



## **Electric System of the Virgin Islands Water and Power Authority**

Management's Discussion and Analysis,  
Financial Statements (with Independent  
Auditor's Report Thereon), Required  
Supplementary Information, and  
Supplementary Schedule (Unaudited)  
Years Ended June 30, 2017 and 2016

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# Electric System of the Virgin Islands Water and Power Authority

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## Independent Auditor's Report

To the Governing Board  
Virgin Islands Water and Power Authority

### Report on the Financial Statements

We have audited the accompanying financial statements of the Electric System (the Electric System) of the Virgin Islands Water and Power Authority (the Authority), a major fund of the Authority, as of and for the years ended June 30, 2017 and 2016, and the related notes to the financial statements, which collectively comprise the Electric System's basic financial statements as listed in the table of contents. The Authority is a component unit of the Government of the U.S. Virgin Islands.

#### *Management's Responsibility for the Financial Statements*

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

#### *Auditor's Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of 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 the 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.

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### *Opinion*

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Electric System of the Virgin Islands Water and Power Authority, as of June 30, 2017 and 2016, and the respective 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 Matters*

As discussed in Note 1 to the financial statements, these financial statements present only the Electric System and do not purport to, and do not present fairly the financial position of the Authority, as of June 30, 2017 and 2016, the respective changes in its financial position, or, where applicable, its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

The accompanying financial statements have been prepared assuming the Electric System will continue as a going concern. As discussed in Note 13 to the financial statements, the Electric System is in an uncertain financial position and has reported an unrestricted net deficit and has suffered losses from operations. Management's evaluation of the events and conditions and management's plans regarding those matters are also described in Note 13. These financial statements do not include any adjustments that might result from the outcome of this uncertainty. 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 management's discussion and analysis, the schedule of funding progress-other postemployment benefits obligation, schedule of the system's share of the net pension liability, and schedule of the system's pension contributions on pages 6 through 13 and 53 through 55 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 Electric System's 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 - Supplementary Schedule*

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Electric System's basic financial statements. The five-year comparative summary of operations is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

#### *Other Reporting Required by Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 7, 2018, on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Electric System's internal control over financial reporting and compliance.

*BDO USA, LLP*

December 7, 2018

## Management's Discussion and Analysis

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# Electric System of the Virgin Islands Water and Power Authority

## Management's Discussion and Analysis

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The Virgin Islands Water and Power Authority (the Authority) owns, operates, and maintains an electric generation and distribution system (the Electric System) and a water production and distribution system (the Water System), which are separately financed and require separate accounting and reporting. Each of these Systems is accounted for as a separate enterprise. As management of the Authority, we offer readers of the Electric System financial statements this discussion and analysis of the financial activities of the Electric System for the years ended June 30, 2017 and 2016, with selected comparative information for the year ended June 30, 2015. We encourage readers to consider the information presented here in conjunction with the financial statements that follow this section.

The Electric System's service territory includes the islands of St. Thomas, St. Croix, St. John, and Water Island. The electric generating facilities for St. Thomas, St. John, and Water Island are interconnected, while the St. Croix generating facilities serve on a stand-alone basis. The Authority is the only electric utility that operates in the Virgin Islands. There are, however, a few commercial entities that produce electricity for their own use.

The Authority provides electric service to more than 55,000 customers (as of June 30, 2017). The Authority also provides water service to more than 12,000 customers (as of June 30, 2017). The Electric System's rates are under the jurisdiction of the Virgin Islands Public Services Commission (PSC or the Commission), unlike many other municipal systems. These rates are intended to provide revenues to recover operating and maintenance expenses, funds for debt service coverage requirements, and funds for working capital and capital expenses. The Authority does not use rate base or rate of return principles for setting rates.

### Financial Highlights - 2017

- Net position decreased by \$46.1 million or 28.4% as a result of fiscal year 2017 operations.
- Current assets decreased from \$92.0 million to \$86.0 million. This was primarily due to a decrease in cash and cash equivalents of \$2.0 million, a decrease in investment derivative instruments of \$5.6 million, a decrease in fuel oil inventory of \$2.7 million, a decrease in the Virgin Islands Government receivables of \$2.2 million, and offset by increases in the alternative energy research assets of \$2.5 million and unbilled revenues of \$2.9 million.
- Noncurrent assets increased by \$25.8 million, due primarily to an increase in restricted cash of \$12.0 million, an increase in non-current Virgin Islands Government receivables of \$4.0 million, and an increase in fuel costs recoverable of \$10.1 million. The Authority has reported a portion of the Virgin Islands Government receivables as noncurrent because said portion is not expected to be collected in 2018.
- Capital assets increased from \$321.5 million in 2016 to \$494.5 million in 2017. This was primarily due to an increase of \$167.4 million in utility plant in service. The increase is mainly attributed to the recognition of a capital lease obligation of \$154.0 million. Additional information on capital assets can be found in Note 5.
- Total deferred outflows of resources increased from \$78.0 million in 2016 to \$82.0 million in 2017.



# Electric System of the Virgin Islands Water and Power Authority

## Management's Discussion and Analysis

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- The fuel costs recoverable balance increased by \$10.1 million to \$19.8 million in 2017 as the Levelized Energy Adjustment Clause (LEAC) permitted by the PSC allowed the Authority to recover a significant amount of its cost of fuel during the year.
- During 2017, total operating revenues were \$244.2 million compared to \$224.3 million in 2016. The increase is mainly due to an increase in base revenues of \$30.4 million, an increase of \$1.7 million in fuel escalator revenues and offset by decreases in LEAC revenues - RFM of \$7.8 million, OPEB surcharge of \$2.3 million, other operating revenues of \$787 thousand, and bad debts of \$979 thousand.
- Operating expenses, excluding depreciation, amortization, and fuel expense were \$102.5 million for the year ended June 30, 2017; an increase of \$19.1 million compared to the year ended June 30, 2016. The increase was primarily due to an increase in administrative and general expenses of \$13.9 million and an increase in operations and maintenance by \$6.0 million.
- Capital grants and contributions received by the Electric System were \$4.9 million in fiscal year 2017 compared to \$4.4 million in fiscal year 2016. Of this amount, \$4.3 million was for fuel tax, \$80 thousand was for the DA/SmartGrid, \$245 thousand was for the Integrated Resource Plan, and \$202 thousand was for the VITEMA headquarters underground project.

### Financial Highlights - 2016

- Net position decreased by \$15.9 million or 11% as a result of fiscal year 2016 operations.
- Current assets decreased from \$94.9 million to \$91.8 million. This was primarily due to a decrease in cash and cash equivalents of \$3.8 million, a decrease in customers' receivables of \$1.4 million, a decrease in fuel oil inventory of \$5.1 million, a decrease in the Virgin Islands Government receivables of \$6.8 million, and offset by increases in the alternative energy research assets of \$3.5 million and investment derivative instrument gain of \$9.8 million.
- Noncurrent assets decreased by \$220 thousand, due primarily to a decrease in non-current Virgin Islands Government receivables of \$6.4 million, a decrease in due from the Water System of \$660 thousand offset by an increase in fuel costs recoverable of \$7.3 million. The Authority reported a portion of the Virgin Islands Government receivables as noncurrent because said portion was not expected to be collected in 2017.
- The fuel costs recoverable balance increased by \$7.3 million to \$9.7 million in 2016 as the Levelized Energy Adjustment Clause (LEAC) permitted by the PSC allowed the Authority to recover a significant amount of its cost of fuel during the year.
- During 2016, total operating revenues were \$224.3 million compared to \$270.3 million in 2015. The decrease is mainly due to decreases in fuel escalator revenues of \$51.9 million offset by an increase in base revenues of \$5.0 million and \$312 thousand in other revenues.

