

# **CITY OF HAMILTON, OHIO – ELECTRIC SYSTEM**

Financial Statements

Years Ended December 31, 2017 and 2016

With Independent Auditors' Report

**TABLE OF CONTENTS**

Independent Auditor’s Report ..... 1 - 2

Management’s Discussion and Analysis..... 3 - 11

Financial Statements:

    Statements of Net Position ..... 12

    Statements of Revenues, Expenses and Changes in Net Position ..... 13

    Statements of Cash Flows..... 14

    Notes to Financial Statements..... 15 – 31

Required Supplementary Information:

    Schedule of the Proportionate Share of the Net Pension Liability ..... 32

    Schedule of Contributions..... 32

## **INDEPENDENT AUDITORS' REPORT**

To the Honorable Mayor and Members of Council  
City of Hamilton, Ohio:

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

We have audited the accompanying financial statements of the City of Hamilton, Ohio - Electric System, an enterprise fund of the City of Hamilton, Ohio (the Electric System), as of and for the years ended December 31, 2017 and 2016 and the related notes to the 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 an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. 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 auditors' 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 opinion.

### ***Opinion***

In our opinion, the financial statements referred to previously present fairly, in all material respects, the financial position of the City of Hamilton, Ohio - Electric System as of December 31, 2017 and 2016, and the changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

**Emphasis of Matter**

As described in Note 1, the financial statements present only the Electric System and do not purport to, and do not present fairly the financial position of the City of Hamilton, Ohio as of December 31, 2017 and 2016, and the changes in its financial position and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

**Other Matters***Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and schedules of net pension liability and pension contributions, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our 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.

*Clark, Schaefer, Hackett & Co.*

Cincinnati, Ohio  
June 25, 2018

# City of Hamilton, Ohio

## Electric System

Management's Discussion and Analysis  
For the Years Ended December 31, 2017 and 2016  
Unaudited

The discussion and analysis of the City of Hamilton, Ohio's Electric System's financial performance provide an overall review of that system's financial activities for the years ended December 31, 2017 and 2016. While the intent of this discussion and analysis is to look at the system's financial performance, readers should also review the Statements of Net Position; Revenues, Expenses and Changes in Net Position; and Cash Flows to enhance their understanding of the system's fiscal performance.

### Financial Highlights

Key highlights for 2017 and 2016 are as follows:

- The assets and deferred outflow of resources of the Hamilton Electric System exceeded its liabilities and deferred inflows of resources at the close of 2017 by \$125,714,184 and \$139,160,764 at the close of 2016 (net position). At December 31, 2017 and 2016, \$31,225,683 and \$43,859,592, respectively, (unrestricted net position) may be used to meet the system's ongoing obligations to customers and creditors.
- The system's total net position decreased by \$13,446,580 between 2017 and 2016, due to the Meldahl plant beginning commercial operation in 2016 and operating for a full year in 2017.
- In 2017, the Electric System's long-term debt, net of discounts, decreased by \$47,023.

### Electric System Summary

The City of Hamilton, Ohio has owned and operated an electric utility system since 1893. Currently, the system is the second largest municipally owned electric system in Ohio. The electric system is a fully integrated electric generation, transmission and distribution system. The system owns both thermal and hydroelectric generation facilities and maintains a diverse customer base, with approximately 29,700 customers. Customer rates are established by the City and are not subject to the regulatory jurisdiction of the Public Utilities Commission of Ohio (PUCO) or any other regulatory body.

This annual report consists only of the Statements of Net Position, the Statements of Revenues, Expenses and Changes in Net Position, and the Statements of Cash Flows as well as Notes to the Financial Statements for the City of Hamilton, Ohio's Electric System for the years ended December 31, 2017 and 2016.

### Reporting Hamilton's Electric System (Whole and Significant Fund)

The financial statements contained within this report include the City of Hamilton, Ohio's Electric System *only*. Readers desiring to view city-wide financial statements, as well as the impact that the Electric System has on the City's overall financial position and operating results, should refer to the City's Basic Financial Statements appearing in the Comprehensive Annual Financial Report for 2017 and 2016. The City of Hamilton's Electric System is reported as a business-type, enterprise fund and is considered a major fund for purposes of individual fund reporting. Payments made from the Electric Fund are restricted to Electric System purposes by municipal ordinance, Ohio Revised Code and indentures issued pursuant to long-term financing.

# City of Hamilton, Ohio

## Electric System

Management's Discussion and Analysis  
For the Years Ended December 31, 2017 and 2016  
Unaudited

In the Statements of Net Position and the Statements of Revenues, Expenses and Changes in Net Position, the view of the System looks at all financial transactions of the Electric Fund and asks the question, "How did we do financially during 2017 and 2016?" These statements provide answers to that question. The statements include all assets, deferred outflow of resources, liabilities, and deferred inflows of resources of the System using the accrual basis of accounting similar to the accounting used by private sector companies. This basis of accounting considers all of the current year's revenues and expenses regardless of when the cash is received or paid. These two statements report the System's net position and the changes in net position. The change in net position is important because it tells the reader whether, for the system, the financial position of the City has improved or diminished. However, in evaluating this position, non-financial information including the condition of capital assets will also need to be evaluated. The Notes to the Electric System's Financial Statements provide additional information that is essential to a full understanding of the data provided.

The System provides services that have a charge based upon the amount of usage. The City's Electric System charges fees to recoup the cost of the entire operation of the Electric System as well as all capital expenses associated with these facilities.

### **Financial Analysis**

As noted earlier, net position may serve over time as a useful indicator of financial position. In the case of the Electric Fund, assets and deferred outflow of resources exceeded liabilities and deferred inflows of resources by \$125,714,184 and \$139,160,764 as of December 31, 2017 and 2016, respectively.

# City of Hamilton, Ohio

## Electric System

Management's Discussion and Analysis  
For the Years Ended December 31, 2017 and 2016  
Unaudited

Table 1 provides a summary of the Electric System's Statement of Net Position for the Years Ended December 31, 2017, 2016 and 2015.

	2017	2016	2015
Current and other assets	\$ 54,919,558	\$ 65,890,034	\$ 31,682,480
Capital assets	116,068,462	117,792,669	121,109,806
Total assets	<u>170,988,020</u>	<u>183,682,703</u>	<u>152,792,286</u>
Deferred outflows of resources	5,557,472	3,439,768	1,159,937
Long-term liabilities:			
Net pension liability	12,116,488	8,949,281	6,858,924
Other long-term amounts	29,688,118	29,738,098	30,524,106
Other liabilities	8,774,797	8,758,758	110,291,228
Total liabilities	<u>50,579,403</u>	<u>47,446,137</u>	<u>147,674,258</u>
Deferred inflows of resources	251,905	515,570	120,562
Net investment in capital assets	87,082,888	87,948,019	(12,824,779)
Restricted	7,405,613	7,353,153	7,451,473
Unrestricted	31,225,683	43,859,592	11,530,709
Total net position	<u>\$ 125,714,184</u>	<u>\$ 139,160,764</u>	<u>\$ 6,157,403</u>

During 2015, the Electric System adopted GASB Statement No. 68, *Accounting and Financial Reporting for Pensions—an Amendment GASB Statement No. 27*, which significantly revised accounting for pension costs and liabilities. For reasons discussed below, many end users of this financial statement will gain a clearer understanding of the Electric System's actual financial condition by adding deferred inflows related to pension and net pension liability to the reported net position and subtracting deferred outflows related to pension.

Governmental Accounting Standards Board standards are national and apply to all government financial reports prepared in accordance with generally accepted accounting principles. When accounting for pension costs, GASB Statement No. 27 focused on a funding approach. This approach limited pension costs to contributions annually required by law, which may or may not be sufficient to fully fund each plan's *net pension liability*. GASB Statement No. 68 takes an earnings approach to pension accounting; however, the nature of Ohio's statewide pension systems and state law governing those systems requires additional explanation in order to properly understand the information presented in these statements.

# City of Hamilton, Ohio

## Electric System

Management's Discussion and Analysis  
For the Years Ended December 31, 2017 and 2016  
Unaudited

Under GASB Statement No. 68, the net pension liability equals the City's proportionate share of each plan's collective:

1. Present value of estimated future pension benefits attributable to active and inactive employees' past service
2. Minus plan assets available to pay these benefits

GASB notes that pension obligations, whether funded or unfunded, are part of the "employment exchange" – that is, the employee is trading his or her labor in exchange for wages, benefits, and the promise of a future pension. GASB noted that the unfunded portion of this pension promise is a present obligation of the government, part of a bargained-for benefit to the employee, and should accordingly be reported by the government as a liability since they received the benefit of the exchange. However, the City is not responsible for certain key factors affecting the balance of this liability. In Ohio, the employee shares the obligation of funding pension benefits with the employer. Both the employer and employee contribution rates are capped by State statute. A change in these caps requires action of both Houses of the General Assembly and approval of the Governor. Benefit provisions are also determined by State statute. The employee enters the employment exchange with the knowledge that the employer's promise is limited not by contract, but by law. The employer enters the exchange also knowing that there is a specific, legal limit to its contribution to the pension system. In Ohio, there is no legal means to enforce the unfunded liability of the pension system *as against the public employer*. State law operates to mitigate/lessen the moral obligation of the public employer to the employee, because all parties enter the employment exchange with notice as to the law. The pension system is responsible for the administration of the plan.

