September 30, 2011. From October 1, 2011, to September 30, 2012, certified law enforcement, correctional officers, and firefighters of the ERS were required by statute to contribute 8.25% of earnable compensation. Effective October 1, 2012, certified law enforcement, correctional officers, and firefighters of the ERS are required by statute to contribute 8.50% of earnable compensation. State Police of the ERS contribute 10% of earnable compensation. ERS local participating employers are not required by statute to increase contribution rates for their members.

Tier 2 covered members of the ERS contribute 6% of earnable compensation to the ERS as required by statute. Tier 2 certified law enforcement, correctional officers, and firefighters of the ERS are required by statute to contribute 7% of earnable compensation. Tier 2 State Police members of the ERS contribute 10% of earnable compensation. These contributions rates are the same for Tier 2 covered members of ERS local participating employers.

The ERS establishes rates based upon an actuarially determined rate recommended by an independent actuary. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with additional amounts to finance any unfunded accrued liability, the pre-retirement death benefit and administrative expenses of the Plan.

For the year ended September 30, 2017, Huntsville Utilities active Tier 1 employee contribution rate was 5% and Tier 2 was 6% of covered employee payroll. Huntsville Utilities contractually required contribution rate for the year ended September 30, 2016 was as follows:

	Electric System				Natural Gas System				Water System			
	2017		2016		2017		2016		2017		2016	
	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2
Normal Cost	1.50%	-0.16%	0.09%	1.59%	1.87%	0.64%	1.86%	1.37%	1.58%	-0.67%	1.54%	0.04%
Accrued Liability	16.82%	16.82%	15.56%	15.56%	8.38%	8.38%	8.63%	8.63%	13.20%	13.20%	12.77%	12.77%
Preretirement Death Benefit	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%
Administrative Expense	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%
	18.69%	17.03%	16.02%	17.52%	10.62%	9.39%	10.86%	10.37%	15.15%	12.90%	14.68%	13.18%

City of Huntsville Electric, Natural Gas, and Water Systems
Notes to Financial Statements

Years Ending September 30, 2017 and 2016



Note 6 – Defined Benefit Pension Plan and Description (Continued)

These required contribution rates are based upon the actuarial valuation dated September 30, 2014, a percent of annual pensionable payroll, and actuarially determined as an amount that, when combined with member contributions, is expected to finance the costs of benefits earned by members during the year, with an additional amount to finance any unfunded accrued liability. Total employer contributions to the pension plan for the year ended September 30, 2017 and 2016 from the Utilities were:

	Electric		Gas		Water	
	2017	2016	2017	2016	2017	2016
Employer Contributions	\$2,070,122	\$1,947,313	\$2,664,475	\$2,746,903	\$1,030,584	\$983,774

Net Pension Liability

The Utilities net pension liability was measured as of September 30, 2016, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as September 30, 2015 rolled forward to September 30, 2016 using standard roll-forward techniques as shown in the following table:

	Electric	Gas	Water
Total pension liability as of September 30, 2015	\$ 62,525,025	\$ 82,168,488	\$ 30,097,040
Entry Age Normal Cost for October 1, 2015 - September 30, 2016 (b)	719,480	1,721,132	441,272
Actual benefit payments and refunds for October 1, 2015 - September 30, 2016 (c)	(4,124,002)	(3,866,137)	(1,564,096)
Total pension liability as of September 30, 2016 = [(a) X (1.08)] + (b) - [(c) X (1.04)]	<u>\$ 63,957,545</u>	<u>\$ 86,442,317</u>	<u>\$ 31,319,415</u>

Actuarial Assumptions

The total pension liability as of September 30, 2016 actuarial valuation was based on the annual actuarial funding valuation report prepared as of September 30, 2015. The key actuarial assumptions are summarized below:

Inflation	2.75%
Salary increases	3.25% - 5.00%
Investment rate of return*	7.75%

*Net of pension plan investment expense

Mortality rates for ERS were based on the sex distinct RP-2000 Blue Collar Mortality Table Projected with Scale BB to 2020 with an adjustment of 125% at all ages for males and 120% for females at ages on and after age 78. The rates of mortality for the period after disability retirement are according to the sex distinct RP-2000 Disabled Retiree Mortality Table Projected with Scale BB to 2020 with an adjustment of 130% at all ages for females.



Note 6 – Defined Benefit Pension Plan and Description (Continued)

The actuarial assumptions used in the September 30, 2015 valuation were based on the results of an investigation of the economic and demographic experience for the ERS based upon participant data as of September 30, 2010.

The Board of Control accepted and approved these changes on January 27, 2012, which became effective at the beginning of fiscal year 2012.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis 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 asset allocation and best estimates of geometric real rates of return for each major asset class are as follows:

	Target Allocation	Long-Term Expected Rate of Return*
Fixed Income	17.00%	4.40%
U.S. Large Stocks	32.00%	8.00%
U.S. Mid Stocks	9.00%	10.00%
U.S. Small Stocks	4.00%	11.00%
International Developed Market Stocks	12.00%	9.50%
International Emerging Market Stocks	3.00%	11.00%
Alternatives	10.00%	10.10%
Real Estate	10.00%	7.50%
Cash	3.00%	1.50%
Total	100.00%	

*Includes assumed rate of Inflation of 2.50%.

Discount Rate

The discount rate used to measure the total pension liability was the long term rate of return, 7.75%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that the employer contributions will be made in accordance with the funding policy adopted by the ERS Board of Control. Based on those assumptions, components of the pension plan's fiduciary net position were projected to be available to make all projected future benefit payments of current pan 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.



Note 6 – Defined Benefit Pension Plan and Description (Continued)

Changes in Net Pension Liability

Electric System

	Increases (Decreases)		
	Total	Plan	Net
	Pension	Fiduciary	Pension
	Liability	Net Position	Liability
	(a)	(b)	(a) - (b)
Balances at September 30, 2015	<u>\$ 62,525,025</u>	<u>\$ 32,350,748</u>	<u>\$ 30,174,277</u>
Changes for the year:			
Service Cost	719,480	-	719,480
Interest	4,837,042	-	4,837,042
Changes of assumptions	1,593,475	-	1,593,475
Difference between expected and actual experience	577,633	-	577,633
Contributions - employer	-	1,991,515	(1,991,515)
Contributions - employee	-	589,360	(589,360)
Net investment income	-	3,217,256	(3,217,256)
Benefit payments, including refunds of employee contributions	(4,124,002)	(4,124,002)	-
Transfers among employers	23,428	23,428	-
Net Changes	<u>3,627,056</u>	<u>1,697,557</u>	<u>1,929,499</u>
Balances at September 30, 2016	<u>\$ 66,152,081</u>	<u>\$ 34,048,305</u>	<u>\$ 32,103,776</u>

Natural Gas System

	Increases (Decreases)		
	Total	Plan	Net
	Pension	Fiduciary	Pension
	Liability	Net Position	Liability
	(a)	(b)	(a) - (b)
Balances at September 30, 2015	<u>\$ 82,168,488</u>	<u>\$ 51,117,195</u>	<u>\$ 31,051,293</u>
Changes for the year:			
Service Cost	1,721,132	-	1,721,132
Interest	6,418,834	-	6,418,834
Changes of assumptions	1,964,837	-	1,964,837
Difference between expected and actual experience	659,005	-	659,005
Contributions - employer	-	2,756,354	(2,756,354)
Contributions - employee	-	1,357,425	(1,357,425)
Net investment income	-	5,220,617	(5,220,617)
Benefit payments, including refunds of employee contributions	(3,866,137)	(3,866,137)	-
Transfers among employers	42,460	42,460	-
Net Changes	<u>6,940,131</u>	<u>5,510,719</u>	<u>1,429,412</u>
Balances at September 30, 2016	<u>\$ 89,108,619</u>	<u>\$ 56,627,914</u>	<u>\$ 32,480,705</u>

City of Huntsville Electric, Natural Gas, and Water Systems
Notes to Financial Statements

Years Ending September 30, 2017 and 2016



Note 6 – Defined Benefit Pension Plan and Description (Continued)

Water System

	Increases (Decreases)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at September 30, 2015	\$ 30,097,040	\$ 17,044,831	\$ 13,052,209
Changes for the year:			
Service Cost	441,272	-	441,272
Interest	2,345,199	-	2,345,199
Changes of assumptions	684,563	-	684,563
Difference between expected and actual experience	976,221	-	976,221
Contributions - employer	-	983,775	(983,775)
Contributions - employee	-	350,968	(350,968)
Net investment income	-	1,722,031	(1,722,031)
Benefit payments, including refunds of employee contributions	(1,564,096)	(1,564,096)	-
Transfers among employers	(42,396)	(42,396)	-
Net Changes	<u>2,840,763</u>	<u>1,450,282</u>	<u>1,390,481</u>
Balances at September 30, 2016	\$ 32,937,803	\$ 18,495,113	\$ 14,442,690

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

The following table presents the City's net pension liability calculated using the discount rate of 8%, as well as what the City's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower (7%) or 1-percentage-point higher (9%) than the current rate:

	HU's Net Pension Liability		
	1.00% Decrease (6.75%)	Current Rate (7.75%)	1.00% Increase (8.75%)
Electric	\$ 39,765,469	\$ 32,103,776	\$ 25,642,705
Gas	\$ 44,085,519	\$ 32,480,705	\$ 22,781,021
Water	\$ 18,401,076	\$ 14,442,690	\$ 11,097,387

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the separately issued RSA Comprehensive Annual Report for the fiscal year ended September 30, 2016. The supporting actuarial information is included in the GASB Statement No. 68 Report for the ERS prepared as of September 30, 2016. The auditor's report dated September 18, 2017 on the Schedule of Changes in Fiduciary Net Position by Employer and accompanying notes is also available. The additional financial and actuarial information is available at www.rsa-al.gov.