# Electric System of the Virgin Islands Water and Power Authority

## Management's Discussion and Analysis

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- Operating expenses, excluding depreciation, amortization, and fuel expense were \$83.9 million for the year ended June 30, 2017; a decrease of \$25.2 million compared to the year ended June 30, 2015. The decrease was primarily due to a decreases in administrative and general expenses of \$20.6 million, distribution expenses of \$1.9 million, and operations and maintenance expenses of \$2.1 million.
- Capital grants and contributions received by the Electric System were \$4.4 million in fiscal year 2016 compared to \$7.3 million in fiscal year 2015. Of this amount, \$3.8 million was for fuel tax, \$301 thousand was for the St. Croix Schools and shelters underground project, \$184 thousand was for the Integrated Resource Plan, and \$47 thousand was for the VITEMA headquarters underground project.

### Overview of the Financial Statements

#### *Statement of Net position*

This statement includes all of the Electric System's assets and liabilities and provides information about the nature and amount of investments in resources (assets) and the obligations to Electric System's creditors (liabilities). It also provides the basis for evaluating the capital structure of the Electric System and assessing the liquidity and financial flexibility of the Electric System.

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

All of the current year's revenues and expenses are accounted for in this statement. This statement measures the success of the Electric System's operations over the past two years and can be used to determine whether the Electric System has successfully recovered all its costs through its user fees and other charges, and maintained profitability and creditworthiness.

#### *Statement of Cash Flows*

The primary purpose of this statement is to provide information about the Electric System's cash receipts and cash payments during the reporting period. This statement reports cash receipts, cash payments, and net changes in cash resulting from operating, investing, and financing activities and provides answers to such questions as "Where did cash come from?" "What was cash used for?" and "What was the change in cash balances during the reporting period?"

#### *Notes to the Financial Statements*

The notes provide additional information that is essential to fully understanding the data provided in the financial statements. The notes to the financial statements can be found on pages 19 - 52 of this report.

#### *Financial Analysis of the Authority's Electric System*

One of the most important questions asked about the Electric System's finances is: "Is the Electric System better off or worse off as a result of the fiscal year's activities?" The statements of net position and the statements of revenues, expenses, and changes in net position report information about the activities of the Electric System in a way that will help answer this question.

# Electric System of the Virgin Islands Water and Power Authority

## Management's Discussion and Analysis

These two statements report the net position of the Electric System and the changes in them. You can think of the Electric System's net position - the difference between assets and liabilities - as one way to measure financial health or financial position. Over time, increases or decreases in the Electric System's net position are one indicator of whether its financial health is improving or deteriorating. However, you will need to consider other nonfinancial factors, such as changes in economic conditions, customer growth, and new or changed legislation and regulation, to gauge overall changes in financial health.

The table below provides a comparative review of key statement of net position captions.

Table 1  
Condensed Statements of Net Position

<i>As of June 30,</i>	<b>2017</b>	<b>2016</b>	<b>2015</b>
Current assets	\$ 85,953,784	\$ 91,971,906	\$ 94,924,511
Restricted assets	75,120,427	62,280,733	58,635,060
Other non-current assets	42,048,379	29,051,539	28,828,665
Net capital assets	494,507,547	321,517,107	330,357,873
Deferred outflows of resources	82,045,494	77,928,745	26,126,789
Total assets and deferred outflows of resources	\$ 779,675,631	\$ 582,750,030	\$ 538,872,898
Long-term debt	\$ 398,880,733	\$ 231,810,190	\$ 233,246,386
Other liabilities	564,212,189	497,610,776	452,285,379
Total liabilities	963,092,922	729,420,966	685,531,765
Deferred inflows of resources	25,321,831	15,931,551	-
Net investment in capital assets	186,761,363	189,945,373	195,825,684
Restricted	28,005,104	52,858,707	49,238,255
Unrestricted	(423,505,589)	(405,406,567)	(391,722,806)
Total net position	(208,739,122)	(162,602,487)	(146,658,867)
Total liabilities, deferred inflows of resources, and net position	\$ 779,675,631	\$ 582,750,030	\$ 538,872,898

At June 30, 2017, the Electric System had total assets and deferred outflows of resources of \$779.7 million of which \$494.5 million or 63% represents net capital assets. Borrowed funds have been instrumental in acquiring these assets, with \$446.2 million in long-term debt and lines of credit balances outstanding at June 30, 2017.

A significant change to the Electric System's financial statements related to the implementation of Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions - an amendment of GASB Statement No. 27*, in 2015, which resulted in the restatement of beginning net position to record beginning net pension liability and beginning deferred outflows. At June 30, 2017 and 2016, the Electric System had a net pension liability of \$274.8 and \$258.9 million, respectively, which is included in other liabilities.

# Electric System of the Virgin Islands Water and Power Authority

## Management's Discussion and Analysis

Changes in net position can be seen by reviewing the following condensed statements of revenues, expenses, and changes in net position.

**Table 2**  
**Condensed Statements of Revenues, Expenses, and Changes in Net Position**

<i>Years ended June 30,</i>	<b>2017</b>	<b>2016</b>	<b>2015</b>
Base revenues	\$ 92,747,396	\$ 62,327,260	\$ 56,760,880
Fuel escalator revenues	129,667,740	135,799,775	187,655,232
Investment earnings	99,479	42,679	26,221
Payment in lieu of taxes	430,946	433,566	428,394
Other income	21,384,395	25,749,666	25,465,318
<b>Total revenues</b>	<b>244,329,956</b>	<b>224,352,946</b>	<b>270,336,045</b>
Fuel	142,627,941	125,688,066	172,209,703
Operating expenses, excluding fuel, depreciation, amortization, and payment in lieu of taxes	102,525,228	83,387,408	108,645,443
Payment in lieu of taxes	500,000	500,000	500,000
Allowance for funds used during construction	(102,310)	(133,116)	(562,849)
Interest expense	28,053,069	13,711,701	14,025,824
Depreciation and amortization	16,176,649	17,553,806	10,770,895
<b>Total expenses</b>	<b>289,780,577</b>	<b>240,707,865</b>	<b>305,589,016</b>
Loss before capital grants and contributions	(45,450,621)	(16,354,919)	(35,252,971)
Loss on retirement of assets	-	(13,772,676)	-
Investment derivative instruments (loss) gain	(5,558,810)	9,825,177	-
Capital grants and contributions	4,872,796	4,358,798	7,306,087
<b>Decrease in net position</b>	<b>(46,136,635)</b>	<b>(15,943,620)</b>	<b>(27,946,884)</b>
<b>Net position, beginning of year</b>	<b>(162,602,487)</b>	<b>(146,658,867)</b>	<b>(118,711,983)*</b>
<b>Net position, end of year</b>	<b>\$ (208,739,122)</b>	<b>\$ (162,602,487)</b>	<b>\$ (146,658,867)</b>

*\*As restated for implementation of GASB Statement No. 68*

The Electric System's net position decreased by \$46.1 million during the fiscal year ended June 30, 2017. Key elements of the decrease are as follows:

- Total operating revenues increased by \$20.0 million, primarily due to an increase of \$30.4 million in base revenues offset by a decrease of \$6.1 million in fuel escalator revenues and a decrease of \$4.4 million in other income.

# Electric System of the Virgin Islands Water and Power Authority

## Management's Discussion and Analysis

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- Total operating expenses increased by \$19.1 million due to an increase of \$6.0 million in production expenses, increases of \$14.0 million in administrative and general expenses, an increase of \$14.3 million in interest expense, offset by a decrease of \$1.4 million in depreciation and amortization expense.
- Total non-operating expenses increased by \$1.6 million primarily due to a loss on investment derivative instruments of \$5.6 million.