Most long-term liabilities have set repayment schedules or, in the case of compensated absences (i.e., sick and vacation leave), are satisfied through paid time-off or termination payments. There is no repayment schedule for the net pension liability. As explained above, changes in pension benefits, contribution rates, and return on investments affect the balance of the net pension liability, but are outside the control of the local government. In the event that contributions, investment returns, and other changes are insufficient to keep up with the required pension payments, State statute does not assign/identify the responsible party for the unfunded portion. Due to the unique nature of how the net pension liability is satisfied, this liability is separately identified within the long-term liability section of the statement of net position.

In accordance with GASB Statement No. 68, the Electric System's statements prepared on an accrual basis of accounting include an annual pension expense for their proportionate share of each plan's *change* in net pension liability not accounted for as deferred inflows/outflows.



# **City of Hamilton, Ohio**

## **Electric System**

Management's Discussion and Analysis  
For the Years Ended December 31, 2017 and 2016  
Unaudited

A vast majority of the System's assets lie within the physical property, plant and equipment of the system having a historical cost less accumulated depreciation of \$116,068,462, \$117,792,669 and \$121,109,806, respectively at December 31, 2017, 2016 and 2015. The System employs these assets in the generation, transmission, and distribution of electricity to customers; consequently, these assets are not readily available for future spending. The System's investment in its capital assets is reported net of related debt in the Net Position section of the Statement of Net Position and it should be noted that the resources needed to repay these debts must be provided from other sources, primarily the revenues of the system, since the capital assets themselves cannot be used to liquidate the liabilities.

As of December 31, 2017 and 2016, the Electric System was able to report positive balances in net position of \$125,714,184 and \$139,160,764, respectively. In 2015, the Electric System reported operating income of \$9,411,310, whereas it reported operating losses of \$12,702,165 and \$4,592,836 in 2017 and 2016, respectively. An increase in operating revenue can be attributed to an increase in the Power Cost Adjustment (PCA). The PCA is a rate rider that is designed to pass through the increases or decreases in power supply costs to customers. Net non-operating expenses of \$744,415 decreased by \$659,388, primarily due to increased investment earnings and decreased interest expense. Investment earnings rose and interest expense decreased due to the sale of the Greenup Hydroelectric Plant in 2016. Approximately \$105 million worth of debt was paid off with these proceeds and the net cash position rose by approximately \$15 million.

During 2016, the Electric System sold 48.6% in an undivided ownership interest in the Greenup Hydroelectric Plant for \$139,000,000. This amount was reported as a special item.

# City of Hamilton, Ohio

## Electric System

Management's Discussion and Analysis  
For the Years Ended December 31, 2017 and 2016  
Unaudited

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

	2017	2016	2015
Operating revenues	\$ 70,567,830	\$ 66,319,492	\$ 64,619,906
Operating expenses:			
Purchased power and fuel	50,712,401	42,211,702	27,473,903
Depreciation	7,805,359	8,861,138	8,622,343
Other operating expenses	24,752,235	19,839,488	19,112,350
Total operating expenses	<u>83,269,995</u>	<u>70,912,328</u>	<u>55,208,596</u>
Operating income (loss)	(12,702,165)	(4,592,836)	9,411,310
Non-Operating revenues (expenses)			
Interest and fiscal charges	(1,453,986)	(1,849,977)	(9,879,374)
Loss on disposal of capital assets	(69,271)	-	(584,858)
Other non-operating revenues	778,842	446,174	102,851
Total non-operating revenues (expenses)	<u>(744,415)</u>	<u>(1,403,803)</u>	<u>(10,361,381)</u>
Transfers	-	-	16,082
Special item	-	139,000,000	-
Change in net position	(13,446,580)	133,003,361	(933,989)
Beginning net position	139,160,764	6,157,403	7,091,392
Ending net position	<u>\$ 125,714,184</u>	<u>\$ 139,160,764</u>	<u>\$ 6,157,403</u>

### **Capital Assets and Debt Administration**

*Capital Assets:* The City's net investment in capital assets of the Electric System as of December 31, 2017, 2016 and 2015 amounted to \$87.1 million, \$87.9 million and (\$12.8 million), respectively, (net of accumulated depreciation and related debt). The negative balances are a direct result of continued depreciation expense coupled with long-term debt balances. The positive balance beginning in 2016 was due to paying off the \$103.7 million general obligation note during that year. This investment in capital assets includes land, buildings, improvements, construction in progress, and machinery and equipment including the City's hydro-electric and thermal generation facilities. The plant and equipment of the Electric System are rigorously tested and maintenance schedules are adhered to in a strenuous fashion to insure safe, long-term, efficient operation.

Note 5 (Capital Assets) provides Electric System asset activity during 2017 and 2016.

*Debt Administration:* At the end of 2017, the City had one outstanding long-term revenue bond issue, the 2009 Electric System Revenue Bonds totaling \$16,330,000.

# City of Hamilton, Ohio

## Electric System

Management's Discussion and Analysis  
For the Years Ended December 31, 2017 and 2016  
Unaudited

In 2017, the Electric System refunded \$13,090,000 in Series 2011 revenue bonds with the issuance of \$13,795,000 in notes maturing in March 2018.

See Note 6 for a discussion of outstanding Electric System bonds, notes and related activity.

### **Economic Factors and Future Trends**

The City's 2017 rate base consisted of approximately 26,800 residential customers and 2,900 commercial and industrial customers. The residential customers account for 50% of the revenue, the commercial and industrial customers account for the remaining 50%. No one customer of the Electric System accounted for more than 2.5% of total revenues and the ten largest customers, accounted for approximately 12.5% of the Electric System's revenues in 2017. The Electric System customer base is comprised of approximately 90% residential and 10% commercial and industrial customers.

The City has a rate ordinance, which sets forth rates and charges for Residential, Commercial Non-Demand, Commercial Demand, Large Power and Industrial Service. All rates include:

- A power cost adjustment (PCA) charge (Rider A) that allows for increases or decreases in the fuel and purchased power costs to be passed directly through to the Electric System's customers in comparison with the level of power costs embedded in the base rates. The PCA averaged a charge of \$0.00778/kWh in 2017.
- An electric rate stabilization adjustment rider (Rider B) that allows for a percentage adder to be applied to all charges under each rate schedule to replenish revenues previously withdrawn from the Electric Rate Stabilization Fund. Rider B was at 0% for 2017.
- A suburban surcharge (Rider C) of 5% for all Electric System customers outside the corporate limits of the City.
- An unfunded environmental mandates adjustment rider (UEMA – Rider D) that allows for expenses associated with the Electric System's compliance with environmental mandates, not included in the base rates or PCA. Rider D wasn't assessed for 2017.
- An unfunded governmental and regulatory, excluding environmental (Rider D), mandates adjustment rider (UGRMA – Rider E) that allows for expenses associated with the Electric System's compliance with governmental and regulatory mandates not included in the base rates, PCA or Rider D. Rider E wasn't assessed for 2017.
- The Economic Development Cost Adjustment (Rider F) for Electric wasn't assessed in 2017.

The annual budget of the City Electric System is adopted in accordance with ten-year projections developed by City staff, and these projections are reviewed and updated in the spring and fall of each year, or more often as deemed necessary by City Management.

# City of Hamilton, Ohio

## Electric System

Management's Discussion and Analysis  
For the Years Ended December 31, 2017 and 2016  
Unaudited

The Electric System is completing the largest transmission and distribution project in its history. The \$25 million project includes three new substations, adding 75 MW of new capacity to the Electric System, retrofitting its twelve existing substations with next-generation SCADA (supervisory control and data acquisition) and intelligent relays.

Future City power supply resources are identified in the City's 20-year Power Supply Plan. The Power Supply Plan was designed to diversify the mix of resources, in an effort to mitigate exposure to generating unit outages, fuel costs, environmental regulations and market prices. Planned and on-going transmission system improvements complement future power supply resources and provide reliable operation.

The Prairie State Energy Campus is a 2-unit, 1,600 MW coal-fired generating project that is located in Central Illinois. Prairie State is projected to be the cleanest coal-fired generating facility in the United States. The first unit came on-line in December 2011 and the second unit in June 2012. The City and American Municipal Power ("AMP") executed a purchase power agreement, wherein the City will purchase 17.5 MW from each unit, resulting in a total of 35 MW of capacity. Prairie State provided approximately 295,160 MWh, 33% of the City's power supply resources, in 2017. The project was financed by AMP. AMP is participating in 368 MW of the Prairie State Energy Campus, on behalf of its members.

The Fremont Energy Center (AFEC) is a natural gas combined cycle (NGCC) facility, purchased by AMP in July 2011, from Akron-based FirstEnergy Corp. AFEC will supply intermediate power to participating AMP member communities. Intermediate power is energy needed Monday-Friday, during the 16 highest demand hours. The city of Hamilton is one of 87 AMP member communities participating in the AFEC project and is receiving power from the facility. AFEC is a 707 MW (fired) facility, with a capacity of 544 MW as an intermediate power source. AFEC also includes duct-firing, which allows an additional 163 MW of generation during peak demand periods. AFEC is projected to provide approximately \$500 million savings to participating AMP member communities, over 30 years, as compared to the market. The City is entitled to a 34.5 MW share of the Fremont plant's capacity, which came on-line in January 2012.