Note 6 – Defined Benefit Pension Plan and Description (Continued)

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

For the year ended September 30, 2017, the City recognized the following pension expense.

	Electric System	Natural Gas System*	Water System
Recognized pension expense – 2017	\$ 3,034,513	\$ 3,163,407	\$ 1,356,173
Recognized pension expense – 2016	\$ 2,558,480	\$ 2,775,995	\$ 625,742

*A portion of Gas pension expenses is allocated to Electric and Water due to this expense including joint services.

At September 30, 2017, the City reported deferred outflows of resources and deferred inflows of resources related to pensions of the following sources:

<u>Electric System</u>	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Difference between expected an actual experience	\$ 1,206,276	\$ -
Changes of assumptions	1,344,495	
Net differences between projected and actual earnings on pension plan investments	301,189	-
Employer contributions subsequent to the measurement date	<u>2,070,122</u>	<u>-</u>
Totals	<u>\$ 4,922,082</u>	<u>\$ -</u>

<u>Natural Gas Systems</u>	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Difference between expected an actual experience	\$ 894,191	\$ -
Changes of assumptions	1,728,110	
Net differences between projected and actual earnings on pension plan investments	451,171	-
Employer contributions subsequent to the measurement date	<u>2,664,475</u>	<u>-</u>
Totals	<u>\$ 5,737,947</u>	<u>\$ -</u>

City of Huntsville Electric, Natural Gas, and Water Systems
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Years Ending September 30, 2017 and 2016



Note 6 – Defined Benefit Pension Plan and Description (Continued)

<u>Water Systems</u>	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Difference between expected an actual experience	\$ 987,637	\$ -
Changes of assumptions	597,909	-
Net differences between projected and actual earnings on pension plan investments	147,301	-
Employer contributions subsequent to the measurement date	<u>1,030,584</u>	<u>-</u>
Totals	<u><u>\$ 2,763,431</u></u>	<u><u>\$ -</u></u>

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

	<u>Electric System</u>	<u>Natural Gas System</u>	<u>Water System</u>
Year ended September 30:			
2018	\$ 594,623	\$ 481,846	\$ 273,387
2019	594,625	481,848	273,385
2020	835,194	841,272	395,063
2021	352,585	152,693	166,362
2022	339,235	376,622	225,222
Thereafter	135,698	739,191	399,428

Note 7 – Property and Rights Held Under Deferred Compensation Plan

Employees of the Utilities may participate in a deferred compensation plan adopted under the provisions of Internal Revenue Code Section 457 (Deferred Compensation Plans with Respect to Service for State and Local Governments). The deferred compensation plan is administered by an unrelated financial institution. Under the terms of an Internal Revenue Code Section 457 deferred compensation plan, all deferred compensation and income attributable to the investment of the deferred compensation amounts held by the financial institution, until paid or made available to the employees or beneficiaries, are the property of the Utilities subject only to the claims of the Utilities general creditors. In addition, the participants in the Plan have rights equal to those of the general creditors of the Utilities, and each participant's rights are equal to his or her share of their fair market value of the Plan assets. The Utilities believe that it is unlikely that Plan assets will be needed to satisfy claims of general creditors that might arise. These assets and related liabilities are not reflected on the books and records of the Utilities.



Note 8 – Post-Employment Benefits Other Than Pension Benefits

Plan description - The Utilities provides certain post-retirement health and life insurance benefits to all employees who retire from the Utilities under the provisions of the qualified plan and a minimum of 20 years of service. As of September 30, 2017, approximately 252 retirees meet those eligibility requirements. The plan includes health, prescription drug, and life insurance benefits. The plan does not issue stand-alone financial statements.

Funding policy - The benefits are not provided under any statutory or contractual authority, but rather by administrative decision. For 2017, the Utilities contributed \$2,263,168.

Annual OPEB cost and net OPEB obligation - The Board’s annual other post-retirement benefit (OPEB) cost is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of the GASB Statement No. 45, *Accounting and Financial Reporting by Employers of Postemployment Benefits Other Than Pensions*. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed 30 years.

Actuarial Valuation as of September 30, 2017

	<u>Electric</u>	<u>Gas</u>	<u>Water</u>	<u>Total</u>
<u>Summary of Employer Census Data</u>				
Number of active members	323	169	180	671
Annual compensation	\$ 24,075,293	\$ 10,796,246	\$ 11,234,089	\$ 46,105,628
Number of retired participants	133	56	63	252
<u>Employer Contribution Rates</u>				
Normal cost	2.03%	2.26%	2.31%	2.15%
Accrued liability	5.66%	5.37%	5.25%	5.49%
Total				

The following table shows the components of the Utilities’ annual OPEB cost for the year and changes in the Utilities’ net OPEB obligation as of:

City of Huntsville Electric, Natural Gas, and Water Systems
Notes to Financial Statements

Years Ending September 30, 2017 and 2016



Note 8 – Post-Employment Benefits Other Than Pension Benefits

<u>Electric</u>	Fiscal Year		Annual	Net OPEB
	Beginning	ARC	OPEB Cost	Obligation
	10/1/2011	\$ 912,387	\$ 912,387	\$ -
	10/1/2012	\$ 992,733	\$ 992,733	\$ -
	10/1/2013	\$ 1,113,180	\$ 1,113,180	\$ -
	10/1/2014	\$ 1,172,814	\$ 1,172,814	\$ -
	10/1/2015	\$ 1,179,146	\$ 1,179,146	\$ -
	10/1/2016	\$ 1,856,164	\$ 1,329,153	\$ 527,011

<u>Gas</u>	Fiscal Year		Annual	Net OPEB
	Beginning	ARC	OPEB Cost	Obligation
	10/1/2011	\$ 370,400	\$ 370,400	\$ -
	10/1/2012	\$ 324,611	\$ 324,611	\$ -
	10/1/2013	\$ 359,025	\$ 359,025	\$ -
	10/1/2014	\$ 369,816	\$ 369,816	\$ -
	10/1/2015	\$ 371,813	\$ 371,813	\$ -
	10/1/2016	\$ 806,199	\$ 419,511	\$ 386,688

<u>Water</u>	Fiscal Year		Annual	Net OPEB
	Beginning	ARC	OPEB Cost	Obligation
	10/1/2011	\$ 399,889	\$ 399,889	\$ -
	10/1/2012	\$ 420,017	\$ 420,017	\$ -
	10/1/2013	\$ 451,836	\$ 451,836	\$ -
	10/1/2014	\$ 466,811	\$ 466,811	\$ -
	10/1/2015	\$ 469,690	\$ 469,690	\$ -
	10/1/2016	\$ 860,677	\$ 514,505	\$ 346,172

Funded status and funding progress - As of September 30, 2017, the most recent actuarial valuation date, the Plan was 18.03% funded. The actuarial accrued liability for benefits was approximately \$49,834,043 and the actuarial value of assets was \$8,982,691 resulting in an unfunded actuarial accrued liability of \$40,851,352. The covered payroll was \$46,105,628 for fiscal year 2017, and the ratio of the UAAL to covered payroll was 88.6%.

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 about whether the actuarial value of Plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.



Note 8 – Post-Employment Benefits Other Than Pension Benefits (Continued)

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 used 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 the calculations.

In the actuarial valuations, the projected unit credit method was used. The actuarial assumptions are as follows:

	<u>2017</u>	<u>2016</u>
Weighted-average assumptions as of December 31:		
Discount Rate	5.00%	6.25%
Health-care cost trend rate assumed for next year	7.75%	5.75%
Rate to which the cost trend is assumed to decline, ultimate trend rate	5.00%	5.00%
Year that the rate reaches the ultimate trend rate	2022	2019

The Utilities’ OPEB actuarial valuation as of September 30, 2016 employed the projected unit credit method, using a level percentage of payroll, amortized over an open 30 year period. Because the unfunded actuarial liability (“UAL”) is being amortized by an open or rolling amortization period (with re-amortization of the UAL in each valuation), the amortization amounts will never fully eliminate the UAL. Also, the amortization of the UAL using the current amortization method results in payments less than the “interest only” payments on the UAL. Payments less than the interest only amount will result in the UAL increasing. The investment return assumption (or discount rate) is to be selected as the estimated long-term investment return on the investments that are expected to be used to finance the payment of benefits. The Utilities selected a 5.00% discount rate, representing the expected return on assets invested. Health care costs are trended at rate of Pre-Medicare rate of 7.75% and Post-Medicare rate of 5.75% with an ultimate rate of 5.0%. The ultimate rate trends to be reached in 2022 and 2019 respectively.