The Electric System's net position decreased by \$15.9 million or 11% during the fiscal year ended June 30, 2016. Key elements of the decrease are as follows:

- Total operating revenues decreased by \$46.0 million, primarily due to a decrease of \$51.9 million in fuel escalator revenues offset by an increase of \$5.0 million in base revenues.
- Total operating expenses decreased by \$65.0 million due to a decrease of \$48.6 million in total production expenses, a decrease of \$20.6 million in administrative and general expenses, offset by an increase of \$6.7 million in depreciation and amortization expense.
- Total non-operating expenses increased by \$4.0 million, primarily due to a gain on investment derivative instruments of \$9.8 million offset by a loss of \$13.8 million on capital assets disposed.
- Capital grants and contributions decreased to \$4.4 million in 2016 from \$7.3 million in 2015.

### Capital Asset and Debt Administration

#### *Capital Assets*

The Electric System's capital assets as of June 30, 2017, amounted to \$494.5 million (net of accumulated depreciation and property-related gains). These capital assets include land, generation, transmission and distribution systems, buildings and fixed equipment, furniture, fixtures, and equipment, and construction in progress. Table 3 provides the detail of capital assets, net of accumulated depreciation and property-related gains.

**Table 3**  
**Capital Assets**  
**(Net of Accumulated Depreciation and Property-Related Gains)**

<i>June 30,</i>	<b>2017</b>	<b>2016</b>	<b>2015</b>
Land	\$ 4,654,206	\$ 4,654,206	\$ 4,654,206
Utility plant in service	248,711,974	249,643,592	260,438,957
Buildings and fixed equipment	159,522,845	17,439,709	12,027,454
Furniture, fixtures, and equipment	19,489,404	7,935,856	4,962,352
Construction in progress	51,907,747	40,223,744	48,274,904
Assets held for sale	10,221,371	1,800,000	-
Net utility plant	\$ 494,507,547	\$ 321,517,107	\$ 330,357,873

# Electric System of the Virgin Islands Water and Power Authority

## Management's Discussion and Analysis

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The major projects completed in fiscal year 2017 was the commissioning of the Liquefied Petroleum Gas (LPG) projects in both St. Thomas and St. Croix for a combined amount of \$160.0 million, other projects on St. Croix included the Richmond Plant Fire Protection System for \$2.4 million, Unit 11 Generator Rotor Repairs for \$1.5 million, and the Cruzan Rum Plant Underground project for \$2.7 million.

The other major projects completed in fiscal year 2017 for St. Thomas were the Rothschild Francis Market Square Utility Relocation for \$1.2 million, GPS/GIS Mapping System for \$1.4 million, and the supervisory control and data acquisition (SCADA) system installation for \$1.7 million.

The Authority's fiscal year 2018 capital budget anticipates investing \$7.8 million in capital projects. Additional information on capital assets can be found in Note 5.

### *Long-Term Debt*

The Authority has no taxing power and its obligations are not debts of the Government of the United States Virgin Islands or of the United States of America. However, the Government of the United States Virgin Islands has agreed to guarantee the payments of the principal and interest on the notes pursuant to the terms of the Guaranty Agreement by and between the Government, the Authority, and FirstBank, which was authorized by the Legislature of the United States Virgin Islands Act No. 7028 (Section 7), 27<sup>th</sup> Legislature of the United States Virgin Islands.

At June 30, 2017, the Electric System had total long-term debt outstanding (including current installments) of \$416.6 million, a net increase of \$175.9 million from the prior year. Table 4 provides the detail of long-term debt.

**Table 4**  
**Long-Term Debt**

<i>June 30,</i>	<b>2017</b>	<b>2016</b>	<b>2015</b>
Revenue bonds	\$ 215,650,000	\$ 227,180,000	\$ 238,190,000
Bond anticipation notes	33,960,000	-	-
RUS note	13,000,000	13,000,000	-
General obligation notes	-	477,597	3,256,067
Capital lease obligation	153,954,445	-	-
Lines of credit	-	-	25,128,440
<b>Total</b>	<b>416,564,445</b>	<b>240,657,597</b>	<b>266,574,507</b>
<b>Plus unamortized bond premium</b>	<b>2,555,560</b>	<b>3,160,190</b>	<b>3,311,295</b>
<b>Total</b>	<b>\$ 419,120,005</b>	<b>\$ 243,817,787</b>	<b>\$ 269,885,802</b>

The Authority's ability to incur long-term indebtedness is capped by Virgin Islands statute at \$750 million for the Electric and Water Systems combined. As of June 30, 2017, combined long-term debt amounts to approximately \$422.8 million.

Additional information on long-term debt can be found in Note 7.

# Electric System of the Virgin Islands Water and Power Authority

## Management's Discussion and Analysis

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### Requests for Information

This financial report is designed to provide a general overview of the Electric System's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Chief Financial Officer, Virgin Islands Water and Power Authority, P.O. Box 1450, St. Thomas, USVI 00804.

## Financial Statements

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# Electric System of the Virgin Islands Water and Power Authority

## Statements of Net Position

<i>June 30,</i>	2017	2016
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 5,226,982	\$ 7,194,028
Accounts receivable:		
Customers and other, net	9,904,058	8,753,529
Virgin Islands Government	14,981,200	17,193,337
Virgin Islands Government, fuel tax receivable	2,284,253	2,024,603
Grants receivable	2,511,156	2,632,554
Unbilled revenues	9,044,287	6,167,646
Alternative energy research asset	15,560,165	13,038,614
Inventories:		
Fuel oil	5,539,991	8,218,241
Materials and supplies	11,103,924	10,723,899
Prepayments and other current assets	5,531,401	6,200,278
Investment derivative instruments	4,266,367	9,825,177
<b>Total current assets</b>	<b>85,953,784</b>	<b>91,971,906</b>
Restricted assets:		
Cash and cash equivalents	30,230,936	18,221,906
Investments	37,439,897	37,737,271
Due from unrestricted assets	7,449,594	6,321,556
<b>Total restricted assets</b>	<b>75,120,427</b>	<b>62,280,733</b>
Other non-current assets:		
Virgin Islands Government accounts receivable	14,572,272	10,564,411
Fuel costs recoverable	19,809,228	9,733,805
Due from Water System	7,666,879	8,753,323
<b>Total other noncurrent assets</b>	<b>42,048,379</b>	<b>29,051,539</b>
Capital assets:		
Utility plant in service	805,026,689	637,610,273
Less accumulated depreciation	(372,648,260)	(358,116,910)
Net utility plant in service	432,378,429	279,493,363
Assets held for sale	10,221,371	1,800,000
Construction in progress	51,907,747	40,223,744
<b>Net capital assets</b>	<b>494,507,547</b>	<b>321,517,107</b>
<b>Deferred Outflows of Resources</b>		
Pension related outflows	82,045,494	77,928,745
<b>Total assets and deferred outflows of resources</b>	<b>\$ 779,675,631</b>	<b>\$ 582,750,030</b>

*Continued on next page.*

# Electric System of the Virgin Islands Water and Power Authority

## Statements of Net Position (continued)

<i>June 30,</i>	2017	2016
<b>Liabilities, Deferred Inflows of Resources, and Net Position</b>		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 137,521,494	\$ 101,023,750
Customer deposits	28,591,801	27,448,918
Due to Federal Emergency Management Agency	4,142,493	4,142,493
Lines of credit	27,128,440	25,128,440
Current installments on capital lease obligation	7,830,990	-
Current installment on general obligation notes	-	477,597
Total current liabilities	205,215,218	158,221,198
Liabilities payable from restricted assets:		
Current installments on long-term debt	12,408,282	11,530,000
Accrued interest payable	6,590,979	5,930,210
Insurance surcharge reserve	8,700,259	8,700,257
Due to restricted assets	7,449,594	6,321,556
Total liabilities payable from restricted assets	35,149,114	32,482,023
Long-term debt:		
Revenue bonds, excluding current installments	237,530,000	215,650,000
Rural Utilities Service note	12,671,718	13,000,000
Unamortized bond premiums	2,555,560	3,160,190
Capital lease obligation	146,123,455	-
Total long-term debt	398,880,733	231,810,190
Long-term liabilities:		
Net pension liability	274,794,360	258,982,351
Net OPEB liability	49,053,497	47,925,204
Total long-term liabilities	323,847,857	306,907,555
Total liabilities	963,092,922	729,420,966
Deferred inflows of resources:		
Pension related inflows	25,321,831	15,931,551
Net position:		
Net investment in capital assets	186,761,363	189,945,373
Restricted	28,005,104	52,858,707
Unrestricted (deficit)	(423,505,589)	(405,406,567)
Total net position (deficit)	(208,739,122)	(162,602,487)
Total liabilities, deferred inflows of resources, and net position	\$ 779,675,631	\$ 582,750,030