On March 1, 2009, the City and AMP completed an agreement, effective March 31, 2009, pursuant to which the City will retain approximately 54 MW of the 105 MW Meldahl project. Additionally, the City will sell approximately 34.1 MW of the 70.2 MW Greenup Project to AMP. The agreement features a sale price of the Greenup power of \$139 million, which was paid by AMP to the City at the commencement of operations of the Meldahl Project in 2016. The City used the sale proceeds to retire outstanding debt and fund necessary capital improvements to the Electric System. Pursuant to the agreement, the City's share of the combined Meldahl/Greenup annual power generation is expected to be approximately 412,165 MWh, thereby diversifying the City's power resources and moving further away from the production of power via fossil fuels. The energy generation from Meldahl, Greenup, New York Power Authority and the Hamilton Small Hydroelectric units was approximately 46% of the City's power supply resources in 2017.

# **City of Hamilton, Ohio**

## **Electric System**

Management's Discussion and Analysis  
For the Years Ended December 31, 2017 and 2016  
Unaudited

As an electric utility that operates a thermal energy power plant, the City is subject to complying with the Federal Clean Air Act and regulation by the U.S. EPA. The Electric System has made a number of improvements over the years to bring the coal-fired, Third Street Power Plant into compliance with the numerous changes in regulations that have taken place. In 2012, the City determined that the most cost effective, long-term solution for meeting the demands of the U.S. EPA was to utilize natural gas as the primary fuel for Units 8 & 9 at the power plant. The conversion of Units 8 & 9 was completed in the Spring of 2013, and the Plant operated the entire 2013 summer cooling season using natural gas. On March 27, 2012, the USEPA proposed greenhouse gas emission limits for newly constructed power plants. These proposed limitations are not likely to impact any of Hamilton's existing power generation resources.

In 2012, the Electric System joined the PJM RTO (Regional Transmission Organization). This transition meant that the Electric System would receive its power from the "grid" through PJM as opposed to through the MISO (Midwest Independent System Operators) RTO, its previous RTO affiliate. This transition was brought about, in large part, due to the fact that Duke Energy Ohio and Duke Energy Kentucky announced that they would be switching from MISO to PJM. Since the City of Hamilton is essentially surrounded by the territory of Duke Energy Ohio and receives its outside power through the Duke Energy Interconnect, the decision to switch to PJM made operational and economic sense. Additionally, most of Ohio is already located in PJM.

The Power Supply Plan spreads the City's needs between multiple resources and thus would not be significantly affected by the price or performance of a single project. The benefits of this plan include reduced exposure to fuel costs, environmental regulations and market prices, as well as solidifying approximately 97% of the City's energy requirement in 2017.

On May 16, 2017, Moody's Investor Service affirmed the City's A3 rating with a stable outlook for its Electric System and for its 2009 Electric System Revenue Bonds.

### **Requests for Information**

This financial report is designed to provide our citizens, customers, taxpayers, creditors, investors and elected officials with an overview of the City of Hamilton, Ohio's Electric System's finances and to show accountability for the money the system receives. If you have any questions about this report or need additional information, contact the City of Hamilton Finance Department, 345 High Street, Hamilton, Ohio 45011, (513) 785-7170, or visit the City website at [www.hamilton-city.org](http://www.hamilton-city.org).

**CITY OF HAMILTON, OHIO – ELECTRIC SYSTEM  
STATEMENTS OF NET POSITION  
DECEMBER 31, 2017 AND 2016**

	<u>2017</u>	<u>2016</u>
<b>ASSETS</b>		
Current assets:		
Cash and investments	\$ 25,708,366	41,584,417
Accounts receivable (less allowance for uncollectible accounts of \$4,454,013 and \$4,678,297)	8,067,771	7,820,844
Interest receivable	124,185	58,900
Interfund receivable	11,230,000	6,645,150
Inventory of supplies at cost	1,902,184	1,813,795
Prepaid expenses	481,439	613,775
Total current assets	<u>47,513,945</u>	<u>58,536,881</u>
Restricted cash and investments	<u>7,405,613</u>	<u>7,353,153</u>
Noncurrent assets:		
Nondepreciable capital assets	17,808,494	17,781,506
Depreciable capital assets, net	<u>98,259,968</u>	<u>100,011,163</u>
Total noncurrent assets	<u>116,068,462</u>	<u>117,792,669</u>
Total assets	<u>170,988,020</u>	<u>183,682,703</u>
<b>DEFERRED OUTFLOWS OF RESOURCES</b>		
Deferred charge on debt refunding	832,053	-
Pension	<u>4,725,419</u>	<u>3,439,768</u>
Total deferred outflows of resources	<u>5,557,472</u>	<u>3,439,768</u>
<b>LIABILITIES</b>		
Current liabilities:		
Accounts payable	5,463,040	5,225,566
Accrued wages and benefits	160,124	398,645
Accrued liabilities	802	802
Intergovernmental payable	24,261	33,636
Accrued interest payable	263,731	413,427
Customer deposits payable	1,483,278	1,338,112
Compensated absences payable-current	489,561	483,570
Revenue bonds payable-current portion	<u>890,000</u>	<u>865,000</u>
Total current liabilities	<u>8,774,797</u>	<u>8,758,758</u>
Noncurrent Liabilities:		
General obligation notes payable	13,795,000	-
Compensated absences payable	513,595	491,552
Revenue bonds payable	15,379,523	29,246,546
Net pension liability	<u>12,116,488</u>	<u>8,949,281</u>
Total noncurrent liabilities	<u>41,804,606</u>	<u>38,687,379</u>
Total liabilities	<u>50,579,403</u>	<u>47,446,137</u>
<b>DEFERRED INFLOWS OF RESOURCES</b>		
Pension	<u>251,905</u>	<u>515,570</u>
<b>NET POSITION</b>		
Net investment in capital assets	87,082,888	87,948,019
Restricted for debt service	3,405,613	3,353,153
Restricted for rate stabilization	4,000,000	4,000,000
Unrestricted	<u>31,225,683</u>	<u>43,859,592</u>
Total net position	<u>\$ 125,714,184</u>	<u>139,160,764</u>

See notes to financial statements.

**CITY OF HAMILTON, OHIO - ELECTRIC SYSTEM**  
**STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION**  
**YEARS ENDED DECEMBER 31, 2017 AND 2016**

	<u>2017</u>	<u>2016</u>
<b>Operating revenues:</b>		
Charges for services	\$ 68,530,260	66,152,902
Other operating revenues	<u>2,037,570</u>	<u>166,590</u>
Total operating revenues	<u>70,567,830</u>	<u>66,319,492</u>
<b>Operating expenses:</b>		
Personal services	10,988,488	8,374,150
Materials and supplies	1,624,289	901,891
Contractual services	8,225,048	6,777,634
Purchased power and fuel	50,712,401	42,211,702
Depreciation	7,805,359	8,861,138
Other operating expenses	<u>3,914,410</u>	<u>3,785,813</u>
Total operating expenses	<u>83,269,995</u>	<u>70,912,328</u>
Operating loss	(12,702,165)	(4,592,836)
<b>Non-operating revenues (expenses):</b>		
Investment earnings	467,967	132,503
Loss on disposal of capital assets	(69,271)	-
Grants	310,875	310,719
Interest and fiscal charges	(1,453,986)	(1,849,977)
Other local taxes (kWh taxes)	<u>-</u>	<u>2,952</u>
Total non-operating revenues (expenses)	<u>(744,415)</u>	<u>(1,403,803)</u>
Loss before special item	(13,446,580)	(5,996,639)
Special item - Sale of ownership interest in electric plant	<u>-</u>	<u>139,000,000</u>
Total transfers and special items	<u>-</u>	<u>139,000,000</u>
Change in net position	(13,446,580)	133,003,361
Net position - beginning of year	<u>139,160,764</u>	<u>6,157,403</u>
Net position - end of year	\$ <u>125,714,184</u>	<u>139,160,764</u>

See notes to financial statements.