While the Utilities established an irrevocable trust to pay its OPEB, full funding was not made until October of 2008 after GASB Codification Section P50: *Postemployment Benefits Other Than Pension Benefits – Employer Reporting* was implemented. The market value of the assets as of September 30, 2016 was \$8,982,691. The Utilities’ OPEB actuarial valuation as of September 30, 2016 reported present value of future accrued unfunded liability as \$40,851,352 with an actuarial accrued liability of \$49,834,043. Future funding will be made each fiscal year.

Note 9 – City of Huntsville – Payment in Lieu of Taxes

Because the Utilities are component units of the City of Huntsville, they are not subject to income taxes, either at the federal or state level. The Electric System, however, does pay to the City of Huntsville a tax equivalent which is determined by applying the current property tax rates to net plant in service at the end of the preceding year. The Natural Gas and Water Systems each pay a tax equivalent which is a predetermined (6%) percentage of sales revenue. The tax equivalent for the years ended September 30, 2017 and 2016 are as follows:



Note 9 – City of Huntsville – Payment in Lieu of Taxes (Continued)

	<u>2017</u>	<u>2016</u>
Electric System	\$ 11,296,708	\$ 11,437,077
Natural Gas System	\$ 1,981,789	\$ 2,108,995
Water System	\$ 2,623,614	\$ 2,452,565

Note 10 – Gas Purchase Commitments

The Gas System has entered into a purchase contract with Tennessee Energy Acquisition Corporation to establish the purchase price for natural gas. The contracts allow the Gas System to lock in certain volumes of gas to be purchased and prices for that gas. Under the contract, the Gas System has committed to purchase 1,572,500 MMBtus per year through December 2026 at index less .56 cents.

Note 11 – Electric Purchase Commitments

Under its wholesale power agreement, the Electric System is committed to purchase its electric power and energy requirement from the Tennessee Valley Authority. The rates for such purchases are subject to review periodically.

Note 12 – Risk Management

The Utilities are exposed to various risks such as torts, theft, damage, and destruction of assets; errors and omissions; and natural disasters and injuries to employees. Potential losses from these risks are mitigated with a combination of commercial and self-insurance. Commercial insurance coverage is combined for the Electric, Water, and Gas Utilities with the expense prorated to each department on a predetermined percentage. Coverage is provided as follows:

Blanket real and personal property	
Real property	\$ 350,000,000
Flood and earthquake	10,000,000
Blanket crime	1,000,000
Cyber	3,000,000
Automobile liability	1,000,000
Public officials and employees	
Electric	5,000,000
Gas and Water	5,000,000
Workers compensation:	
Bodily injury (accident and disease)	Statutory
Excess coverage per occurrence (SIR)	1,000,000
Comprehensive general liability	Self-insured



Note 13 – Commitments and Contingencies

General Litigation

The Utilities are a party to a number of legal actions arising in the ordinary course of its business. In management's opinion, the Utilities have adequate legal defenses, insurance coverage, and/or self-insured reserves respecting each of these actions and does not believe that they will materially affect the Utilities' operations or financial position.

Construction Commitment

The Utilities entered into two construction contracts during fiscal year 2017 which are for the purpose of constructing a fiber network. The total contract for each vendor is as follows:

	<u>Original Contract Amount</u>	<u>Amount Paid</u>
Constructing a fiber network		
Bear Communication	\$80,988,688	\$4,046,694
Associated Diversified Services Inc.	\$17,521,428	\$9,072,741

Note 14 – Customer Deposits

During 2017 and 2016, the Utilities had the following Customer Deposit transactions:

2017			
	<u>Deposits</u>	<u>Accrued Interest</u>	<u>Total</u>
Electric System	\$ 35,354,485	\$ 9,305,600	\$ 44,660,085
Natural Gas System	3,231,945	875,521	4,107,466
Water System	4,220,792	1,193,568	5,414,360
	<u>\$ 42,807,222</u>	<u>\$ 11,374,689</u>	<u>\$ 54,181,911</u>

2016			
	<u>Deposits</u>	<u>Accrued Interest</u>	<u>Total</u>
Electric System	\$ 29,804,497	\$ 8,279,948	\$ 38,084,445
Natural Gas System	8,354,509	2,413,669	10,768,178
Water System	3,963,490	1,280,217	5,243,707
	<u>\$ 42,122,496</u>	<u>\$ 11,973,834</u>	<u>\$ 54,096,330</u>



Note 14 – Customer Deposits (Continued)

Deposit Transactions

	2017				
	Beginning Balance	New deposits	Returned Deposits	Deposit Allocation	Ending Balance
Electric System	\$ 29,804,497	\$ 7,341,995	\$ (6,775,434)	\$ 4,983,427	\$ 35,354,485
Natural Gas System	8,354,509	671,172	(619,379)	(5,174,357)	3,231,945
Water System	3,963,490	876,523	(808,885)	189,664	4,220,792
	<u>\$ 42,122,496</u>	<u>\$ 8,889,690</u>	<u>\$ (8,203,698)</u>	<u>\$ (1,266)</u>	<u>\$ 42,807,222</u>

	2016			
	Beginning Balance	New deposits	Returned Deposits	Ending Balance
Electric System	\$ 29,513,801	\$ 6,228,276	\$ (5,937,580)	\$ 29,804,497
Natural Gas System	8,047,307	1,745,850	(1,438,648)	8,354,509
Water System	3,818,604	828,254	(683,368)	3,963,490
	<u>\$ 41,379,712</u>	<u>\$ 8,802,380</u>	<u>\$ (8,059,596)</u>	<u>\$ 42,122,496</u>

Note 15 – Subsequent Events

The Utilities have evaluated subsequent events between September 30, 2017 and February 14, 2018, the date the financial statements were available to be issued, and there are none to disclose.

City of Huntsville Electric, Natural Gas, and Water Systems
Required Supplementary Information

Schedule of Changes in the Net Pension Liability



<u>ELECTRIC SYSTEM</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
TOTAL PENSION LIABILITY:			
Service Cost	\$ 719,480	\$ 711,294	\$ 731,584
Interest	4,837,042	4,638,804	4,509,630
Difference in expected an actual experience	577,633	1,097,266	-
Changes of assumptions	1,593,475	-	-
Benefit payments, including refunds of employee contributions	(4,124,002)	(3,814,789)	(3,438,283)
Transfer among employers	23,428	-	-
Net change in total pension liability	<u>3,627,056</u>	<u>2,632,575</u>	<u>1,802,931</u>
Total pension liability - beginning	<u>62,525,025</u>	<u>59,892,450</u>	<u>58,089,519</u>
Total pension liability - end (a)	<u>\$ 66,152,081</u>	<u>\$ 62,525,025</u>	<u>\$ 59,892,450</u>
PLAN FIDUCIARY NET POSITION:			
Contribution - employer	\$ 1,991,515	\$ 1,891,153	\$ 1,956,167
Contribution - member	589,360	548,691	544,943
Net investment income	3,217,256	387,215	3,616,105
Benefit payments, including refunds of employee contributions	(4,124,002)	(3,814,789)	(3,438,283)
Transfers among employers	23,428	25,241	-
Net change in plan fiduciary net position	<u>1,697,557</u>	<u>(962,489)</u>	<u>2,678,932</u>
Plan net position - beginning	<u>32,350,748</u>	<u>33,313,237</u>	<u>30,634,305</u>
Plan net position - end (b)	<u>\$ 34,048,305</u>	<u>\$ 32,350,748</u>	<u>\$ 33,313,237</u>
Net pension liability - ending (a) - (b)	\$ 32,103,776	\$ 30,174,277	\$ 26,579,213
Plan fiduciary net position as a percentage of the total pension liability	51.47%	51.74%	55.62%
Covered employee payroll*	\$ 11,425,176	\$ 10,519,400	\$ 10,518,022
Net pension liability as a percentage of covered employee payroll	280.99%	286.84%	252.70%

* Employer's covered payroll during the measurement period is the total covered payroll (not just pensionable payroll). For FY2017, the measurement period is October 1, 2015 - September 30, 2016. GASB issued a statement "Pension Issues" in March, 2016 to redefine covered payroll for FY2017.