*See accompanying notes to the financial statements.*

# Electric System of the Virgin Islands Water and Power Authority

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

<i>Years ended June 30,</i>	2017	2016
<b>Operating Revenues</b>		
Electricity sales to customers	\$ 70,823,169	\$ 47,984,195
Electricity sales to Virgin Islands Government	21,924,227	14,281,634
Fuel escalator revenues	129,667,740	127,996,405
LEAC revenue - RFM	-	7,803,370
OPEB surcharge	2,922,132	5,239,552
Maintenance surcharge	15,619,170	15,954,156
Payment in lieu of taxes surcharge	430,946	433,566
Line loss surcharge	1,379,712	1,388,032
Other operating revenues	2,381,069	3,167,926
Bad debt (expense) recovery	(917,688)	61,431
<b>Total operating revenues</b>	<b>244,230,477</b>	<b>224,310,267</b>
<b>Operating and Production Expenses</b>		
Production:		
Fuel	142,627,941	125,688,066
Operations and maintenance	38,602,721	32,596,030
<b>Total production expenses</b>	<b>181,230,662</b>	<b>158,284,096</b>
Distribution	8,031,632	8,185,087
Customer service	4,567,186	5,274,266
Administrative and general	51,323,689	37,332,025
Payment in lieu of taxes	500,000	500,000
Depreciation and amortization	16,176,649	17,553,806
<b>Total operating and production expenses</b>	<b>261,829,818</b>	<b>227,129,280</b>
<b>Operating loss</b>	<b>(17,599,341)</b>	<b>(2,819,013)</b>
<b>Nonoperating Revenues (Expenses)</b>		
Loss on retirement of capital assets	-	(13,772,676)
Investment derivative instruments (loss) gain	(5,558,810)	9,825,177
Interest expense	(28,053,069)	(13,711,701)
Investment earnings	99,479	42,679
Allowance for funds used during construction	102,310	133,116
<b>Total nonoperating expenses</b>	<b>(33,410,090)</b>	<b>(17,483,405)</b>
<b>Capital grants and contributions</b>	<b>4,872,796</b>	<b>4,358,798</b>
<b>Decrease in net position</b>	<b>(46,136,635)</b>	<b>(15,943,620)</b>
<b>Net position, beginning of year</b>	<b>(162,602,487)</b>	<b>(146,658,867)</b>
<b>Net position, end of year</b>	<b>\$ (208,739,122)</b>	<b>\$ (162,602,487)</b>

See accompanying notes to the financial statements.

# Electric System of the Virgin Islands Water and Power Authority

## Statements of Cash Flows

<i>Years ended June 30,</i>	<b>2017</b>	<b>2016</b>
<b>Operating Activities</b>		
Receipts from customers	\$ 238,407,583	\$ 239,158,133
Payments to suppliers	(189,189,098)	(182,451,452)
Payments to employees	(25,013,522)	(24,665,773)
<b>Net cash provided by operating activities</b>	<b>24,204,963</b>	<b>32,040,908</b>
<b>Capital and Related Financing Activities</b>		
Proceeds from long-term debt	33,960,000	13,000,000
Principal paid on long-term debt	(11,530,000)	(11,010,000)
Interest paid on long-term debt	(11,726,720)	(11,848,909)
Interest paid on customer deposits/other	(1,205,767)	(1,096,965)
Acquisition and construction of capital assets	(29,167,088)	(22,485,717)
Capital grants and contributions received	4,734,543	4,270,463
<b>Net cash used in capital and related financing activities</b>	<b>(14,935,032)</b>	<b>(29,171,128)</b>
<b>Non-capital Financing Activities</b>		
Proceeds from lines of credit	2,000,000	-
Principal payments on general obligation notes	(477,597)	(2,778,470)
Interest paid on lines of credit	(1,249,513)	(1,177,721)
<b>Net cash provided by (used in) non-capital financing activities</b>	<b>272,890</b>	<b>(3,956,191)</b>
<b>Investing Activities</b>		
Interest received	201,789	175,796
Purchases, sales, and maturities of investments, net	297,374	(936,269)
<b>Net cash provided by (used in) investing activities</b>	<b>499,163</b>	<b>(760,473)</b>
<b>Net change in cash and cash equivalents</b>	<b>10,041,984</b>	<b>(1,846,884)</b>
<b>Cash and cash equivalents, beginning of year</b>	<b>25,415,934</b>	<b>27,262,818</b>
<b>Cash and cash equivalents, end of year</b>	<b>\$ 35,457,918</b>	<b>\$ 25,415,934</b>

*Continued on next page.*

# Electric System of the Virgin Islands Water and Power Authority

## Statements of Cash Flows (continued)

<i>Years ended June 30,</i>	2017	2016
<b>Cash and Cash Equivalents</b>		
Unrestricted	\$ 5,226,982	\$ 7,194,028
Restricted	30,230,936	18,221,906
	<b>\$ 35,457,918</b>	<b>\$ 25,415,934</b>
<b>Reconciliation of Operating Loss to Net Cash Provided By Operating Activities</b>		
Operating loss	\$ (17,599,341)	\$ (2,819,013)
Adjustments to reconcile operating loss to net cash provided by operating activities:		
Depreciation and amortization	16,176,649	17,553,806
Changes in operating assets and liabilities:		
Accounts receivable, net	(5,822,894)	14,909,299
Alternative energy research asset	(2,521,551)	(3,517,711)
Inventories	2,298,225	5,168,862
Prepayments and other current assets	668,877	(1,017,606)
Due from Water System	1,086,444	660,407
Fuel costs recoverable	(10,075,423)	(7,310,289)
Accounts payable and accrued liabilities	16,637,261	(4,424,580)
Customer deposits	1,142,883	1,524,122
Net pension liability	15,812,009	42,509,373
Deferred outflows of resources	(4,116,749)	(51,873,733)
Deferred inflows of resources	9,390,280	15,931,551
Accrued OPEB liability	1,128,293	4,746,420
<b>Net cash provided by operating activities</b>	<b>\$ 24,204,963</b>	<b>\$ 32,040,908</b>
<b>Noncash Capital and Related Financing Activities</b>		
Capital lease obligation incurred for capital assets	\$ 160,000,000	\$ -

*See accompanying notes to the financial statements.*

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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### 1. Reporting Entity and Summary of Significant Accounting Policies

#### *Reporting Entity*

The Virgin Islands Water and Power Authority (the Authority) is an instrumentality created by the government of the United States Virgin Islands (the Government) in 1964. The Authority was created to operate an electric generation and distribution system (the Electric System) and a water production and distribution system (the Water System) in the United States Virgin Islands. The Authority is governed by a nine member board, three of whom are appointed by the Governor of the Virgin Islands from his Cabinet, and six of whom are nominated by the Governor of the Virgin Islands and confirmed by the Virgin Islands Legislature. As such, the Government has determined that the Authority is a component unit. The Water and Electric Systems are separately financed and each system's indebtedness is repayable from its net revenues. The Authority is required by its bond resolutions to maintain separate accounting for each system. Each system is a major fund of the Authority for financial reporting purposes.

The Electric System of the Authority accounts for all activities associated with the generation and distribution of electricity to customers. The accompanying financial statements include only the financial activities of the Electric System major fund and are not intended to present fairly the financial position and changes in net position of the Authority.