**CITY OF HAMILTON, OHIO - ELECTRIC SYSTEM  
STATEMENTS OF CASH FLOWS  
YEARS ENDED DECEMBER 31, 2017 AND 2016**

	<u>2017</u>	<u>2016</u>
<b>Cash flows from operating activities:</b>		
Cash received from customers	\$ 70,778,969	65,810,471
Cash paid for employee services and benefits	(10,808,890)	(9,428,002)
Cash paid to suppliers for goods and services	(63,505,509)	(50,606,203)
Net cash from operating activities	<u>(3,535,430)</u>	<u>5,776,266</u>
<b>Cash flows from noncapital financing activities:</b>		
Intergovernmental grants	310,875	310,719
Kilowatt hour taxes received	2,320,348	2,403,875
Kilowatt hour taxes paid to State	(2,320,348)	(2,400,923)
Advances in from other funds	95,150	180,150
Advances out to other funds	(4,680,000)	(6,550,000)
Net cash from noncapital financing activities	<u>(4,273,975)</u>	<u>(6,056,179)</u>
<b>Cash flows from capital and related financing activities:</b>		
Payments for capital acquisition	(5,934,110)	(5,781,322)
Proceeds from sale of undivided interest	-	139,000,000
Note issuance	13,795,000	-
Note retirement	-	(103,695,000)
Revenue bond principal retirement	(13,955,000)	(830,000)
Debt interest payments	(2,322,758)	(1,956,422)
Net cash from capital and related financing activities	<u>(8,416,868)</u>	<u>26,737,256</u>
<b>Cash flows from investing activities:</b>		
Interest from investments and change in fair value of investments	<u>402,682</u>	<u>80,832</u>
Net change in cash and investments	(15,823,591)	26,538,175
Cash and investments at beginning of year	<u>48,937,570</u>	<u>22,399,395</u>
Cash and investments at end of year	\$ <u><u>33,113,979</u></u>	<u><u>48,937,570</u></u>
Reconciliation of operating loss to net cash from operating activities		
Operating loss	\$ (12,702,165)	(4,592,836)
Adjustments to reconcile operating income to net cash from operating activities:		
Depreciation	7,805,359	8,861,138
Change in deferred outflows-pension	(1,285,651)	(2,279,831)
Change in deferred inflows-pension	(263,665)	395,008
Change in Assets and Liabilities:		
(Increase) decrease in receivables	(246,927)	(1,348,846)
(Increase) decrease in inventory	(88,389)	81,835
(Increase) decrease in prepaid items	132,336	19,153
Increase (decrease) in customer deposits payable	145,166	122,618
Increase (decrease) in payables	21,161	2,154,477
Increase (decrease) in accrued liabilities	(210,487)	324,028
Increase (decrease) in intergovernmental payables	(9,375)	(50,835)
Increase (decrease) in net pension liability	<u>3,167,207</u>	<u>2,090,357</u>
Net cash from operating activities	\$ <u><u>(3,535,430)</u></u>	<u><u>5,776,266</u></u>
Schedule of noncash activities:		
Outstanding liabilities for purchase of certain capital assets	\$ <u><u>617,492</u></u>	<u><u>401,179</u></u>

See notes to financial statements.



# CITY OF HAMILTON, OHIO – ELECTRIC SYSTEM

## Notes to Financial Statements Years Ended December 31, 2017 and 2016

---

### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

**Financial Reporting Entity** – The City of Hamilton, Ohio – Electric System (Electric System) is a utility operating as a separate enterprise fund of the City of Hamilton, Ohio (City). The Electric System is controlled by and is dependent on the City’s executive and legislative branches. Control by or dependence on the City is determined on the basis of outstanding debt secured by revenues or general obligations of the City, obligation of the City to finance any deficits that may occur, or receipt of subsidies from the City.

**Measurement Focus, Basis of Accounting and Basis of Presentation** – The financial statements are prepared in accordance with accounting principles generally accepted in the United States of America 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 financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of cash flows.

Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the Electric System’s principal ongoing operations. The principal operating revenues are charges to customers for sales and services. Operating expenses include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting these definitions are reported as non-operating revenues and expenses.

**Income Taxes** – The Electric System, which is owned and operated by the City, is exempt from income taxes since it is a division of a municipality.

**Cash and Investments** – Certain Electric System cash and investments are held in the City Treasury and pooled for investment management purposes. The portion of these pooled funds owned by the Electric System is reported as cash and investments. In accordance with GASB Statement No. 31, *Accounting and Financial Reporting for Certain Investments and for External Investment Pools*, and GASB Statement No. 72, *Fair Value Measurement and Application*, all investments are recorded at fair value except for nonparticipating investment contracts which are reported at amortized cost, which approximates fair value. Interest earned on funds invested is distributed on the basis of the relationship of the average monthly balance of all funds, including the Electric System.

**Inventories** – Inventories are stated at cost based on a moving-average cost method.

**Capital Assets** – Expenses that increase values or extend the useful life of the respective assets are capitalized while the costs of maintenance and repairs are charged to operating expenses. Interest costs related to the construction of property, plant and equipment are capitalized. Depreciation is calculated on a straight-line basis over the estimated useful life of the various classes of assets. The range of useful lives for computing depreciation is 5 to 75 years.

**Bond Discounts** – Unamortized bond discounts are amortized on the interest method over the term of the related bonds. Amortization of bond discounts was \$112,977 and \$16,726 in 2017 and 2016, respectively.

**Compensated Absences** - The Electric System follows the provisions of GASB Statement No. 16, *Accounting for Compensated Absences*. Vacation and compensatory time benefits are accrued as a liability as the benefits are earned if the employees' rights to receive compensation are attributable to services already rendered and it is probable that the Electric System will compensate the employees for the benefits through paid time off or some other means. Sick leave termination benefits are accrued using the vesting method. The liability includes the employees who are currently eligible to receive termination benefits and those employees for whom it is probable that they will become eligible to receive payment in the future. The amount is based on accumulated sick leave and employees' wage rates at year-end.

**Pension** – For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the pension plans and additions to/deductions from their fiduciary net position have been determined on the same basis as they are reported by the pension system. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. The pension system reports investments at fair value.

**Deferred Outflows of Resources** – In addition to assets, the statement of financial position will sometimes report a separate section for deferred outflows of resources. This separate financial statement reporting element, *deferred outflows of resources*, represents a consumption of net position that applies to a future period(s) and so will *not* be recognized as an outflow of resources (expense) until then. For the Electric System, deferred outflows of resources are reported on the statement of net position for pension. The deferred outflows of resources related to pension are explained in Note 7.

**Deferred Inflows of Resources** – In addition to liabilities, the statement of financial position will report a separate section for deferred inflows of resources. Deferred inflows of resources represent an acquisition of net position that applies to a future period and will not be recognized until that time. For the Electric System, deferred inflows of resources include pension (see Note 7).

**Net Position** – Net position represents the difference between assets and deferred outflows of resources, reduced by liabilities and deferred inflows of resources. Net position invested in capital assets, net of related debt consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of any borrowings used for the acquisition, construction, or improvement of those assets. Net position is reported as restricted when there are limitations imposed on their use either through the enabling legislation adopted by the City or through external restrictions imposed by creditors, grantors or laws or regulations of other governments. The Electric System applies restricted resources when an expense is incurred for purposes for which both restricted and unrestricted net position is available.

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

## 2. CASH AND INVESTMENTS

The Electric System follows the practice of pooling cash and investments with the City Treasurer except for the cash and investments of certain accounts maintained by trustees. Pooled cash and investments of the Electric System totaled \$29,708,366 and \$45,584,417 at December 31, 2017 and 2016, respectively, and consisted of demand deposits, money market funds, U.S. government securities and State Treasury Asset Reserve of Ohio (STAR Ohio). Cash and investments held by trustees were \$3,405,613 and \$3,353,153 at December 31, 2017 and 2016, respectively.

STAR Ohio is an investment pool managed by the State Treasurer's Office, which allows governments within the State to pool their funds for investment purposes. STAR Ohio is not registered with the SEC as an investment company, but does operate in a manner consistent with Rule 2a7 of the Investment Company Act of 1940. Investments in STAR Ohio are valued at the net asset value (NAV) per share provided by STAR Ohio. The NAV per share is calculated on an amortized cost basis that provides a NAV per share that approximates fair value. For 2017, there were no limitations or restrictions on any participant withdrawals due to redemption notice periods, liquidity fees, or redemption gates. However, notice must be given 24 hours in advance of all deposits and withdrawals exceeding \$25 million. STAR Ohio reserves the right to limit the transaction to \$50 million, requiring the excess amount to be transacted the following business day(s), but only to the \$50 million limit. All accounts of the participant will be combined for these purposes.

**Deposits** – Custodial credit risk is the risk that in the event of a bank failure, the City's deposits may not be returned to it. The City does not have a custodial risk policy. As of December 31, 2017 approximately 93% of the City's deposits with financial institutions, including the amount of pooled deposits related to the Electric System, were exposed to custodial credit risk because they are considered uninsured and uncollateralized. However, the State of Ohio has established by statute a collateral pooling system for financial institutions acting as public depositories. Public depositories must pledge qualified securities with fair values greater than the total amount of all public deposits to be secured by the collateral pool. This pooled collateral covers the Electric System's uninsured and uncollateralized deposits.

**Investments** – The State of Ohio statutes, Electric Revenue Bond indentures, and the City Charter authorize the City to invest in obligations of the U.S. Treasury, agencies, instrumentalities, and repurchase agreements. Custodial credit risk in regards to investments is the risk that, in the event of a failure of a counter party, the City will not be able to recover the value of its investments or collateral securities that are in possession of an outside party. The City employs the use of "safekeeping" accounts to hold and maintain custody of its investments as identified within this policy and as means of mitigating this risk.

Interest rate risk is the risk that the City will incur fair value losses arising from rising interest rates. Such risk is mitigated by the investment policy by limiting investments to certain maximum maturities. As a rule, unless specified otherwise within the policy, investments are to have a maximum maturity of five years unless the investment is matched to a specific expenditure. The context of a specific investment purchase must be weighed in proportion to the remainder of the existing investment portfolio and the "prudent investor" rule to attempt to limit such risk. Fair value in U.S. Treasury securities are measured using level 1 inputs, using quoted prices in active markets for identical assets. Fair value in U.S. agency securities and commercial paper are measured using level 2 inputs, using significant other observable inputs.