City of Huntsville Electric, Natural Gas, and Water Systems
Required Supplementary Information

Schedule of Changes in the Net Pension Liability



<u>GAS SYSTEM</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
TOTAL PENSION LIABILITY:			
Service Cost	\$ 1,721,132	\$ 1,573,503	\$ 1,505,782
Interest	6,418,834	6,078,446	5,786,806
Difference in expected an actual experience	659,005	435,578	-
Changes of assumptions	1,964,837	-	-
Benefit payments, including refunds of employee contributions	(3,866,137)	(3,799,232)	(3,494,950)
Transfer among employers	42,460	-	-
Net change in total pension liability	6,940,131	4,288,295	3,797,638
Total pension liability - beginning	82,168,488	77,880,193	74,082,555
Total pension liability - end (a)	<u>\$ 89,108,619</u>	<u>\$ 82,168,488</u>	<u>\$ 77,880,193</u>
PLAN FIDUCIARY NET POSITION:			
Contribution - employer	\$ 2,756,354	\$ 2,552,653	\$ 2,501,138
Contribution - member	1,357,425	1,215,689	1,134,390
Net investment income	5,220,617	599,470	5,401,049
Benefit payments, including refunds of employee contributions	(3,866,137)	(3,799,232)	(3,494,950)
Transfers among employers	42,460	7,562	41,272
Net change in plan fiduciary net position	5,510,719	576,142	5,582,899
Plan net position - beginning	51,117,195	50,541,053	44,958,154
Plan net position - end (b)	<u>\$ 56,627,914</u>	<u>\$ 51,117,195</u>	<u>\$ 50,541,053</u>
Net pension liability - ending (a) - (b)	\$ 32,480,705	\$ 31,051,293	\$ 27,339,140
Plan fiduciary net position as a percentage of the total pension liability	63.55%	62.21%	64.90%
Covered employee payroll*	\$ 26,520,532	\$ 24,318,743	\$ 22,247,041
Net pension liability as a percentage of covered employee payroll	122.47%	127.68%	122.90%

* Employer's covered payroll during the measurement period is the total covered payroll (not just pensionable payroll). For FY2017, the measurement period is October 1, 2015 - September 30, 2016. GASB issued a statement "Pension Issues" in March, 2016 to redefine covered payroll for FY2017.

City of Huntsville Electric, Natural Gas, and Water Systems
Required Supplementary Information

Schedule of Changes in the Net Pension Liability



<u>WATER SYSTEM</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
TOTAL PENSION LIABILITY:			
Service Cost	\$ 441,272	\$ 402,811	\$ 386,061
Interest	2,345,199	2,243,404	2,164,859
Difference in expected an actual experience	976,221	194,984	-
Changes of assumptions	684,563	-	-
Benefit payments, including refunds of employee contributions	(1,564,096)	(1,573,407)	(1,564,812)
Transfer among employers	(42,396)	-	-
Net change in total pension liability	<u>2,840,763</u>	<u>1,267,792</u>	<u>986,108</u>
Total pension liability - beginning	<u>30,097,040</u>	<u>28,829,248</u>	<u>27,843,140</u>
Total pension liability - end (a)	<u>\$ 32,937,803</u>	<u>\$ 30,097,040</u>	<u>\$ 28,829,248</u>
PLAN FIDUCIARY NET POSITION:			
Contribution - employer	\$ 983,775	\$ 884,789	\$ 822,264
Contribution - member	350,968	334,737	291,847
Net investment income	1,722,031	199,105	1,828,686
Benefit payments, including refunds of employee contributions	(1,564,096)	(1,573,407)	(1,564,812)
Transfers among employers	(42,396)	480,153	(275,616)
Net change in plan fiduciary net position	<u>1,450,282</u>	<u>325,377</u>	<u>1,102,369</u>
Plan net position - beginning	<u>17,044,831</u>	<u>16,719,454</u>	<u>15,617,085</u>
Plan net position - end (b)	<u>\$ 18,495,113</u>	<u>\$ 17,044,831</u>	<u>\$ 16,719,454</u>
Net pension liability - ending (a) - (b)	\$ 14,442,690	\$ 13,052,209	\$ 12,109,794
Plan fiduciary net position as a percentage of the total pension liability	56.15%	56.63%	57.99%
Covered employee payroll*	\$ 7,107,229	\$ 6,438,733	\$ 5,870,735
Net pension liability as a percentage of covered employee payroll	203.21%	202.71%	206.30%

* Employer's covered payroll during the measurement period is the total covered payroll (not just pensionable payroll). For FY2017, the measurement period is October 1, 2015 - September 30, 2016. GASB issued a statement "Pension Issues" in March, 2016 to redefine covered payroll for FY2017.

**City of Huntsville Electric, Natural Gas, and Water Systems
Required Supplementary Information**

Schedule of Employer Contributions



<u>ELECTRIC SYSTEM</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Actuarially determined contribution **	\$ 2,070,122	\$ 1,947,313	\$ 1,890,601
Contributions in relation to the actuarially determined contribution	<u>2,070,122</u>	<u>1,947,313</u>	<u>1,890,601</u>
Contribution deficiency	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered employee payroll ***	\$ 11,424,043	\$ 11,568,353	\$ 10,915,642
Contributions as a percentage of covered employee payroll	18.12%	16.83%	17.32%

** The amount of employer contributions related to normal and accrued liability components of employer rate net of any refunds or error service payments. The Schedule of Employer Contributions is based on the 12 month period of the underlying financial statements.

*** Employer's covered payroll for FY2017 is the total covered payroll for the 12 month period of the underlying financial statement.

Notes to Schedule

Actuarially determined contribution rates are calculated as of September 30, three years prior to the end of the fiscal year in which contributions are reported. Contributions for fiscal year 2017 were based on the September 30, 2014 actuarial valuation.

Methods and assumptions used to determine contribution rates for the period October 1, 2016 to September 30, 2017:

Actuarial cost method	Entry Age
Amortization method	Level percent closed
Remaining amortization period	28 years
Asset valuation method	Five years smoothed market
Inflation	3.00%
Salary increases	3.75 - 7.25%, including inflation
Investment rate of return	8.00%, net of pension plan investment

**City of Huntsville Electric, Natural Gas, and Water Systems
Required Supplementary Information**

Schedule of Employer Contributions



<u>GAS SYSTEM</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Actuarially determined contribution **	\$ 2,664,475	\$ 2,746,903	\$ 2,551,653
Contributions in relation to the actuarially determined contribution	<u>2,664,475</u>	<u>2,746,903</u>	<u>2,551,653</u>
Contribution deficiency	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered employee payroll ***	\$ 26,518,350	\$ 26,059,398	\$ 23,900,521
Contributions as a percentage of covered employee payroll	10.05%	10.54%	10.68%

** The amount of employer contributions related to normal and accrue liability components of employer rate net of any refunds or service payments. The Schedule of Employer Contributions is based on the 12 month period of the underlying financial statements.

*** Employer's covered payroll for FY2017 is the total covered payroll for the 12 month period of the underlying financial statement.

Notes to Schedule

Actuarially determined contribution rates are calculated as of September 30, three years prior to the end of the fiscal year in which contributions are reported. Contributions for fiscal year 2017 were based on the September 30, 2014 actuarial valuation.

Methods and assumptions used to determine contribution rates for the period October 1, 2016 to September 30, 2017:

Actuarial cost method	Entry Age
Amortization method	Level percent closed
Remaining amortization period	26 years
Asset valuation method	Five years smoothed market
Inflation	3.00%
Salary increases	3.75 - 7.25%, including inflation
Investment rate of return	8.00%, net of pension plan investment expense, including inflation

**City of Huntsville Electric, Natural Gas, and Water Systems
Required Supplementary Information**

Schedule of Employer Contributions



<u>WATER SYSTEM</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Actuarially determined contribution **	\$ 1,030,584	\$ 983,774	\$ 82,264
Contributions in relation to the actuarially determined contribution	<u>1,030,584</u>	<u>983,774</u>	<u>82,264</u>
Contribution deficiency	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered employee payroll ***	\$ 7,076,595	\$ 6,747,417	\$ 6,260,841
Contributions as a percentage of covered employee payroll	14.56%	14.58%	13.13%

** The amount of employer contributions related to normal and accrue liability components of employer rate net of any refunds or error service payments. The Schedule of Employer Contributions is based on the 12 month period of the underlying financial statements.

*** Employer's covered payroll for FY2017 is the total covered payroll for the 12 month period of the underlying financial statement.

Notes to Schedule

Actuarially determined contribution rates are calculated as of September 30, three years prior to the end of the fiscal year in which contributions are reported. Contributions for fiscal year 2017 were based on the September 30, 2014 actuarial valuation.

Methods and assumptions used to determine contribution rates for the period October 1, 2016 to September 30, 2017:

Actuarial cost method	Entry Age
Amortization method	Level percent closed
Remaining amortization period	29 years
Asset valuation method	Five years smoothed market
Inflation	3.00%
Salary increases	3.75 - 7.25%, including inflation
Investment rate of return	8.00%, net of pension plan investment expense, including inflation

**City of Huntsville Electric, Natural Gas, and Water Systems
Required Supplementary Information**

Schedule of Funding Progress for the Retiree Health Plan



Electric

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)*	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
10/1/2012	\$ 3,291,897	\$ 16,714,702	\$ 13,422,805	19.69%	\$ 20,724,863	64.77%
10/1/2014	\$ 3,985,372	\$ 20,253,519	\$ 16,268,147	19.68%	\$ 19,822,141	82.07%
10/1/2016	\$ 4,834,733	\$ 26,822,062	\$ 21,987,329	18.03%	\$ 24,075,293	91.33%

Gas

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)*	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
10/1/2012	\$ 1,068,024	\$ 5,422,923	\$ 4,354,899	19.69%	\$ 5,961,266	73.05%
10/1/2014	\$ 1,479,381	\$ 7,518,167	\$ 6,038,786	19.68%	\$ 9,106,431	66.31%
10/1/2016	\$ 2,056,519	\$ 11,409,125	\$ 9,352,606	18.03%	\$ 10,796,246	86.63%