#### *Measurement Focus and Basis of Accounting*

The Authority complies with all applicable pronouncements of the Governmental Accounting Standards Board (GASB). The operations of the Authority are presented as an enterprise fund and as such, the financial statements are reported using the economic measurement focus and the accrual basis of accounting. Under this basis, revenues are recognized in the period earned and expenses are recognized in the period incurred regardless of the timing of related cash flows. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

In accordance with the Electric System Revenue Bond Resolution (Bond Resolution), rates are designed to cover debt service, capital expenditures, and other operating expense requirements, excluding depreciation and other noncash expense items. This method of rate setting results in costs being included in the determination of rates in different periods rather than when these costs are recognized for financial statement purposes.

#### *Rates and Regulations*

The Authority is regulated by the Virgin Islands Public Services Commission (PSC or the Commission). The Commission has the authority to approve, modify, or deny any proposed rate changes made by the Authority.

The Authority is further subject to the provisions of GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, which address accounting rules for regulated operations. This standard allows regulated entities such as the Authority to record certain assets or liabilities as a result of the regulated ratemaking process.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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Regulatory assets generally represent incurred costs that have been capitalized because such costs are probable of future recovery in customer rates and for the Electric System, these include fuel costs recoverable and alternative energy research asset.

Regulatory liabilities generally represent obligations to make refunds to customers for previous collections for costs that are not likely to be incurred or items that will be credited to customers in future periods and for the Electric System, these include unamortized property-related gains, the insurance surcharge reserve, credits for excess PILOT (Payments in Lieu of Taxes) collections, and fuel rate revenue refundable.

At June 30, 2017 and 2016, the Electric System had \$35.4 million and \$22.8 million, respectively of regulatory assets and \$8.7 million of regulatory liabilities in both years. During 2017, it was determined that \$18.2 million of previously deferred fuel costs were not probable of recovery in future rates and as such were charged to operations.

In order for a rate-regulated entity to continue to apply the provisions of GASB Statement No. 62, it must meet the following three criteria: (1) the enterprise's rates for regulated services provided to customers must be established by an independent 3<sup>rd</sup> party regulator or its own governing board empowered by a statute to establish rates that bind customers, (2) the regulated rates must be designed to recover the specific enterprise's costs of providing the regulated services, and (3) in the view of the demand for the regulated services and level of competition, it is reasonable to assume that rates, set at levels that will recover the enterprise's costs, can be charged and collected from customers.

Management believes that the Authority currently meets the criteria for continued application of GASB Statement No. 62, but will continue to evaluate significant changes in the regulatory and competitive environment to assess the ability to continue to apply GASB Statement No. 62. If the Authority no longer applied GASB Statement No. 62 due to competition, regulatory changes, inadequate rates, or other reasons, the Authority would make certain adjustments that would include the write-off of all or a portion of its regulatory assets and liabilities, the evaluation of utility plant, contracts, and commitments, and the recognition, if necessary, of any losses to reflect market conditions.

### *Cash and Cash Equivalents*

For purposes of reporting cash flows, cash and cash equivalents include cash on hand, bank demand accounts, money market accounts, certificates of deposit, and overnight repurchase agreements. The Authority considers all investments with an original maturity of three months or less to be cash equivalents.

### *Inventories*

Fuel oil, materials, and supplies inventories are stated at cost using the weighted-average unit cost method, which approximates the first-in, first-out method. Obsolete and unusable inventory is reduced to estimated salvage value. The cost of fuel oil used for electric generation is charged to expense as consumed.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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### *Investments*

Investments are reported at fair value in the accompanying Statements of Net Position. All changes in the fair value of investments are recognized as gains or losses in the statements of revenues, expenses, and changes in net position.

### *Due from Water System*

As of June 30, 2017 and 2016, the Electric System had a receivable due from the Water System in the amount of \$7.7 million and \$8.8 million, respectively, as a result of an intersystem transfer of cash to pay for fuel costs incurred and other allocated operating, maintenance, and administrative expenses. This intersystem balance is noninterest-bearing and has no set repayment date. The Authority has classified these balances as noncurrent because it did not expect to collect such amounts within 12 months of the respective fiscal year-ends.

### *Capital Assets*

Capital assets are recorded at cost, which includes material, payroll-related costs, overhead, and an allowance for borrowed funds used during construction. Capital expenditures of \$1,000 or more are capitalized. Maintenance and repairs are charged to operating expense as incurred. The cost of depreciable plant retired is eliminated from the utility plant accounts, and such costs, plus cost of removal less salvage, are charged to accumulated depreciation.

Depreciation of capital assets is computed using the straight-line method over estimated service lives ranging from 5 to 40 years. Depreciation expense was equivalent to 2.0% and 2.7% of average depreciable property for the years ended June 30, 2017 and 2016, respectively.

In accordance with accounting principles generally accepted in the United States of America, management reviews the estimated useful lives of capital assets on a periodic basis. The results of an engineering condition assessment and depreciation rate review indicated the lives of certain utility plant assets were longer than the estimated useful lives used for depreciation purposes in the Electric System's financial statements. As a result, effective July 1, 2013, estimates of the useful lives were changed to better reflect the estimated periods during which these assets will remain in service.

The Authority reviews the carrying value of its capital assets to determine if circumstances exist indicating impairment. If facts or circumstances support the possibility of impairment, management follows the guidance in GASB Statement No. 42, *Accounting and Financial Reporting for Impairment of Capital Assets and for Insurance Recoveries*. If impairment is indicated, an adjustment is made to the carrying value of the capital assets. As such, the Electric System recorded a loss on retirement of capital assets of \$13.8 million for the year ended June 30, 2016, to reflect the lower of its carrying value or fair value. There were no such losses for the year ended June 30, 2017.

### *Deferred Outflows of Resources*

Deferred outflows of resources represent a consumption of net position that applies to a future period(s) and will not be recognized as an outflow of resources (expense) until that time.



# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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Deferred outflows of resources for the Electric System consist of unrecognized items not yet charged to pension expense and contributions from the employer after the measurement date but before the end of the employer's reporting period and deferred outflows for derivative instruments, as may be applicable.

### *Compensated Absences*

The Authority accrues for compensated absences in accordance with accounting principles generally accepted in the United States of America. The Authority allows vesting of permanent employee annual leave, which is governed by the period of employment. Vested annual leave in excess of 480 hours is transferred to the Government of the Virgin Islands Employees' Retirement System (GERS) for retirement service credit.

### *Customer Deposits*

All nongovernmental customers pay a deposit upon application for service. The deposit varies based on the class of customer and is not refundable until the customer account is terminated. The deposits previously accrued interest at 4.75% annually.

On September 20, 2016, the legislature signed Act 7931 into law, which reduced the interest earned on customer deposits compounded annually from 4.75% to a rate equal to the average prevailing interest rate paid by local banks on saving accounts. This will assist in lowering the financial obligation of the Authority.

### *Net Pension Liability*

For purposes of measuring the net pension liability, deferred outflows of resources related to pensions, and pension expense, information about the fiduciary net position of the pension plans, as well as additions to and deductions from the pension plan fiduciary net position have been determined on the same basis as they are reported in the financial statements of GERS. Employer contributions are recognized when due and the employer has a legal requirement to provide the contributions. Also see Note 8.

### *Deferred Inflows of Resources*

Deferred inflows of resources represent an acquisition of net position that applies to a future period(s) and will not be recognized as an inflow of resources (revenue) until that time. Deferred inflows of resources for the Electric System consist of the unamortized portion of the net differences between projected and actual earnings on pension plan investments, changes in assumptions, and other differences between expected and actual experience.