The City's pooled investments, as well as the investments held by trustees specifically for the Electric System, are invested primarily in U.S. governmental agency securities with a credit rating of AA+ and an average maximum maturity of 1.96 years and STAR Ohio which has a credit rating of AAAm.

### 3. ACCOUNTS RECEIVABLE

Receivables at December 31, 2017 and 2016 consist of the following:

		<u>2017</u>	<u>2016</u>
Earned and unbilled consumer accounts	\$	4,157,576	3,976,866
Earned and billed consumer accounts		7,706,592	7,611,260
Due from AMP, Inc.		-	882,214
Other		657,616	28,801
Less allowance for uncollectible accounts		<u>(4,454,013)</u>	<u>(4,678,297)</u>
Total	\$	<u>8,067,771</u>	<u>7,820,844</u>

### 4. RESTRICTED ASSETS

Restricted assets consist of assets whose use has been restricted by bond indenture for debt service and rate stabilization. Restricted assets were \$7,405,613 and \$7,353,153 at December 31, 2017 and 2016, respectively.

### 5. CAPITAL ASSETS

Capital asset activity for the year ended December 31, 2017 and 2016 was as follows:

	Balance			Balance
	<u>1/1/17</u>	Increases	Decreases	<u>12/31/17</u>
<b><i>Nondepreciable capital assets:</i></b>				
Land	\$ 1,743,589	94,720	-	1,838,309
Construction in progress	<u>16,037,917</u>	<u>3,469,400</u>	<u>(3,537,132)</u>	<u>15,970,185</u>
Subtotal	<u>17,781,506</u>	<u>3,564,120</u>	<u>(3,537,132)</u>	<u>17,808,494</u>
<b><i>Capital assets being depreciated:</i></b>				
Intangibles	1,070,786	-	-	1,070,786
Buildings and improvements	21,179,885	782,757	-	21,962,642
Machinery and equipment	<u>393,498,520</u>	<u>5,340,676</u>	<u>(615,444)</u>	<u>398,223,752</u>
Subtotal	<u>415,749,191</u>	<u>6,123,433</u>	<u>(615,444)</u>	<u>421,257,180</u>
Totals at historical cost	<u>433,530,697</u>	<u>9,687,553</u>	<u>(4,152,576)</u>	<u>439,065,674</u>
Less accumulated depreciation:				
Intangibles	192,744	21,416	-	214,160
Buildings and improvements	9,146,264	339,503	-	9,485,767
Machinery and equipment	<u>306,399,020</u>	<u>7,444,440</u>	<u>(546,175)</u>	<u>313,297,285</u>
Total accumulated depreciation	<u>315,738,028</u>	<u>7,805,359</u>	<u>(546,175)</u>	<u>322,997,212</u>
Capital assets, net	\$ <u>117,792,669</u>	<u>1,882,194</u>	<u>(3,606,401)</u>	<u>116,068,462</u>

	Balance 1/1/16	Increases	Decreases	Balance 12/31/16
<b><i>Nondepreciable capital assets:</i></b>				
Land	\$ 1,743,589	-	-	1,743,589
Construction in progress	<u>18,146,839</u>	<u>926,534</u>	<u>(3,035,456)</u>	<u>16,037,917</u>
Subtotal	<u>19,890,428</u>	<u>926,534</u>	<u>(3,035,456)</u>	<u>17,781,506</u>
<b><i>Capital assets being depreciated:</i></b>				
Intangibles	1,070,786	-	-	1,070,786
Buildings and improvements	19,821,136	1,358,749	-	21,179,885
Machinery and equipment	<u>387,849,440</u>	<u>6,294,174</u>	<u>(645,094)</u>	<u>393,498,520</u>
Subtotal	<u>408,741,362</u>	<u>7,652,923</u>	<u>(645,094)</u>	<u>415,749,191</u>
Totals at historical cost	<u>428,631,790</u>	<u>8,579,457</u>	<u>(3,680,550)</u>	<u>433,530,697</u>
Less accumulated depreciation:				
Intangibles	171,328	21,416	-	192,744
Buildings and improvements	8,827,949	318,315	-	9,146,264
Machinery and equipment	<u>298,522,707</u>	<u>8,521,407</u>	<u>(645,094)</u>	<u>306,399,020</u>
Total accumulated depreciation	<u>307,521,984</u>	<u>8,861,138</u>	<u>(645,094)</u>	<u>315,738,028</u>
Capital assets, net	\$ <u>121,109,806</u>	<u>(281,681)</u>	<u>(3,035,456)</u>	<u>117,792,669</u>

## 6. LONG-TERM DEBT

On September 9, 2009, the City issued \$18,620,000 in Series 2009A Electric System Revenue Bonds and \$14,520,000 in Series 2009B Taxable Electric System Build America Revenue Bonds to currently refund bond anticipation notes and provide funding for Electric System transmission and distribution improvements. With the issuance of the Build America Bonds, the City will be entitled to receive an interest subsidy payment of 35% from the U.S. Treasury on any interest payment date. The Series 2009A revenue bonds fully mature in 2030 with interest from 2.25% to 4.625% per annum. The Series 2009B Build America Bonds fully mature in 2039 with interest from 6.5% to 6.6% per annum.

In December 2017, the City defeased \$13,090,000 of Electric System Revenue Bonds, along with portions of Water and Wastewater Revenue Bonds, through the issuance of \$45,220,000 of Various Purpose General Obligation Notes. The Electric System's portion of the 2017 Notes was \$13,795,000. The net proceeds of the 2017 Notes have been invested in obligations guaranteed as to both principal and interest by the United States and placed in irrevocable escrow accounts which, including interest earned, will be used to pay the principal and interest on the refunded bonds. The refunded bonds, which have an outstanding balance of \$13,090,000 at December 31, 2017 are not included in the Electric System's outstanding debt since the Electric System has in-substance satisfied its obligations through the advanced refunding. As a result of the issuance of the \$45,220,000 Notes, the City reduced its aggregate debt service payments over the life of the Electric, Water and Wastewater refunded bonds by \$4,118,083 and obtained an economic gain (difference between the present value of the old and new debt service payments) of \$539,762.

The \$45,220,000 in Various Purpose General Obligation Notes were retired in March 2018 with the issuance of \$43,930,000 of Revenue Refunding Bonds. See Note 15.

Debt activity for the year ended December 31, 2017 was as follows:

	Balance			Due	
	1/1/17	Additions	Reductions	12/31/17	Within One Year
Series 2009A Revenue Bonds	\$ 15,765,000	-	(13,955,000)	1,810,000	890,000
Series 2009B Revenue BABs	14,520,000	-	-	14,520,000	-
Less deferred amount:					
for issuance discounts	(173,454)	-	112,977	(60,477)	-
Notes payable	-	13,795,000	-	13,795,000	-
Net pension liability	8,949,281	3,167,207	-	12,116,488	-
Compensated absences	975,092	511,634	(483,570)	1,003,156	489,561
	<u>\$ 40,035,919</u>	<u>17,473,841</u>	<u>(14,325,593)</u>	<u>43,184,167</u>	<u>1,379,561</u>

Debt activity for the year ended December 31, 2016 was as follows:

	Balance			Due	
	1/1/16	Additions	Reductions	12/31/16	Within One Year
Series 2009A Revenue Bonds	\$ 16,595,000	-	(830,000)	15,765,000	865,000
Series 2009B Revenue BABs	14,520,000	-	-	14,520,000	-
Less deferred amount:					
for issuance discounts	(190,180)	-	16,726	(173,454)	-
Net pension liability	6,858,924	2,090,357	-	8,949,281	-
Compensated absences	891,089	545,806	(461,803)	975,092	483,570
	<u>\$ 38,674,833</u>	<u>2,636,163</u>	<u>(1,275,077)</u>	<u>40,035,919</u>	<u>1,348,570</u>

Under the terms of the revenue bond indenture, the City has agreed to certain covenants including, among other things, maintaining revenue levels and providing for operating expenses and debt service. The revenue bonds are insured under municipal bond insurance policies. Under the terms of the policies, the payments of principal and interest are guaranteed by the insurer.

A summary of the System's annual debt service requirements as of December 31, 2017 follows:

	Principal	Interest	Total
2018	\$ 890,000	1,591,809	2,481,809
2019	920,000	1,562,884	2,482,884
2020	-	952,540	952,540
2021	-	952,540	952,540
2022	-	952,540	952,540
2023-2027	-	4,762,700	4,762,700
2028-2032	2,770,000	4,674,625	7,444,625
2033-2037	8,030,000	2,857,545	10,887,545
2038-2039	3,720,000	370,920	4,090,920
Total	<u>\$ 16,330,000</u>	<u>18,678,103</u>	<u>35,008,103</u>

## 7. **DEFINED BENEFIT PENSION PLANS AND OTHER POSTEMPLOYMENT BENEFITS**

The Electric System contributes to the Ohio Public Employees Retirement System, the City of Hamilton Metropolitan Pension Plan, and post-employment life insurance.

### ***Net Pension Liability***

The net pension liability reported on the statement of net position represents a liability to employees for pensions. Pension is a component of exchange transactions—between an employer and its employees—of salaries and benefits for employee services. Pensions are provided to an employee—on a deferred-payment basis—as part of the total compensation package offered by an employer for employee services each financial period. The obligation to sacrifice resources for pensions is a present obligation because it was created as a result of employment exchanges that already have occurred.