Water

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)*	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
10/1/2012	\$ 1,316,199	\$ 6,698,273	\$ 5,379,074	19.69%	\$ 8,541,622	62.97%
10/1/2014	\$ 1,566,590	\$ 7,961,355	\$ 6,394,765	19.68%	\$ 8,663,415	73.81%
10/1/2016	\$ 2,091,438	\$ 11,602,856	\$ 9,511,418	18.03%	\$ 11,234,089	84.67%

City of Huntsville Electric, Natural Gas, and Water Systems

Supplementary Information

Statistical Highlights – Electric System



Years ending September 30,	2017	2016	2015
OPERATING REVENUE			
Residential	\$ 231,572,251	\$ 233,653,455	\$ 242,941,029
Large Commercial and Industrial	200,194,454	197,260,436	197,704,139
Small Commercial	36,066,016	33,726,964	34,676,255
Public Street and Highway Lighting	4,863,964	4,714,640	4,709,629
Other Operating Revenue	13,376,089	11,045,344	11,747,008
Total Operating Revenue	\$ 486,072,774	\$ 480,400,839	\$ 491,778,060
CUSTOMERS			
Residential	162,931	160,556	157,841
Large Commercial and Industrial	2,872	3,541	3,403
Small Commercial	18,485	17,599	17,505
Public Street and Highway Lighting	640	642	631
Total Customers	184,928	182,338	179,380
KWH SALES (THOUSANDS)			
Residential	2,298,238	2,421,246	2,561,189
Large Commercial and Industrial	2,252,088	2,336,682	2,326,710
Small Commercial	340,273	326,349	335,913
Public Street and Highway Lighting	35,604	35,779	35,503
Total KWH Sales (Thousands)	4,926,203	5,120,055	5,259,315
OPERATING REVENUE/CUSTOMER			
Residential	\$ 1,421.29	\$ 1,455.28	\$ 1,539.15
Large Commercial and Industrial	69,705.59	55,707.55	58,097.01
Small Commercial	1,951.10	1,916.41	1,980.93
Public Street and Highway Lighting	7,599.94	7,343.68	7,463.75
OPERATING REVENUE/KWH			
Residential	\$ 0.101	\$ 0.097	\$ 0.095
Large Commercial and Industrial	0.089	0.084	0.085
Small Commercial	0.106	0.103	0.103
Public Street and Highway Lighting	0.137	0.132	0.133
KWH/CUSTOMER			
Residential	14,105.59	15,080.38	16,226.38
Large Commercial and Industrial	784,153.27	659,893.18	683,723.19
Small Commercial	18,408.04	18,543.60	19,189.55
Public Street and Highway Lighting	55,631.32	55,730.28	56,265.23
OPERATING REVENUE			
Residential	47.6%	48.6%	49.4%
Large Commercial and Industrial	41.2%	41.1%	40.2%
Small Commercial	7.4%	7.0%	7.1%
Public Street and Highway Lighting	1.0%	1.0%	1.0%
Other Operating Revenue	2.8%	2.3%	2.4%
CUSTOMERS			
Residential	88.1%	88.1%	88.0%
Large Commercial and Industrial	1.6%	1.9%	1.9%
Small Commercial	10.0%	9.7%	9.8%
Public Street and Highway Lighting	0.3%	0.4%	0.4%
Percentage of kWh Sold			
Residential	46.7%	47.3%	48.7%
Large Commercial and Industrial	45.7%	45.6%	44.2%
Small Commercial	6.9%	6.4%	6.4%
Public Street and Highway Lighting	0.7%	0.7%	0.7%

City of Huntsville Electric, Natural Gas, and Water Systems

Supplementary Information

Statistical Highlights – Electric System



<u>2017</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
HUNTSVILLE HOSPITAL	\$ 7,916,573	HUNTSVILLE HOSPITAL	91,476,210 KWH
HUNTSVILLE SCHOOLS	\$ 6,116,198	TMMAL	79,137,907 KWH
TMMAL	\$ 5,257,134	HUNTSVILLE SCHOOLS	63,844,322 KWH
TECHNICOLOR HOME ENTERTAINMENT SERVICES	\$ 4,056,149	TECHNICOLOR HOME ENTERTAINMENT SERVICES	63,317,066 KWH
HUNTSVILLE UTILITIES	\$ 3,888,189	SAINT GOBAIN CERAMIC	55,092,164 KWH
WAL MART STORES EAST	\$ 3,797,528	KENNAMETAL INC	47,615,774 KWH
KENNAMETAL INC	\$ 3,640,054	WAL MART STORES EAST	44,927,523 KWH
SAINT GOBAIN CERAMIC	\$ 3,579,830	HUNTSVILLE UTILITIES	42,074,252 KWH
MAD CO BD OF ED	\$ 3,046,318	BASF CATALYSTS LLC	37,434,940 KWH
ALABAMA A&M UNIV	\$ 3,018,277	ALABAMA A&M UNIV	34,583,277 KWH
<u>2016</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
HUNTSVILLE HOSPITAL	\$ 7,921,758	HUNTSVILLE HOSPITAL	96,341,971 KWH
HUNTSVILLE SCHOOLS	\$ 5,955,364	TMMAL	80,548,955 KWH
TMMAL	\$ 5,700,091	HUNTSVILLE SCHOOLS	65,719,813 KWH
WAL MART STORES EAST	\$ 3,530,203	SAINT GOBAIN CERAMIC	61,331,711 KWH
HUNTSVILLE UTILITIES	\$ 3,502,248	KENNAMETAL INC	47,127,600 KWH
KENNAMETAL INC	\$ 3,446,322	WAL MART STORES EAST	43,661,191 KWH
SAINT GOBAIN CERAMIC	\$ 3,417,811	HUNTSVILLE UTILITIES	40,306,003 KWH
MAD CO BD OF ED	\$ 3,103,991	BASF CATALYSTS LLC	37,752,770 KWH
ALABAMA A&M UNIV	\$ 2,881,438	PPG INDUSTRIES INC WKS #22	34,734,913 KWH
HUNTSVILLE CITY ENG	\$ 2,853,280	ALABAMA A&M UNIV	34,580,588 KWH
<u>2015</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
HUNTSVILLE HOSPITAL	\$ 7,806,720	HUNTSVILLE HOSPITAL	95,419,310 KWH
HUNTSVILLE SCHOOLS	\$ 5,864,574	CINRAM GROUP INC	66,951,112 KWH
TMMAL	\$ 4,818,758	HUNTSVILLE SCHOOLS	65,082,291 KWH
CINRAM GROUP INC	\$ 4,299,194	TMMAL	63,941,384 KWH
SAINT GOBAIN CERAMIC	\$ 4,105,450	SAINT GOBAIN CERAMIC	62,714,815 KWH
KENNAMETAL INC	\$ 3,461,934	KENNAMETAL INC	45,906,054 KWH
MAD CO BD OF ED	\$ 3,337,956	WAL MART STORES EAST	38,139,827 KWH
HUNTSVILLE UTILITIES	\$ 3,258,505	HUNTSVILLE UTILITIES	37,636,976 KWH
WAL MART STORES EAST	\$ 3,093,540	BASF CATALYSTS LLC	36,812,854 KWH
ALABAMA A&M UNIV	\$ 2,905,902	ALABAMA A&M UNIV	35,257,475 KWH
<u>2014</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
HUNTSVILLE HOSPITAL	\$ 7,922,834	HUNTSVILLE HOSPITAL	95,347,815 KWH
HUNTSVILLE SCHOOLS	\$ 6,026,834	SAINT GOBAIN CERAMIC	77,326,150 KWH
SAINT GOBAIN CERAMIC	\$ 5,098,165	HUNTSVILLE SCHOOLS	65,636,843 KWH
TMMAL	\$ 4,588,326	CINRAM GROUP INC	65,588,519 KWH
CINRAM GROUP INC	\$ 4,358,479	TMMAL	61,172,425 KWH
MAD CO BD OF ED	\$ 3,641,409	KENNAMETAL INC	44,530,338 KWH
KENNAMETAL INC	\$ 3,413,876	BASF CATALYSTS LLC	38,129,219 KWH
HUNTSVILLE UTILITIES	\$ 3,088,736	MAD CO BD OF ED	36,351,165 KWH
ALABAMA A&M UNIV	\$ 2,970,995	ALABAMA A&M UNIV	35,456,535 KWH
INTERNATIONAL DIESEL OF ALABAMA LLC	\$ 2,723,420	HUNTSVILLE UTILITIES	34,582,906 KWH

City of Huntsville Electric, Natural Gas, and Water Systems

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Statistical Highlights – Electric System