### *Net Position*

Net position represents the difference between assets, deferred outflows, liabilities, and deferred inflows. Net investment in capital assets consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of any borrowings used for the acquisition or construction of those assets. Net position is reported as restricted when there are limitations imposed on its use, either through legislation or external restrictions imposed by creditors, grantors, laws, or regulations.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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### *Revenue Recognition*

Revenues are recorded as service is provided to customers. The Electric System accrues the nonfuel portion of base revenues for services rendered but unbilled. The cost of fuel for the Electric System is passed directly through to its customers. Every six months, the Commission establishes a Levelized Energy Adjustment Clause (LEAC) rate that is designed to true-up the fuel costs recovered through the Electric System's base rates.

If the amount recovered through rates exceeds actual fuel costs, the Electric System records fuel costs refundable as a regulatory liability, plus interest at 8.75%, for amounts to be refunded through future rate adjustments over the following six-month period. If the amount recovered through rates is less than the actual fuel costs, the Electric System records fuel costs recoverable as a regulatory asset, without interest, for amounts to be collected through future rates, generally over the following six-month period.

The Electric System distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering electricity in connection with the Electric System's principal ongoing operations. The principal operating revenues for the Electric System are charges to customers for sales and services. Operating expenses for the Electric System include the cost of sales and services, administrative expenses, and depreciation on utility plant. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

### *Allowance for Funds Used During Construction*

An allowance for funds used during construction (AFUDC) of \$102 thousand and \$133 thousand for the years ended June 30, 2017 and 2016, respectively, is included in construction in progress. These amounts are computed by applying the weighted-average effective-interest rate on the funds borrowed to finance specific projects to the monthly balance of those projects under construction.

In addition, interest incurred on restricted tax-exempt borrowings is reduced by interest earned on temporary investments purchased with the borrowed funds. The stated AFUDC rate was 5% for the years ended June 30, 2017 and 2016.

### *Capital Grants and Contributions*

The United States Government and the Virgin Islands Government appropriate and make available to the Authority grant funds for the construction and improvement of electric generation and distribution facilities. The Authority also receives capital contributions from customers (nongovernment) for construction and improvement of the facilities. The Authority maintains ownership and operation of the facilities. Beginning in 2015, the Electric System received funds from the Virgin Islands Water and Power Authority Generating and Infrastructure Fund, based on fuel taxes collected by the Virgin Islands Government. The proceeds are kept in a restricted Fuel Tax Fund for use in certain capital improvements. Also see Note 4.

For the years ended June 30, 2017 and 2016, the Electric System recognized capital grants and contributions of \$536 thousand and \$532 thousand respectively, from the United States Government and \$4.3 million and \$3.8 million, respectively from the Virgin Islands Government.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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### *Cost Allocation*

The Water and Electric Systems share administrative and operating personnel. Payroll and a substantial portion of other operating expenses are initially incurred by the Electric System and are subsequently allocated to the Water System based on labor costs and hours. The operating costs allocated to the Water System for the years ended June 30, 2017 and 2016, amounted to \$5.5 million and \$5.7 million, respectively.

Expenses incurred for common or integrated facilities are allocated between the systems using an engineering study that is based on monthly production statistics and the Water System's power consumption. The production costs allocated to the Water System for the years ended June 30, 2017 and 2016, amounted to \$3.8 million and \$4.6 million, respectively.

### *Commitments and Contingencies*

The Authority accrues liabilities for loss contingencies, including deductibles for insurance claims and environmental remediation costs, arising from claims, assessments, litigation, fines and penalties, and other sources when it is probable that a liability has been incurred and the amount of the claim, assessment, and/or remediation can be reasonably estimated.

### *Use of Estimates*

Management of the Authority has made a number of estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities to prepare these financial statements in conformity with accounting principles generally accepted in the United States of America. Actual results could differ from those estimates.

### *New Accounting Pronouncements*

In June 2015, GASB issued Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, which replaces GASB Statements No. 43 and No. 57 and addresses reporting for state and local government other post-employment benefit (OPEB) plans that are administered through trusts that meet a specified criteria. The requirements of this Statement are effective for the Electric System's financial statements for the year ended June 30, 2017. The Authority has evaluated this Statement and has provided additional disclosure within Note 9.

In December 2015, GASB issued Statement No. 78, *Pensions Provided through Certain Multiple-Employer Defined Benefit Pensions Plans*, which amends the scope and applicability of GASB Statement No. 68 to exclude pensions provided to employees of state or local governmental employers through a cost-sharing multiple-employer defined benefit pension plan that meets certain criteria. The requirements of this Statement are effective for the Electric System's financial statements for the year ended June 30, 2017. The Authority has evaluated this Statement and has determined there is no impact on the financial statements as its pension plan qualifies under GASB Statement No. 68 as disclosed within Note 8.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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In April 2016, GASB issued Statement No. 82, *Pension Issues - An Amendment of GASB Statements No. 67, No. 68, and No. 73*, which addresses issues regarding presentation of payroll-related measures in the required supplementary information; selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes; and classification of payments made by employers to satisfy employee (plan member) contribution requirements. The requirements of this Statement are effective for the Electric System's financial statements for the year ended June 30, 2017. The Authority has evaluated this Statement and has determined there is no impact on the financial statements.

### 2. Deposits and Investments

In accordance with its policies and the Revenue Bond Resolution, the Authority is authorized, with certain restrictions, to invest in open accounts, time deposits, certificates of deposit, repurchase agreements, obligations of the United States government, and obligations of any state within the United States, mutual funds, and corporate commercial paper.

At June 30, 2017 and 2016, the Electric System had approximately \$37.4 million and \$37.7 million in investments which were invested in a U.S. Governmental Agency Fund with a AAAM rating and a maturity of less than a year.

The Electric System held certificate of deposits of approximately \$5.2 million and \$5.1 million as of June 30, 2017 and 2016, respectively, with a maturity date of less than a year. Cash deposits were \$30.2 million and \$20.2 million as of June 30, 2017 and 2016, respectively.

Interest Rate Risks - As a means of limiting its exposure to fair value losses from rising interest rates, the Authority has an investment practice for operating funds which is structured to provide sufficient liquidity to pay obligations as they come due and (1) limits 80% of investments to not more than one-year maturities and (2) requires that the portfolio have no more than 20% in securities maturing in or having an average life of more than ten years. Bond proceeds and reserve funds are managed in accordance with bond covenants and funding needs which could result in maturities longer than ten years.

Credit Risk and Concentration of Credit Risks - As of June 30, 2017, the Electric System's exposure to credit risk is evaluated by the ratio of investments including deposits and investments in U.S. government securities, certificates of deposit, and cash deposits. The Authority places no limit on the amount the Electric System may invest in any one permitted investment type.

As of June 30, 2017, 51.4% of the Electric System's cash and investments are in U.S. Governmental Agency Funds, 7.1% are invested in certificates of deposit, and 41.5% are in cash deposits. As of June 30, 2016, 59.8% of the Electric System's cash and investments are in U.S. Governmental Agency Funds, 8.2% are invested in certificate of deposits, and 32.0% are in cash deposits.

The Authority places both Water and Electric System cash and cash equivalents with some of the same high credit quality financial institutions that are federally insured. Therefore, in the event of a loss, federal insurance recoveries would have to be allocated among the two systems. As such, the potential amounts held in excess of the FDIC limits for the Electric System were \$27.5 million at June 30, 2017. The Authority has not experienced any losses in such accounts and believes it is not exposed to any significant credit risk on its cash and cash equivalents.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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Custodial risks - The Authority does not have a custodial risk policy. This is the risk that the Authority will not be able to recover the value of its investments that are in the possession of an outside party. At June 30, 2017, 100% of Electric System's investments were held in the name of Bank of New York Mellon, as Trustee for the Authority.

### *Fair Value Measurements*

The Authority categorizes the fair market measurements of its investments and derivative instruments within the fair value hierarchy established which further provides the framework for measuring fair value by establishing a three-level fair value hierarchy that describes inputs that are used to measure assets and liabilities as follows:

- Level 1: Inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets that an organization can access at the measurement date.
- Level 2: Inputs are other than quoted prices included within Level 1 that are observable for an asset or liability, that are either directly or indirectly observable.
- Level 3: Inputs are significant unobservable units.