The net pension liability represents the Electric System’s proportionate share of each pension plan’s collective actuarial present value of projected benefit payments attributable to past periods of service, net of each pension plan’s fiduciary net position. The net pension liability calculation is dependent on critical long-term variables, including estimated average life expectancies, earnings on investments, cost of living adjustments and others. While these estimates use the best information available, unknowable future events require adjusting this estimate annually.

Ohio Revised Code limits the Electric System’s obligation for this liability to annually required payments. The Electric System cannot control benefit terms or the manner in which pensions are financed; however, the Electric System does receive the benefit of employees’ services in exchange for compensation including pension.

GASB 68 assumes the liability is solely the obligation of the employer, because (1) they benefit from employee services; and (2) State statute requires all funding to come from these employers. All contributions to date have come solely from these employers (which also includes costs paid in the form of withholdings from employees). State statute requires the pension plans to amortize unfunded liabilities within 30 years. If the amortization period exceeds 30 years, each pension plan’s board must propose corrective action to the State legislature. Any resulting legislative change to benefits or funding could significantly affect the net pension liability. Resulting adjustments to the net pension liability would be effective when the changes are legally enforceable.

The proportionate share of each plan’s unfunded benefits is presented as a long-term *net pension liability* on the accrual basis of accounting. Any liability for the contractually-required pension contribution outstanding at the end of the year is included in *intergovernmental payable* on both the accrual and modified accrual bases of accounting.

***Plan Description – Ohio Public Employees Retirement System (OPERS)***

Electric System employees participate in the Ohio Public Employees Retirement System (OPERS). OPERS administers three separate pension plans. The traditional pension plan is a cost-sharing, multiple-employer defined benefit pension plan. The member-directed plan is a defined contribution plan and the combined plan is a cost-sharing, multiple-employer defined benefit pension plan with defined contribution features. While members (e.g. Electric System employees) may elect the member-directed plan and the combined plan, substantially all employee members are in OPERS’ traditional plan; therefore, the following disclosure focuses on the traditional pension plan.

OPERS provides retirement, disability, survivor and death benefits, and annual cost of living adjustments to members of the traditional plan. Authority to establish and amend benefits is provided by Chapter 145 of the Ohio Revised Code. OPERS issues a stand-alone financial report that includes financial statements, required supplementary information and detailed information about OPERS’ fiduciary net position that may be obtained by visiting <https://www.opers.org/financial/reports.shtml>, by writing to the Ohio Public Employees Retirement System, 277 East Town Street, Columbus, Ohio 43215-4642, or by calling 800-222-7377.

Senate Bill (SB) 343 was enacted into law with an effective date of January 7, 2013. In the legislation, members were categorized into three groups with varying provisions of the law applicable to each group. The following table provides age and service requirements for retirement and the retirement formula applied to final average salary (FAS) for the three-member groups under the traditional plan as per the reduced benefits adopted by SB 343 (see OPERS CAFR referenced above for additional information):

<b>Group A</b> Eligible to retire prior to January 7, 2013 or five years after January 7, 2013	<b>Group B</b> 20 years of service credit prior to January 7, 2013 or eligible to retire ten years after January 7, 2013	<b>Group C</b> Members not in other Groups and members hired on or after January 7, 2013
<b>State and Local</b>	<b>State and Local</b>	<b>State and Local</b>
<b>Age and Service Requirements:</b> Age 60 with 60 months of service credit or Age 55 with 25 years of service credit	<b>Age and Service Requirements:</b> Age 60 with 60 months of service credit or Age 55 with 25 years of service credit	<b>Age and Service Requirements:</b> Age 57 with 25 years of service credit or Age 62 with 5 years of service credit
<b>Formula:</b> 2.2% of FAS multiplied by year of service for the first 30 years and 2.5% for service years in excess of 30	<b>Formula:</b> 2.2% of FAS multiplied by year of service for the first 30 years and 2.5% for service years in excess of 30	<b>Formula:</b> 2.2% of FAS multiplied by year of service for the first 35 years and 2.5% for service years in excess of 35

Final average salary (FAS) represents the average of the three highest years of earnings over a member’s career for Groups A and B. Group C is based on the average of the five highest years of earnings over a member’s career.

Members who retire before meeting the age and years of service credit requirement for unreduced benefits receive a percentage reduction in the benefit amount.



When a benefit recipient has received benefits for 12 months, an annual cost of living adjustment (COLA) is provided. This COLA is calculated on the base retirement benefit at the date of retirement and is not compounded. For those retiring prior to January 7, 2013, the COLA will continue to be a 3 percent simple annual COLA. For those retiring subsequent to January 7, 2013, beginning in calendar year 2019, the COLA will be based on the average percentage increase in the Consumer Price Index, capped at 3 percent.

Funding Policy – The Ohio Revised Code (ORC) provides statutory authority for member and employer contributions as follows:

	<u>2017</u>	<u>2016</u>
<b>Statutory Maximum Contribution Rates</b>		
Employer	14.0 %	14.0 %
Employee	10.0 %	10.0 %
<b>Actual Contribution Rates</b>		
Employer:		
Pension	13.0 %	12.0 %
Post-employment Health Care Benefits	<u>1.0 %</u>	<u>2.0 %</u>
Total Employer	<u>14.0 %</u>	<u>14.0 %</u>
Employee	<u>10.0 %</u>	<u>10.0 %</u>

Employer contribution rates are actuarially determined and are expressed as a percentage of covered payroll. The Electric System's contractually required contributions were \$982,747 and \$809,238 for 2017 and 2016, respectively. Of these amounts, \$20,717 and \$33,636 were reported as intergovernmental payables in 2017 and 2016, respectively.

***Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions***

The net pension liabilities for OPERS were measured as of December 31, 2016 and 2015, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Electric System's proportion of the net pension liability was based on the Electric System's share of contributions to the pension plan relative to the contributions of all participating entities in those measurement periods. The following is information related to the proportionate share and pension expense:

	<u>2017</u>	<u>2016</u>
Proportionate Share of the Net Pension Liability	\$12,116,488	\$8,949,281
Proportion of the Net Pension Liability	0.0533571%	0.0516665%
Change in Proportion	0.0016906%	
Pension Expense	\$3,877,382	\$1,109,710

At December 31, 2017 and 2016, the Electric System reported deferred outflows of resources and deferred inflows of resources related to pension from the following sources:

	<u>2017</u>	<u>2016</u>
<b>Deferred Outflows of Resources</b>		
Net difference between projected and actual earnings on pension plan investments	\$ 1,804,424	\$ 2,630,530
Changes in assumptions	1,921,822	-
Differences between expected and actual experience	16,426	-
Electric System contributions subsequent to the measurement date	<u>982,747</u>	<u>809,238</u>
Total Deferred Outflows of Resources	<u>\$ 4,725,419</u>	<u>\$ 3,439,768</u>
<b>Deferred Inflows of Resources</b>		
Differences between expected and actual experience	\$ 72,111	\$ 184,004
Electric System change in proportionate share	<u>179,794</u>	<u>331,566</u>
Total Deferred Inflows of Resources	<u>\$ 251,905</u>	<u>\$ 515,570</u>

\$982,747 reported as deferred outflows of resources related to pension resulting from the Electric System's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ending December 31, 2018. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense as follows:

Year Ending December 31:		
2018	\$	1,355,162
2019		1,545,273
2020		643,326
2021		<u>(52,994)</u>
Total	\$	<u>3,490,767</u>

***Actuarial Assumptions - OPERS***

Actuarial valuations of an ongoing plan involve estimates of the values of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employers and plan members) and include the types of benefits provided at the time of each valuation.

In 2016, the OPERS' actuarial consultants conducted an experience study for the period 2011 through 2015, comparing assumptions to actual results. The experience study incorporates both a historical review and forward-looking projections to determine the appropriate set of assumptions to keep the plan on a path toward full funding. Information from this study led to changes in both demographic and economic assumptions, with the most notable being a reduction in the actuarially assumed rate of return from 8.0 percent down to 7.5 percent, for the defined benefit investments. The total pension liability in the December 31, 2016, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Wage Inflation	3.25 percent
Future Salary Increases, including inflation COLA or Ad Hoc COLA	3.25 to 10.75 percent including wage inflation Pre 1/7/2013 Retirees: 3 percent, simple; Post 1/7/2013 Retirees: 3 percent simple through 2018, then 2.15 percent simple
Investment Rate of Return	7.5 percent
Actuarial Cost Method	Individual Entry Age

Mortality rates are based on the RP-2014 Healthy Annuitant mortality table. For males, Healthy Annuitant Mortality tables were used, adjusted for mortality improvement back to the observation period base of 2006 and then established the base year as 2015. For females, Healthy Annuitant Mortality tables were used, adjusted for mortality improvements back to the observation period base year of 2006 and then established the base year as 2010. The mortality rates used in evaluating disability allowances were based on the RP-2014 Disabled mortality tables, adjusted for mortality improvement back to the observation base year of 2006 and then established the base year as 2015 for males and 2010 for females. Mortality rates for a particular calendar year for both healthy and disabled retiree mortality tables are determined by applying the MP-2015 mortality improvement scale to the above described tables.