<u>2013</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
HUNTSVILLE HOSPITAL	\$ 7,803,510	HUNTSVILLE HOSPITAL	95,957,180 KWH
HUNTSVILLE SCHOOLS	\$ 5,870,398	SAINT GOBAIN CERAMIC	70,489,469 KWH
SAINT GOBAIN CERAMIC	\$ 4,827,358	HUNTSVILLE SCHOOLS	64,745,873 KWH
TDY INDUSTRIES LLC	\$ 4,595,960	TDY INDUSTRIES LLC	60,744,649 KWH
TMMAL	\$ 4,512,874	TMMAL	59,120,158 KWH
MAD CO BD OF ED	\$ 3,746,604	MAD CO BD OF ED	38,449,712 KWH
INTERNATIONAL DIESEL OF ALABAMA LLC	\$ 3,111,036	INTERNATIONAL DIESEL OF ALABAMA LLC	36,688,247 KWH
HUNTSVILLE UTILITIES	\$ 2,938,467	BASF CATALYSTS LLC	35,253,238 KWH
ALABAMA A&M UNIV	\$ 2,894,441	ALABAMA A&M UNIV	35,223,453 KWH
BOEING COMPANY	\$ 2,493,474	PPG INDUSTRIES INC WKS #22	33,881,693 KWH
<u>2012</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
HUNTSVILLE HOSPITAL	\$ 7,911,333	HUNTSVILLE HOSPITAL	97,904,625 KWH
HUNTSVILLE SCHOOLS	\$ 5,711,072	SAINT GOBAIN CERAMIC	72,744,443 KWH
SAINT GOBAIN CERAMIC	\$ 4,638,806	HUNTSVILLE SCHOOLS	63,104,578 KWH
TMMAL	\$ 4,573,513	CINRAM INC	62,036,066 KWH
CINRAM INC	\$ 4,180,845	TMMAL	60,268,971 KWH
MAD CO BD OF ED	\$ 3,940,401	METALWORKING PRODUCT	48,406,554 KWH
METALWORKING PRODUCT	\$ 3,613,912	INTERNATIONAL DIESEL OF ALABAMA LLC	42,148,888 KWH
INTERNATIONAL DIESEL OF ALABAMA LLC	\$ 3,477,417	MAD CO BD OF ED	41,245,832 KWH
HUNTSVILLE UTILITIES	\$ 3,288,036	HUNTSVILLE UTILITIES	37,870,804 KWH
ALABAMA A&M UNIV	\$ 2,917,913	BASF CATALYSTS LLC	37,724,998 KWH

City of Huntsville Electric, Natural Gas, and Water Systems
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Statistical Highlights – Gas System



<i>Years Ending September 30,</i>	2017	2016	2015
OPERATING REVENUE			
Residential	\$ 13,815,923	\$ 14,910,446	\$ 20,065,929
Commercial	17,279,794	17,823,428	21,695,617
Industrial	2,055,685	2,325,249	2,566,710
Other Operating Revenue	2,315,863	2,562,636	2,832,563
Total Operating Revenue	\$ 35,467,265	\$ 37,621,759	\$ 47,160,819
CUSTOMERS			
Residential	48,080	47,040	45,880
Commercial	5,514	5,439	5,379
Industrial	18	18	18
Total Customers	53,612	52,497	51,277
MCF SALES			
Residential	1,351,105	1,491,621	2,027,434
Commercial	1,925,150	2,024,603	2,298,784
Industrial	315,426	335,026	346,161
Total MCF Sales	3,591,681	3,851,250	4,672,379
OPERATING REVENUE/CUSTOMER			
Residential	\$ 287.35	\$ 316.97	\$ 437.36
Commercial	3,133.80	3,276.97	4,033.39
Industrial	114,204.72	129,180.50	142,595.00
OPERATING REVENUE/MCF			
Residential	\$ 10.226	\$ 9.996	\$ 9.897
Commercial	\$ 8.976	\$ 8.803	\$ 9.438
Industrial	\$ 6.517	\$ 6.941	\$ 7.415
MCF/CUSTOMER			
Residential	28.10	31.71	44.19
Commercial	349.14	372.24	427.36
Industrial	17,523.67	18,612.56	19,231.17
OPERATING REVENUE %			
Residential	39.0%	39.6%	42.5%
Commercial	48.7%	47.4%	46.0%
Industrial	5.8%	6.2%	5.4%
Other Operating Revenue	6.5%	6.8%	6.0%
Total Operating Revenue	100.0%	100.0%	100.0%
CUSTOMERS %			
Residential	89.68%	89.61%	89.47%
Commercial	10.29%	10.36%	10.49%
Industrial	0.03%	0.03%	0.04%
Total Customers	100.00%	100.00%	100.00%

City of Huntsville Electric, Natural Gas, and Water Systems

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Statistical Highlights – Gas System



<u>2017</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
HUNTSVILLE SCHOOLS	\$ 804,077	BASF CATALYSTS LLC	320,366,000 CUF
VINTAGE PHARMACEUTICALS LLC	\$ 620,143	UNITED STATES ARMY	318,496,500 CUF
HUNTSVILLE CITY GSD	\$ 609,535	HUNTSVILLE HOSPITAL	235,047,800 CUF
POLARIS INDUSTRIES INC	\$ 576,428	NORRIS CYLINDER COMPANY INC	206,195,000 CUF
REMINGTON ARMS COMPANY LLC	\$ 400,067	KOHLER CO	156,842,800 CUF
ALABAMA A&M UNIV	\$ 380,546	UNITED STATES ARMY	127,683,000 CUF
INTERNATIONAL PAPER COMPANY/ADVIQ-MS108	\$ 374,936	HUNTSVILLE SCHOOLS	90,544,500 CUF
HUNTSVILLE HOSPITAL	\$ 372,307	VINTAGE PHARMACEUTICALS LLC	75,521,900 CUF
NEKTAR THERAPEUTICS	\$ 319,085	HUNTSVILLE CITY GSD	71,075,700 CUF
UNITED STATES ARMY	\$ 312,797	POLARIS INDUSTRIES INC	69,904,400 CUF
<u>2016</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
HUNTSVILLE SCHOOLS	\$ 832,771	BASF CATALYSTS LLC	319,800,000 CUF
VINTAGE	\$ 668,794	UNITED STATES ARMY	304,039,000 CUF
HUNTSVILLE CITY GSD	\$ 558,240	HUNTSVILLE HOSPITAL	258,454,600 CUF
HUNTSVILLE HOSPITAL	\$ 407,857	NORRIS CYLINDER COMPANY INC	214,468,000 CUF
ALABAMA A&M UNIV	\$ 400,564	KOHLER CO	159,917,200 CUF
INTERNATIONAL PAPER COMPANY	\$ 393,571	UNITED STATES ARMY	155,358,000 CUF
NEKTAR THERAPEUTICS	\$ 358,275	HUNTSVILLE SCHOOLS	90,358,200 CUF
UNITED STATES ARMY	\$ 307,344	VINTAGE	81,153,600 CUF
REMINGTON ARMS COMPANY LLC	\$ 306,246	REED CONTRACTING SERVICES INC	72,628,800 CUF
CRESTWOOD HEALTHCARE	\$ 301,859	HUNTSVILLE CITY GSD	64,398,900 CUF
<u>2015</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
HUNTSVILLE SCHOOLS	\$ 1,051,849	BASF CATALYSTS LLC	318,118,000 CUF
HUNTSVILLE CITY GSD	\$ 672,155	UNITED STATES ARMY	304,168,300 CUF
VINTAGE	\$ 650,998	HUNTSVILLE HOSPITAL	269,070,800 CUF
ALABAMA A&M UNIV	\$ 564,008	NORRIS CYLINDER COMPANY INC	225,760,000 CUF
HUNTSVILLE HOSPITAL	\$ 451,837	UNITED STATES ARMY	163,233,000 CUF
INTERNATIONAL PAPER COMPANY	\$ 399,112	KOHLER CO	145,528,500 CUF
NEKTAR THERAPEUTICS	\$ 383,259	HUNTSVILLE SCHOOLS	108,318,600 CUF
MAD CO BD OF ED	\$ 374,705	VINTAGE	74,741,000 CUF
UNITED STATES ARMY	\$ 318,938	HUNTSVILLE CITY GSD	73,501,600 CUF
CRESTWOOD HEALTHCARE	\$ 315,592	REED CONTRACTING SERVICES INC	65,368,800 CUF
<u>2014</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
HUNTSVILLE SCHOOLS	\$ 1,136,041	BASF CATALYSTS LLC	333,570,000 CUF
HUNTSVILLE CITY GSD	\$ 680,715	UNITED STATES ARMY	300,989,500 CUF
VINTAGE	\$ 662,348	HUNTSVILLE HOSPITAL	265,202,800 CUF
ALABAMA A&M UNIV	\$ 640,450	NORRIS CYLINDER COMPANY INC	228,561,000 CUF
HUNTSVILLE HOSPITAL	\$ 426,484	UNITED STATES ARMY	164,186,000 CUF
MAD CO BD OF ED	\$ 384,753	KOHLER CO	140,884,900 CUF
NEKTAR THERAPEUTICS	\$ 366,059	HUNTSVILLE SCHOOLS	117,418,300 CUF
INTERNATIONAL PAPER COMPANY	\$ 344,501	REED CONTRACTING SERVICES INC	86,259,800 CUF
UNITED STATES ARMY	\$ 308,214	VINTAGE	76,169,600 CUF
HEALTH GROUP OF ALABAMA DBA CENTRAL	\$ 294,029	HUNTSVILLE CITY GSD	74,457,500 CUF

City of Huntsville Electric, Natural Gas, and Water Systems

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Statistical Highlights – Gas System



<u>2014</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
HUNTSVILLE SCHOOLS	\$ 1,136,041	BASF CATALYSTS LLC	333,570,000 CUF
HUNTSVILLE CITY GSD	\$ 680,715	UNITED STATES ARMY	300,989,500 CUF
VINTAGE	\$ 662,348	HUNTSVILLE HOSPITAL	265,202,800 CUF
ALABAMA A&M UNIV	\$ 640,450	NORRIS CYLINDER COMPANY INC	228,561,000 CUF
HUNTSVILLE HOSPITAL	\$ 426,484	UNITED STATES ARMY	164,186,000 CUF
MAD CO BD OF ED	\$ 384,753	KOHLER CO	140,884,900 CUF
NEKTAR THERAPEUTICS	\$ 366,059	HUNTSVILLE SCHOOLS	117,418,300 CUF
INTERNATIONAL PAPER COMPANY	\$ 344,501	REED CONTRACTING SERVICES INC	86,259,800 CUF
UNITED STATES ARMY	\$ 308,214	VINTAGE	76,169,600 CUF
HEALTH GROUP OF ALABAMA DBA CENTRAL	\$ 294,029	HUNTSVILLE CITY GSD	74,457,500 CUF
<u>2013</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
HUNTSVILLE SCHOOLS	\$ 1,002,534	BASF CATALYSTS LLC	296,651,000 CUF
HUNTSVILLE CITY GSD	\$ 627,760	UNITED STATES ARMY	289,402,100 CUF
ALABAMA A&M UNIV	\$ 614,765	HUNTSVILLE HOSPITAL	253,745,200 CUF
REED CONTRACTING SERVICES INC	\$ 583,331	NORRIS CYLINDER COMPANY INC	213,782,000 CUF
VINTAGE	\$ 573,007	UNITED STATES ARMY	160,361,000 CUF
HUNTSVILLE HOSPITAL	\$ 404,472	KOHLER CO	141,479,500 CUF
UAH PHYSICAL PLANT	\$ 344,268	HUNTSVILLE SCHOOLS	104,580,000 CUF
INTERNATIONAL PAPER COMPANY	\$ 337,745	REED CONTRACTING SERVICES INC	77,701,700 CUF
NEKTAR THERAPEUTICS	\$ 308,532	HUNTSVILLE CITY GSD	68,643,200 CUF
APAC ALABAMA INC APAC SERVICE CENTER	\$ 300,516	ALABAMA A&M UNIV	66,477,100 CUF
<u>2012</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
HUNTSVILLE SCHOOLS	\$ 904,041	BASF CATALYSTS LLC	295,358,000 CUF
VINTAGE	\$ 646,742	UNITED STATES ARMY	264,652,300 CUF
HUNTSVILLE CITY GSD	\$ 608,808	HUNTSVILLE HOSPITAL	261,322,500 CUF
ALABAMA A&M UNIV	\$ 570,882	NORRIS CYLINDER COMPANY INC	212,240,000 CUF
HUNTSVILLE HOSPITAL	\$ 461,804	UNITED STATES ARMY	156,681,000 CUF
UAH PHYSICAL PLANT	\$ 378,510	KOHLER CO	122,946,000 CUF
NEKTAR THERAPEUTICS	\$ 368,010	HUNTSVILLE SCHOOLS	81,567,200 CUF
INTERNATIONAL PAPER COMPANY	\$ 350,255	VINTAGE	65,634,400 CUF
CRESTWOOD HEALTHCARE	\$ 300,618	HUNTSVILLE CITY GSD	59,625,400 CUF
HEALTH GROUP OF ALABAMA DBA CENTRAL	\$ 299,695	COVANTA HUNTSVILLE INC	57,760,500 CUF

City of Huntsville Electric, Natural Gas, and Water Systems
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Statistical Highlights – Water System



<i>Years ending September 30,</i>	2017	2016	2015
OPERATING REVENUE			
Residential	\$ 25,277,101	\$ 23,387,774	\$ 20,337,718
Commercial	12,701,204	12,083,615	10,554,147
Industrial	2,144,687	2,138,113	2,008,755
Government	2,449,761	2,395,719	2,415,375
Other	496,496	553,158	544,417
Fire Hydrants	1,485,508	1,405,531	1,323,461
Other Operating Revenue	1,203,196	1,173,452	1,313,937
Total Operating Revenue	\$ 45,757,953	\$ 43,137,362	\$ 38,497,810
CUSTOMERS			
Residential	85,380	84,205	82,790
Commercial	10,174	10,195	10,029
Industrial	61	67	67
Government	24	25	24
Other	8	9	9
Total Customers	95,647	94,501	92,919
METERED WATER GALLONS (THOUSAND)			
Residential	5,568,530	5,546,901	5,270,243
Commercial	3,377,103	3,438,209	3,189,767
Industrial	1,061,820	1,115,598	1,047,105
Government	1,412,265	1,405,037	2,515,318
Other	218,653	234,750	273,145
Total Sales Gallons (Thousands)	11,638,371	11,740,495	12,295,578
OPERATING REVENUE/CUSTOMER			
Residential	\$ 296.05	\$ 277.75	\$ 245.65
Commercial	1,248.40	1,185.25	1,052.36
Industrial	35,158.80	31,912.13	29,981.42
Government	102,073.38	95,828.76	100,640.63
Other	62,062.00	61,462.00	60,490.78
OPERATING REVENUE/ THOUSAND GALLONS			
Residential	\$ 4.539	\$ 4.216	\$ 3.859
Commercial	3.761	3.515	3.309
Industrial	2.020	1.917	1.918
Government	1.735	1.705	0.960
Other	2.271	2.356	1.993
THOUSAND GALLONS/CUSTOMER			
Residential	65.22	65.87	63.66
Commercial	331.93	337.24	318.05
Industrial	17,406.89	16,650.72	15,628.43
Government	58,844.38	56,201.48	104,804.92
Other	27,331.63	26,083.33	30,349.44
OPERATING REVENUE %			
Residential	55.2%	54.2%	52.8%
Commercial	27.8%	28.0%	27.4%
Industrial	4.7%	5.0%	5.2%
Government	5.4%	5.6%	6.3%
Other	1.1%	1.3%	1.4%
Fire Hydrants	3.2%	3.3%	3.4%
Other Operating Revenue	2.6%	2.7%	3.4%
Total Operating Revenue			
CUSTOMERS %			
Residential	89.27%	89.10%	89.10%
Commercial	10.64%	10.79%	10.79%
Industrial	0.06%	0.07%	0.07%
Government	0.03%	0.03%	0.03%
Other	0.01%	0.01%	0.01%
Total Customers	100.00%	100.00%	100.00%

City of Huntsville Electric, Natural Gas, and Water Systems

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Statistical Highlights – Water System