The most recent experience study was completed for the five-year period ended December 31, 2015.

The long-term rate of return on defined benefit investment assets was determined using a building-block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected real rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation.

During 2016, OPERS managed investments in four investment portfolios: the Defined Benefits portfolio, the 401(h) Health Care portfolio, the 115 Health Care Trust portfolio and the Defined Contribution portfolio. The 401(h) Health Care Trust was closed as of June 30, 2016. The Defined Benefit portfolio contains the investment assets of the Traditional Pension Plan, the defined benefit component of the Combined Plan, the annuitized accounts of the Member-Directed Plan. The Defined Benefit portfolio historically included the assets of the Member-Directed retiree medical accounts funded through the VEBA Trust. However, the VEBA Trust was closed as of June 30, 2016 and the net position transferred to the 115 Health Care Trust portfolio as of July 1, 2016. Within the Defined Benefit portfolio, contributions into the plans are all recorded at the same time, and benefit payments all occur on the first of the month. Accordingly, the money-weighted rate of return is considered to be the same for all plans within the portfolio. The money weighted rate of return, net of investments expense, for the Defined Benefit portfolio is 8.3 percent for 2016.

The allocation of investment assets with the Defined Benefit portfolio is approved by the Board of Trustees as outlined in the annual investment plan. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the defined benefit pension plans. The table below displays the Board-approved asset allocation policy for 2016 and the long-term expected real rates of return:

Asset Class	Target Allocation	Weighted Average Long-Term Expected Real Rate of Return (Arithmetic)
Fixed Income	23.00 %	2.75 %
Domestic Equities	20.70	6.34
Real Estate	10.00	4.75
Private Equity	10.00	8.97
International Equities	18.30	7.95
Other investments	18.00	4.92
Total	100.00 %	5.66 %

**Discount Rate** The discount rate used to measure the total pension liability was 7.5 percent. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and those of the contributing employers are made at the statutorily required rates. Based on those assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefits payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**Sensitivity of the Electric System’s Proportionate Share of the Net Pension Liability to Changes in the Discount Rate** The following table presents the Electric System’s proportionate share of the net pension liability calculated using the current period discount rate assumption of 7.5 percent, as well as what the Electric System’s proportionate share of the net pension liability would be if it were calculated using a discount rate that is one-percentage-point lower (6.5 percent) or one-percentage-point higher (8.5 percent) than the current rate:

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
Electric System's proportionate share of the net pension liability	\$ 18,510,886	12,116,488	\$ 6,788,179

### **OPERS Other Postemployment Benefits**

**Plan Description** – OPERS administers three separate pension plans: the Traditional Pension Plan – a cost-sharing, multiple-employer defined benefit pension plan; the Member-Directed Plan – a defined contribution plan; and the Combined Plan – cost-sharing, multiple-employer defined benefit pension plan that has elements of both a defined benefit and defined contribution plan.

OPERS maintains a cost-sharing, multiple-employer defined benefit post-employment health care trust, which funds multiple health care plans including medical coverage, prescription drug coverage and deposits to a Health Reimbursement Arrangement to qualifying benefit recipients of both the Traditional Pension and the Combined plans. This trust is also used to fund health care for Member-Directed Plan participants, in the form of a Retiree Medical Account (RMA). At retirement or refund, Member-Directed Plan participants may be eligible for reimbursement of qualified medical expenses from their vested RMA balance.

In order to qualify for post-employment health care coverage, age-and-service retirees under the Traditional Pension and Combined Plans must have 20 or more years of qualifying Ohio service credit. Health care coverage for disability benefit recipients and qualified survivor benefit recipients is available. The health care coverage provided by OPERS is considered an Other Postemployment Benefit (OPEB) as described in GASB Statement No. 45. Please see the Plan Statement in the OPERS 2016 CAFR for details.

The ORC permits, but does not mandate, OPERS to provide OPEB benefits to its eligible members and beneficiaries. Authority to establish and amend benefits is provided in Chapter 145 of the ORC.

OPERS issues a stand-alone financial report. Interested parties may obtain a copy by visiting <https://www.opers.org/financial/reports.shtml#CAFR>, by making a written request to OPERS, 277 East Town Street, Columbus, Ohio 43215-4642, or by calling (614) 222-5601 or 1-800-222-7377.

**Funding Policy** – The ORC provides the statutory authority requiring public employers to fund post retirement health care coverage through their contributions to OPERS. A portion of each employer’s contribution to OPERS is set aside for the funding of post retirement health care benefits. Employer contribution rates are expressed as a percentage of the covered payroll of active members. In 2017, local government employers contributed at a rate of 14 percent of covered payroll. The ORC currently limits the employer contribution to a rate not to exceed 14 percent of covered payroll for local government employers. Active members do not make contributions to the OPEB plan.

Each year, the OPERS Board of Trustees determines the portion of the employer contribution rate that will be set aside to fund health care plans. The portion of employer contributions allocated to health care for members in the Traditional Pension and Combined Plans was 1 percent during calendar year 2017. As recommended by OPERS’ actuary, the portion of employer contributions allocated to health care beginning January 1, 2018 decreased to 0 percent for both plans. The Board is also authorized to establish rules for the retiree or their surviving beneficiaries to pay a portion of the health care provided. Payment amounts vary depending on the number of covered dependents and the coverage selected. The employer contribution as a percentage of covered payroll deposited to the RMA for participants in the Member-Directed Plan for 2017 was 4 percent.

The Electric System's contributions for health care to the OPERS for the years ending December 31, 2017, 2016, and 2015 \$70,000, \$116,000 and \$131,000, respectively, which were equal to the required contributions for each year.

## Metropolitan Pension Plan

Employees of the City who were not included under the Ohio Public Employees Retirement System (OPERS) prior to May 15, 1962 and who were included under a Group Annuity Contract of the Metropolitan Life Insurance Company participate in the City of Hamilton Metropolitan Pension Plan, a single-employer defined benefit pension plan.

Upon retirement, plan participants are entitled to a supplemental retirement benefit paid by the City, equal to the difference between OPERS benefits that would have been payable to such employee had the employee been covered by OPERS during the full period of employment and actual OPERS benefits received. Benefit provisions of the plan are established and may be amended by the City Council through ordinance. All current participants in the Metropolitan Pension Plan are retired from service with the City.

The Metropolitan Pension Plan currently has no assets and the plan is not administered through a trust. GASB Statement No. 73 establishes requirements for defined benefit pensions that are not with the scope of GASB Statement No. 68, as well as for the assets accumulated for purposes of providing those pensions. The total pension liability was deemed not material to the Gas System's financial statements. As such, the Metropolitan Pension Plan liability is not reported in the financial statements.

## Retiree Life Insurance

The City provides post-employment life insurance coverage through the Hartford Insurance Company. The insurance coverage provided is considered an other post-employment benefit (OPEB) as described in GASB Statement No. 45.

Eligible employees are grouped into two classes. Employees who retired prior to March 1, 1977 are eligible to receive \$2,000 in life insurance benefits. Employees who retired after March 1, 1977 are eligible to receive \$4,000 in life insurance benefits. Benefit provisions of the plan are established and may be amended by City Council through ordinance.

The Electric System's annual OPEB cost and net OPEB for the Retiree Life Insurance Plan for the years ended December 31, 2017, 2016, and 2015 are as follows:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Annual required contribution (ARC)	\$ 18,980	\$ 19,363	\$ 18,099
Interest on Net OPEB	392	282	183
Adjustments to ARC	<u>(593)</u>	<u>(417)</u>	<u>(274)</u>
Annual OPEB cost	18,779	19,228	18,008
Contributions made	<u>16,460</u>	<u>16,634</u>	<u>15,947</u>
Increase in Net OPEB	2,319	2,594	2,061
Net OPEB, beginning of year	<u>9,230</u>	<u>6,636</u>	<u>4,575</u>
Net OPEB, end of year	<u>\$ 11,549</u>	<u>\$ 9,230</u>	<u>\$ 6,636</u>

The Electric System’s annual OPEB cost, percentage of OPEB contributed, net OPEB, and unfunded actuarial accrued liabilities for the years ended December 31, 2017, 2016, and 2015 are as follows:

<u>Years Ended</u>	<u>Annual OPEB Cost</u>	<u>Percentage of OPEB Contributed</u>	<u>Net OPEB Obligation</u>	<u>Unfunded Actuarial Accrued Liability</u>
2017	\$ 18,779	87.7%	\$ 11,549	\$ 277,234
2016	19,228	86.5%	9,230	254,226
2015	18,008	88.6%	6,636	266,328

The actuarial valuation date was December 31, 2017 and the accrued liability was calculated using the entry age normal cost method. The City’s post-employment life-insurance plan currently has no assets.

**9. RELATED PARTY TRANSACTIONS**

Under an arrangement with the City, the Electric System provides street lighting and traffic light services to the City, without charge and the estimated operating cost of supplying these free services was \$288,000 in both 2017 and 2016.

The City’s Gas System provides gas to the Electric System for use in the generation of electricity. Gas costs of \$94,000 and \$137,000 in 2017 and 2016, respectively, paid to the Gas System are included in operating expenses.