<u>2017</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
MADISON CO COMM S2WD	\$ 1,313,708	MADISON CO COMM S2WD	750,659,600 GAL
UNITED STATES ARMY	\$ 1,152,614	UNITED STATES ARMY	665,814,300 GAL
HUNTSVILLE CITY GSD	\$ 724,187	HUNTSVILLE CITY GSD	207,274,200 GAL
HOUSING AUTHORITY OF CITY OF HUNTSVILLE	\$ 439,124	HUNTSVILLE HOSPITAL	173,368,700 GAL
HUNTSVILLE HOSPITAL	\$ 438,710	ALABAMA A&M UNIV	162,151,600 GAL
HUNTSVILLE SCHOOLS	\$ 419,908	NEW HOPE TOWN OF	142,575,000 GAL
		HOUSING AUTHORITY OF CITY OF	
ALABAMA A&M UNIV	\$ 335,767	HUNTSVILLE	120,968,000 GAL
NEW HOPE TOWN OF	\$ 285,902	COVANTA HUNTSVILLE INC	117,029,800 GAL
IMI HUNTSVILLE LLC	\$ 285,677	HUNTSVILLE SCHOOLS	103,249,700 GAL
COVANTA HUNTSVILLE INC	\$ 205,305	IMI HUNTSVILLE LLC	89,807,700 GAL
<u>2016</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
MADISON CO COMM S2WD	\$ 1,358,835	MADISON CO COMM S2WD	796,672,200 GAL
UNITED STATES ARMY	\$ 1,053,128	UNITED STATES ARMY	615,217,400 GAL
HUNTSVILLE CITY GSD	\$ 722,689	HUNTSVILLE CITY GSD	217,138,900 GAL
HUNTSVILLE HOSPITAL	\$ 442,077	HUNTSVILLE HOSPITAL	184,913,200 GAL
HOUSING AUTHORITY OF CITY OF HUNTSVILLE	\$ 392,573	ALABAMA A&M UNIV	164,423,500 GAL
HUNTSVILLE SCHOOLS	\$ 351,428	NEW HOPE TOWN OF	149,810,000 GAL
ALABAMA A&M UNIV	\$ 336,057	COVANTA HUNTSVILLE INC	124,579,900 GAL
		HOUSING AUTHORITY CITY OF	
NEW HOPE TOWN OF	\$ 296,302	HUNTSVILLE	111,549,600 GAL
IMI HUNTSVILLE LLC	\$ 227,623	HUNTSVILLE SCHOOLS	95,804,600 GAL
COVANTA HUNTSVILLE INC	\$ 213,910	SAINT GOBAIN CERAMIC	84,201,000 GAL
<u>2015</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
MADISON CO COMM S2WD	\$ 1,278,267	MADISON CO COMM S2WD	1,444,642,700 GAL
UNITED STATES ARMY	\$ 1,225,543	UNITED STATES ARMY	730,988,300 GAL
HUNTSVILLE CITY GSD	\$ 621,832	HUNTSVILLE CITY GSD	191,716,800 GAL
HUNTSVILLE HOSPITAL	\$ 389,846	HUNTSVILLE HOSPITAL	173,360,400 GAL
HOUSING AUTHORITY OF CITY OF HUNTSVILLE	\$ 347,758	NEW HOPE TOWN OF	158,252,700 GAL
ALABAMA A&M UNIV	\$ 308,952	ALABAMA A&M UNIV	153,892,900 GAL
NEW HOPE TOWN OF	\$ 308,731	COVANTA HUNTSVILLE INC	121,061,000 GAL
		HOUSING AUTHORITY OF CITY OF	
HUNTSVILLE SCHOOLS	\$ 305,540	HUNTSVILLE	104,453,500 GAL
IMI HUNTSVILLE LLC	\$ 258,426	IMI HUNTSVILLE LLC	90,090,400 GAL
COVANTA HUNTSVILLE INC	\$ 204,756	HUNTSVILLE SCHOOLS	88,293,400 GAL
<u>2014</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
UNITED STATES ARMY	\$ 1,292,771	UNITED STATES ARMY	785,548,100 GAL
HUNTSVILLE CITY GSD	\$ 495,701	MADISON CO COMM S2WD	165,382,100 GAL
MADISON CO COMM S2WD	\$ 427,167	NEW HOPE TOWN OF	164,769,500 GAL
HUNTSVILLE HOSPITAL	\$ 354,332	HUNTSVILLE HOSPITAL	163,882,400 GAL
NEW HOPE TOWN OF	\$ 318,811	HUNTSVILLE CITY GSD	156,005,800 GAL
HUNTSVILLE SCHOOLS	\$ 314,907	COVANTA HUNTSVILLE INC	132,063,700 GAL
HOUSING AUTHORITY OF CITY OF HUNTSVILLE	\$ 300,485	HUNTSVILLE SCHOOLS	105,747,600 GAL
		HOUSING AUTHORITY OF CITY OF	
COVANTA HUNTSVILLE INC	\$ 218,220	HUNTSVILLE	94,344,500 GAL
IMI HUNTSVILLE LLC	\$ 155,888	SAINT GOBAIN CERAMIC	93,588,300 GAL
RESERVE AT RESEARCH PARK LLC	\$ 155,756	IMI HUNTSVILLE LLC	60,237,200 GAL

**City of Huntsville Electric, Natural Gas, and Water Systems
Supplementary Information**

Statistical Highlights – Water System



<u>2013</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
UNITED STATES ARMY	\$ 1,229,094	UNITED STATES ARMY	771,632,000 GAL
HUNTSVILLE CITY GSD	\$ 406,980	HUNTSVILLE HOSPITAL	159,839,700 GAL
MADISON CO COMM S2WD	\$ 329,265	NEW HOPE TOWN OF	157,324,900 GAL
HUNTSVILLE HOSPITAL	\$ 303,895	MADISON CO COMM S2WD	155,528,800 GAL
NEW HOPE TOWN OF	\$ 297,541	HUNTSVILLE CITY GSD	151,310,400 GAL
HOUSING AUTHORITY OF CITY OF HUNTSVILLE	\$ 264,042	ALABAMA A&M UNIV	148,518,000 GAL
ALABAMA A&M UNIV	\$ 261,497	COVANTA HUNTSVILLE INC	139,779,700 GAL
HUNTSVILLE SCHOOLS	\$ 251,447	HUNTSVILLE SCHOOLS	100,175,900 GAL
COVANTA HUNTSVILLE INC	\$ 217,723	SAINT GOBAIN CERAMIC	99,480,500 GAL
SAINT GOBAIN CERAMIC	\$ 152,219	HOUSING AUTHORITY OF CITY OF HUNTSVILLE	95,733,000 GAL
<u>2012</u>			
<u>Top 10 by Revenue</u>		<u>Top 10 by Consumption</u>	
UNITED STATES ARMY	\$ 1,005,264	UNITED STATES ARMY	735,734,000 GAL
MADISON CO COMM S2WD	\$ 521,447	HUNTSVILLE CITY GSD	237,023,300 GAL
HUNTSVILLE CITY GSD	\$ 444,533	MADISON CO COMM S2WD	216,040,900 GAL
NEW HOPE TOWN OF	\$ 281,500	ALABAMA A&M UNIV	171,690,100 GAL
HUNTSVILLE HOSPITAL	\$ 254,319	HUNTSVILLE HOSPITAL	165,586,100 GAL
ALABAMA A&M UNIV	\$ 249,892	NEW HOPE TOWN OF	157,017,600 GAL
HOUSING AUTHORITY OF CITY OF HUNTSVILLE	\$ 233,131	COVANTA HUNTSVILLE INC	129,886,600 GAL
HUNTSVILLE SCHOOLS	\$ 194,693	SAINT GOBAIN CERAMIC	111,370,200 GAL
COVANTA HUNTSVILLE INC	\$ 177,685	HUNTSVILLE SCHOOLS	105,007,400 GAL
SAINT GOBAIN CERAMIC	\$ 149,997	HOUSING AUTHORITY CITY OF HUNTSVILLE	100,018,900 GAL

**City of Huntsville Electric, Natural Gas, and Water Systems
Supplementary Information**

Unaudited Information for Year Ended September 30, 2017



I. Water System

A. Annual Average and Peak Day Production Huntsville Groundwater Sources

Average Day Production (mgd)	7.5
Percentage of Estimated Safe Capacity (80% = 12.4 mgd)	50%
Peak Day Production (mgd)	8.9
Percentage of Estimated Safe Capacity (80% = 12.4 mgd)	60%

B. Annual Average and Peak Day Production Huntsville Water Treatment Plants

Average Day Production (mgd)	39.6
Percentage of Plant Safe Capacity (80% = 76.8 mgd)	43%
Peak Day Production (mgd)	63.3
Percentage of Plant Safe Capacity (80% = 76.8 mgd)	69%
Plant Capacity (mgd)	111.5

C. Additional Operating Data

Number of Water System Customers	95,647
Sales (Gallons)	11,668,371,400
Sales (Dollars)	\$43,790,167.78

**City of Huntsville Electric, Natural Gas, and Water Systems
Supplementary Information**

Unaudited Information for Year Ended September 30, 2017



II. Electric System

A. Debt Service Requirements for Electric Revenue Warrants¹

Fiscal Year Ending September 30,	Series2017-A Warrants	Series2017-B Warrants	Grand Total
2018	\$2,497,867	\$1,770,412	\$4,268,279
2019	2,958,000	2,818,725	5,776,725
2020	4,708,125	1,886,975	6,595,100
2021	4,711,000	1,880,600	6,591,600
2022	4,709,125	1,881,725	6,590,850
2023	4,249,125	2,333,475	6,582,600
2024	4,709,500	1,876,850	6,586,350
2025	4,708,250	1,873,350	6,581,600
2026	4,711,250	1,878,550	6,589,800
2027	4,708,250	1,875,625	6,583,875
2028	4,709,000	1,877,500	6,586,500
2029	4,708,125	1,875,625	6,583,750
2030	4,710,250	1,874,875	6,585,125
2031	4,710,000	1,875,000	6,585,000
2032	4,712,000	1,875,750	6,587,750
2033	4,710,875		4,710,875
2034	4,711,250		4,711,250
2035	4,707,750		4,707,750
2036	4,709,875		4,709,875
2037	4,707,125		4,707,125
2038	4,709,000		4,709,000
2039	4,709,875		4,709,875

B. Operating and Maintenance Costs per Customer

The following compares Huntsville Utilities' operating and maintenance costs per customer and per 1,000 kWh sold to that of other local power companies regulated by the Tennessee Valley Authority for the fiscal year ended September 30, 2017, data for the trailing twelve months ended June 2017.

1. O&M Costs Per Average Customer

	Dollar Amount
Huntsville Utilities	\$255
Similar Distributors	\$388
Neighboring Distributors	\$297
All TVA Distributors	\$372
All Municipals	\$373
All Cooperatives	\$371

**City of Huntsville Electric, Natural Gas, and Water Systems
Supplementary Information**

Unaudited Information for Year Ended September 30, 2017



2. O&M Costs per 1,000 kWh Sold

	Dollar Amount
Huntsville Utilities	\$ 9
Similar Distributors	\$14
Neighboring Distributors	\$12
All TVA Distributors	\$15
All Municipals	\$13
All Cooperatives	\$18

C. Revenue per Kilowatt

The following provides average revenue per kilowatt for residential, commercial and industrial customers, for Huntsville Utilities:

	Dollar Amount
Average Revenue per Kilowatt Hour - Residential	\$0.10
Average Revenue per Kilowatt Hour – Commercial 1,000 kW or Less	\$0.11
Average Revenue per Kilowatt Hour – Industrial greater than 1,000 kW	\$0.09