The Electric System sells electricity to the City’s Water and Wastewater Systems. Included in revenues are sales to the Water System and Wastewater System in 2017 and 2016 of \$1,455,488 (\$928,612 and \$526,876) and \$1,805,755 (\$1,217,154 and \$588,601), respectively.

The Electric System is allocated from the City a portion of the City’s administrative cost. In addition, it was charged expenses by the City’s internal service funds, which provide services to various City departments. Total expenses for these items were approximately \$3,994,000 and \$3,565,000 in 2017 and 2016, respectively, and are included in other operating expenses.

**10. CONTINGENT LIABILITIES**

Various claims and lawsuits are pending against the City involving the Electric System. The City believes that the ultimate disposition of such claims and lawsuits will not have a material adverse effect on the financial position of the Electric System.

**11. RISK MANAGEMENT**

The City is exposed to various risks of loss related to torts and liability, damage to and theft of or destruction of assets; errors and omissions; injuries to employees; and natural disasters. The City maintains comprehensive insurance coverage, for all City departments including the Electric System, with private carriers for real property, building contents, vehicle, property and general liability insurance, police professional liability, and public officials errors and omissions insurance. Vehicle policies include liability coverage for bodily injury and property damage. Claim payments have not exceeded coverage in the past three years. There was no decline in the level of coverage from the prior year.

**12. JOINT VENTURES/JOINTLY GOVERNED ORGANIZATIONS**

The City of Hamilton is a member of a number of Governmental Joint Ventures and Jointly Governed Organizations as described in GASB Statement No. 61, The Financial Reporting Entity. The following is a list of organizations and a brief description of the Joint Venture and the Jointly Governed Organizations pertaining specifically to the Electric System of the City.

*(a) AMP, Inc.* – The City is a founding member of American Municipal Power, Inc. (AMP). AMP is a non-profit corporation organized under Ohio law and Internal Revenue Code Section 501 and is a jointly governed organization. The organization operates on a non-profit basis for the mutual benefit of its member municipalities, all of whom own or operate a municipal electric system. The non-profit corporation is dedicated to providing member assistance and low-cost power supplies.

The controlling board of AMP, Inc. is based upon a representative from several of the member communities. The degree of control exercised by any participating government is limited to its representation on the board. The continued existence of the corporation is not dependent upon the City. Complete financial statements may be obtained from AMP, Inc., 1111 Schrock Road, Columbus, Ohio 43219.

*(b) American Municipal Power (AMP) – OMEGA JV2 Project* – In December 2000, the City became a part of the OMEGA (Ohio Municipal Energy Generation Association) JV2 Project. The OMEGA JV2 project is a joint venture among the City of Hamilton and 35 other participating municipalities created under the auspices of the Ohio Constitution section XVIII, Sections 3 and 4 and Ohio Revised Code Section 715.02. All of the participating communities are members of AMP, Inc. and the joint venture has appointed that non-profit corporation to perform certain management functions. The purpose of the joint venture is to create distributive generation among the participating members allowing for increased electric production capacity during peak demand. The degree of control exercised by any participating member is weighted in proportion to each participant’s project share, which is 23.87 percent for the City (a non-majority voting position). Project share is equal to the amount of the distributive generation capacity for each of the members. Membership in the joint venture is defined as financing or non-financing participant, as well as owner or purchasing participant, for which the City qualified as a financing, purchasing participant. As a financing participant, the City makes payments to OMEGA JV2.

The following amounts were expended by the Electric Fund and recorded within the Purchase of Electric expense account to the OMEGA JV2 in 2017 and 2016:

	<u>2017</u>	<u>2016</u>
Payments - OMEGA JV2	\$ 2,251,749	2,430,247

The continued existence of OMEGA JV2 is dependent upon the City’s continued participation but the City, as a financing purchasing participant, does not have an equity interest in OMEGA JV2. Complete financial statements may be obtained from AMP, Inc., 1111 Schrock Road, Columbus, Ohio 43219.



*(c) Meldahl Hydroelectric Project* – AMP constructed a three-unit hydroelectric generation facility on the Captain Anthony Meldahl Locks and Dam, an existing dam, on the Ohio River, constructed by the United States Army Corps of Engineers and of related equipment and associated transmission facilities (the “Meldahl Project”). Now that the Meldahl Project has entered commercial operation, it has a generating capacity of approximately 105 MW. The City of Hamilton and AMP hold, as co-licensees, the Federal Energy Regulatory Commission license to operate the Meldahl Project.

The City of Hamilton has executed a take-or-pay power sales contract with AMP for a Project Share of 54 MW, or 51.4 percent, of capacity and associated energy from the Meldahl Project.

Pursuant to the various agreements between the City of Hamilton and AMP, the Meldahl Project is owned by Meldahl, LLC, a single member, Delaware not-for-profit limited liability company (“Meldahl LLC”). AMP is the sole member of Meldahl, LLC and appoints three members of its Board of Directors (the Meldahl Board). AMP acting as agent of Meldahl LLC, has financed the development, acquisition, construction and equipping of the Meldahl Project. In order to finance the construction of the Meldahl Project and related costs, in 2010 and 2011 AMP issued six series of \$685,100,000 consisting of taxable, tax-exempt and tax advantaged obligations (Build America Bonds, Clean Renewable Energy Bonds and New Clean Renewable Energy Bonds). The Meldahl Bonds are secured by a master trust indenture and payable from amounts received by AMP under a take-or-pay power sales contract with 48 of its Members. The Meldahl Project entered commercial operation on April 12, 2016.

### **13. CONTRACTUAL COMMITMENTS**

At December 31, 2017, the Electric System had contractual commitments of approximately \$2,438,000 related to property, plant and equipment improvements and additions, as well as various other contract and agreements to provide or receive services related to the Electric System operations.

### **14. CLOSURE OF THE ELECTRIC SYSTEM TO COMPETITION**

In March 2002, the Hamilton City Council adopted an ordinance effectively closing the municipal borders of the City to electric deregulation. With the adoption of the ordinance, electric customers within these corporate boundaries must purchase their electricity from the Hamilton Electric System.

### **15. SUBSEQUENT EVENT**

In March and April 2018, the City issued \$43,930,000 of Revenue Refunding Bonds. The 2018 bond proceeds, including issuance premium, were used to retire the 2017 Various Purpose General Obligation Notes reported by the Electric, Water and Wastewater Systems.

The Electric System refunding bonds were issued in the amount of \$12,980,000, carry an interest rate of 3 to 5 percent, and mature in 2030.

**CITY OF HAMILTON, OHIO – ELECTRIC SYSTEM  
REQUIRED SUPPLEMENTARY INFORMATION  
OHIO PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**SCHEDULE OF THE PROPORTIONATE SHARE OF THE NET PENSION LIABILITY  
LAST FOUR MEASUREMENT PERIODS**

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Electric System's proportion of the Net Pension Liability	0.0533571%	0.0516665%	0.0568681%	0.0568681%
Electric System's proportionate share of the Net Pension Liability	\$ 12,116,488	\$ 8,949,281	\$ 6,858,924	\$ 6,707,570
Electric System's Covered Payroll	\$ 6,743,650	\$ 6,614,758	\$ 6,999,658	\$ 6,440,385
Electric System's Proportionate Share of the Net Pension Liability as a Percentage of it Covered Payroll	179.67%	135.29%	97.99%	104.15%
Plan Fiduciary Net Position as a Percentage as a Percentage of the Total Pension Liability	77.25%	81.08%	86.45%	86.36%

Note: Information prior to 2014 was not available.

The schedule is reported as of the measurement date of the net pension liability, which is the prior year end.

**SCHEDULE OF CONTRIBUTIONS  
LAST FIVE YEARS**

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Contractually Required Contributions	\$ 982,747	\$ 809,238	\$ 793,771	\$ 839,959	\$ 837,250
Contributions in Relation to the Contractually Required Contribution	<u>(982,747)</u>	<u>(809,238)</u>	<u>(793,771)</u>	<u>(839,959)</u>	<u>(837,250)</u>
Contribution Deficiency (Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Electric System's Covered Payroll	\$ 7,559,592	\$ 6,743,650	\$ 6,614,758	\$ 6,999,658	\$ 6,440,385
Contributions as a Percentage of Covered Payroll	13.00%	12.00%	12.00%	12.00%	13.00%

Note: Information prior to 2013 was not available.

**NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION**

There were no recent significant changes of benefit terms, investment policies, the size or composition of the population covered by the benefit terms impacting the actuarial valuation study for the year ended December 31, 2016.

In 2016, a five-year experience study was completed on the period January 1, 2011 through December 31, 2015. The Board adopted changes to both the demographic and economic assumptions as a result of the study. The most notable change in demographic assumptions is an increased life expectancy of the members and the most notable change in economic assumptions is the reduction in the actuarially assumed rate of return from 8.00% down to 7.50% for the defined benefit investments. The new assumptions are included in the 2016 actuarial valuation.

In 2016, OPERS, in conjunction with the Board's investment consultants, also completed an asset liability study. Periodically, the System engages in a more comprehensive study that examines the nature of the pension liabilities the plan will ultimately pay and the characteristics of the asset allocation projections and the associated level of risk. As a result of this study, OPERS modified the asset allocation slightly, but not substantively.