The fair value hierarchy gives the highest priority to Level 1 and the lowest priority to Level 3 inputs. If a price for an identical asset is not observable, an organization may evaluate fair market value using another valuation technique that maximizes the use of relevant observable inputs and minimizes the use of unobservable inputs. If the fair value of an asset is measured using inputs from more than one level of the fair market value hierarchy, the measurement is considered to be based on the lowest level input that is significant to the entire measurement.

The following section describes the valuation technique methodologies the Authority is utilizing to measure assets at fair value:

- Level 1: Investments classified within Level 1 are valued based on quotes obtained from active public exchanges or reported on the national market, and are stated at the last reported sales price on the day of valuation. Fair value of exchange-traded contracts is based upon exchange settlement prices.
- Level 2: Investments classified within Level 2 are valued by pricing vendors using outside data. In determining the fair value of the investments, the pricing vendors use a market approach and pricing spreads based on the credit risk of the issuer, maturity, current yield, and other terms and conditions of each security. Ineffective derivative instruments have been classified in Level 2 of the fair value hierarchy and are valued using valuations provided by a third party valuation service provider. See Note 10.

Following is the three-level fair value hierarchy as of June 30, 2017:

	Level 1	Level 2	Level 3
U.S. Governmental Agency Fund	\$ 37,439,897	\$ -	\$ -
Derivative instruments	-	4,266,367	-

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

Following is the three-level fair value hierarchy as of June 30, 2016:

	Level 1	Level 2	Level 3
U.S. Governmental Agency Fund	\$ 37,737,271	\$ -	\$ -
Derivative instruments	-	9,825,177	-

### 3. Accounts Receivable

Accounts receivable, current and non-current, at June 30, 2017 and 2016, consists of the following:

	2017	2016
Customers	\$ 22,504,683	\$ 21,161,532
Other	963,528	440,557
Less allowance for doubtful accounts	(13,564,153)	(12,848,560)
Customers and other, net	9,904,058	8,753,529
Virgin Islands Government	29,553,472	27,757,748
Virgin Islands Government, fuel tax receivable	2,284,253	2,024,603
Grants	2,511,156	2,632,554
Unbilled revenues	9,044,287	6,167,646
Accounts receivable, net	\$ 53,297,226	\$ 47,336,080

Management of the Authority has been working with the Government and its various instrumentalities in an attempt to obtain payment on outstanding receivable balances and to increase the percentage of remittances on current billings for services.

The Authority has made certain arrangements with specific governmental agencies concerning the collection of past due accounts receivable. As of June 30, 2017 and 2016, the Authority has classified Government accounts receivable of \$14.6 million and \$10.6 million, respectively, as noncurrent because these balances are expected to take longer than one year from the statement of net position dates to be paid by the various government agencies.

### 4. Restricted Assets

The Electric System Revenue Bond Resolution, as amended, and certain Commission regulatory orders establish the following funds and accounts, which are restricted as to their usage:

Construction Fund - Amounts in the Construction Fund represent unspent bond proceeds, which will be used to pay the cost of construction of plant and equipment used in the generation and distribution of electricity. The Construction Fund is held by the Authority.

Debt Service Fund - The Authority is required to make monthly deposits into the Debt Service Fund to accumulate the required debt service amounts payable to bondholders prior to the next respective interest and/or principal payment date. The Debt Service Fund is held by the bond trustee who makes the required payments on behalf of the Authority.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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Debt Service Reserve Fund - The Authority is required to maintain a balance in the Debt Service Reserve Fund equal to the maximum annualized debt service requirement remaining on any outstanding revenue bonds. The Debt Service Reserve Fund is held by the bond trustee and was fully funded at June 30, 2017.

Cost of Issuance Fund - Amounts in the fund are used to pay for legal fees, underwriters' discounts, and other costs of issuing bonds. The Cost of Issuance Fund is held by the bond trustee who makes the required payments on behalf of the Authority.

Self-Insurance Reserve Fund - Amounts in the Self-Insurance Reserve Fund are used to cover any unexpected and uninsured losses caused by hurricanes or, upon prior petition to the Commission and approval, to fund bona fide hazard mitigation programs. The Self-Insurance Fund is held by the Authority.

The Commission authorized the Authority to borrow from the Self-Insurance Reserve Fund to augment its fuel and transmission and distribution inventory. As of June 30, 2017 and 2016, the Authority has not repaid any of the amounts borrowed. The unpaid balance of \$7.4 million and \$6.3 million respectively, is reflected as Due from Unrestricted Assets on the accompanying Statements of Net Position.

Fuel Tax Fund - Amounts in the fund are used for funding new energy and power generating units and/or heat recovery steam generators and assisting with the issuance of bonds. The Fuel Tax Fund is held by the Authority.

OPEB Fund - Amounts in the fund are used to cover the cost of other post-employment benefits. The OPEB Fund is held by the Authority. During the year, funds were transferred from the OPEB Fund into a trust which will be used to pay the benefits. Also see Note 9.

Demand Side Management Fund - Amounts in the fund are used to pay for the costs of a demand side management study. The Demand Side Management Fund is held by the Authority.

Load Research Program Fund - Funds are used to cover costs of performing customer load requirements in order to establish effective procedures for rate setting. The Load Research Program Fund is held by the Authority.

HRSG 6B Escrow - Funds are reserved for the use of modification and repairs of turbine unit #21. The HRSG 6B Escrow is held by the Authority.

Electric System revenues and all funds established by the Bond Resolution are pledged for payment of bond principal and interest. The trustee funds consist primarily of cash equivalents and investments in U.S. government securities stated at fair value. Other funds specified by the Bond Resolution and the Commission are primarily in cash and cash equivalents.

It is the Authority's policy to first apply restricted resources when an expense is incurred for purposes for which both restricted and unrestricted assets are available.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

Restricted assets at June 30, 2017 and 2016, consist of the following:

	2017	2016
Construction Fund	\$ 21,856,405	\$ 2,787,889
Debt Service Fund	22,092,907	18,290,157
Debt Service Reserve Fund	18,521,806	19,126,154
Cost of Issuance Fund	351,092	320,961
Self-Insurance Reserve Fund	4,000,186	3,990,714
Fuel Tax Fund	25,502	6,488,812
OPEB Fund	606	4,133,278
Demand Side Management Fund	256,188	255,737
Load Research Program Fund	366,141	365,475
Due from Unrestricted Assets	7,449,594	6,321,556
HRSB 6B Escrow	200,000	200,000
	<b>\$ 75,120,427</b>	<b>\$ 62,280,733</b>

## 5. Capital Assets

Capital assets activity for the year ended June 30, 2017, was as follows:

Description	Beginning Balance	Additions	Disposals	Transfers	Ending Balance
Non-depreciable assets:					
Land and land right	\$ 4,654,206	\$ -	\$ -	\$ -	\$ 4,654,206
Construction in progress	40,223,743	31,663,795		(19,979,791)	51,907,747
Assets held for sale	1,800,000	-	-	8,421,371	10,221,371
Depreciable assets:					
Utility plant	632,956,067	157,503,295	-	9,913,121	800,372,483
Total at historical cost	679,634,016	189,167,090	-	(1,645,299)	867,155,807
Less accumulated depreciation and amortization	358,116,910	16,176,649	-	(1,645,299)	372,648,260
Capital assets, net	\$ 321,517,106	\$ 172,990,441	\$ -	\$ -	\$ 494,507,547

During 2017, a 20-megawatt generator encountered mechanical issues which rendered it inoperable. The Authority decided to discontinue repairs to the generator and consequently this generator has been taken out of service and reclassified as part of the assets held for sale.



# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

Capital assets activity for the year ended June 30, 2016, was as follows:

Description	Beginning Balance	Additions	Disposals	Transfers	Ending Balance
Non-depreciable assets:					
Land and land right	\$ 4,654,206	\$ -	\$ -	\$ -	\$ 4,654,206
Construction in progress	48,274,904	15,536,590	(5,026,875)	(18,560,875)	40,223,744
Assets held for sale	-	-	-	1,800,000	1,800,000
Depreciable assets:					
Utility plant	639,733,289	6,949,126	(30,487,223)	16,760,875	632,956,067
Total at historical cost	692,662,399	22,485,716	(35,514,098)	-	679,634,017
Less accumulated depreciation and amortization	362,304,526	17,553,806	(21,741,422)	-	358,116,910
Capital assets, net	\$ 330,357,873	\$ 4,931,910	\$ (13,772,676)	\$ -	\$ 321,517,107

During 2016, the Authority contracted an engineering consultant to perform a generation study. This study indicated that the use of steam for generation was not an efficient process and recommended a discontinuation of steam production for that purpose at the Randolph Harley Plant on St. Thomas. The value of the steam generating unit (Unit 6B) was estimated as \$1.8 million and was classified as assets held for sale.

### 6. Lines of Credit

At June 30, 2017, the Authority has available bank lines of credit for \$13.0 million for capital projects and \$20.0 million for working capital purposes. Interest on amounts borrowed is payable quarterly at a variable interest rate of prime plus 1%, London Interbank Offered Rate (LIBOR) plus 1.5% or 1.5% above the interest rate on three-year United States Government treasury notes.

The Authority has the option to select the variable interest rate to utilize for any borrowings on these notes. During 2017, the Authority made a \$2.0 million draw on the Working Capital Line of Credit. At June 30, 2017 and 2016, there was \$27.1 million and \$25.1 million outstanding under the lines of credit, respectively. The lines were extended to have a maturity of December 2018.

Furthermore, there are certain financial reporting covenants that the Authority must comply with. The agreements require the Authority to deliver audited financial statements within 180 days after the end of its fiscal year. The banks have granted the Authority a waiver from this requirement for the year ended June 30, 2017.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

### 7. Long-Term Liabilities

Long-term debt consists of the following at June 30:

	2017	2016
2003 Electric System Revenue Bonds, interest payable semiannually on January 1 and July 1 at various rates ranging from 4.00% to 5.00%; maturing in 2028	\$ 45,525,000	\$ 48,295,000
2007A Electric System Subordinated Revenue Bonds, interest payable semiannually on January 1 and July 1 at various rates ranging from 4.50% to 5.00%; maturing in 2031	57,585,000	57,585,000
2010 Electric System Revenue and Refunding Bonds, interest payable semiannually on January 1 and July 1 at various rates ranging from 4.00% to 6.85%; maturing in 2035	55,935,000	61,360,000
2012 Electric System Revenue Refunding and Subordinated Revenue Bonds, interest payable semiannually on January 1 and July 1 at 4.00% to 6.06%; maturing in 2025	56,605,000	59,940,000
2016A Subordinated Bond Anticipation Notes, interest payable semiannually on January 1 and July 1 at 5.50%; maturing in 2019	33,960,000	-
Rural Utilities Service Note, interest payable quarterly on each March 31, June 30, September 30, and December 31 at 1.62%; maturing in 2035	13,000,000	13,000,000
Unamortized premium	2,555,560	3,160,190
General obligation notes at 5.5%	-	477,597
Capital lease obligation	153,954,445	-
Lines of credit	27,128,440	25,128,440
Total long-term debt	446,248,445	268,946,227
Less current installments	(47,367,712)	(37,136,037)
Long-term debt, excluding current installments	\$ 398,880,733	\$ 231,810,190

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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### *Revenue Bonds*

In June 2003, the Authority issued \$69.9 million in Electric System Revenue Bonds, Series 2003. The proceeds from the bonds were used to finance capital improvements, repay \$18.0 million of then outstanding lines of credit, cover underwriters' costs, and establish a debt service fund. The Series 2003 Bonds maturing on or after July 1, 2013, shall be subject to redemption prior to their stated maturity date, at the option of the Authority, on or after July 1, 2013, as a whole or in part at any time, at a redemption price equal to the principal amount thereof plus accrued interest thereon to the date fixed for redemption.

In June 2007, the Authority issued \$57.6 million in 2007A Electric System Subordinated Revenue Bonds. The proceeds of the Series 2007A Bonds were used to (1) finance costs of certain capital improvements, (2) refinance certain costs of capital improvements funded through draws on a Line of Credit and reinstallation of \$10.0 million to the line of credit allocable to the Electric System, (3) make certain required deposits to the subordinated Debt Service Reserve Fund, and (4) pay certain costs of issuance of the Series 2007A Bonds.

In March 2010, the Authority issued \$85.3 million in bonds made up as, \$39.1 million in 2010A Electric System Revenue Refunding Bonds, \$8.9 million in 2010B Electric System Revenue Bonds, and \$37.3 million in 2010C Electric System Revenue Bonds. The proceeds of the Series 2010A Bonds were used to (1) refund a portion of the Authority's Electric System Revenue Refunding Bonds, Series 1998 and (2) pay certain costs of issuance of the Series 2010A Bonds. The proceeds of the Series 2010B Bonds were used to finance certain capital expenditures temporarily funded through draws on a line of credit (\$9.0 million) and to make certain deposits into the Debt Service Revenue Fund sufficient to satisfy the Debt Service Reserve Fund requirement. The proceeds of the Series 2010C Bonds were used to fund a portion of the costs of certain capital improvements to the Electric System and to make certain deposits into the Debt Service Revenue Fund sufficient to satisfy the Debt Service Revenue Fund Requirement. The proceeds of the three series were also used to pay certain costs of issuance of the 2010A, 2010B, and 2010C Bonds.

In May 2012, the Authority issued \$69.1 million in bonds made up as, \$17.4 million in 2012A Electric System Revenue Refunding Bonds, \$19.7 million in 2012B Electric System Subordinated Revenue Bonds, and \$32.0 million in 2012C Electric System Subordinated Revenue Bonds. The proceeds of the Series 2012A Bonds were used to (1) refund the Authority's Electric System Revenue Refunding Bonds, Series 1998 and (2) pay certain costs of issuance of the Series 2012A Bonds. The proceeds of the Series 2012B Bonds were used to (1) refinance a portion of the Authority's Electric System Term Loan, (2) make a deposit into the Subordinated Debt Service Reserve Fund sufficient to satisfy the Series 2012B Subordinated Debt Service Reserve Fund Requirement, and (3) pay certain costs of issuance of the Series 2012B Bonds. The proceeds of the Series 2012C Bonds were used to (1) refinance all or a portion of the Electric System Working Capital Lines of Credit and Overdraft Credit Facility, (2) make a deposit into the Series 2012C Subordinated Debt Service Reserve Fund sufficient to satisfy the Subordinated Debt Service Reserve Fund Requirement, and (3) pay certain costs of issuance of the Series 2012C Bonds.

### *Bond Anticipation Notes (BAN)*

In November 2016, the Authority closed on financing for \$33.9 million to fund the Streetlight conversion project. The funding provides for (1) acquisition, assembly, and installation of the light-emitting diode (LED) and solar panels, (2) engineering and project management, and (3) integration with the Authority's Tantalus "smart meter" network or automated metering infrastructure (AMI).

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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The Authority issued the BANs to fund the project since long term rates have trended higher with the recent rating agency downgrades. The rate on the BANs was 5.50%, maturing November 15, 2018. The Authority is working with the Rural Utilities Service program for long-term funding, which would most likely provide the lowest cost of long-term capital, otherwise the Authority would issue long-term bonds or "roll" or re-issue another short-term note to keep rates low until a long-term financing option is viable. Also see Note 15.

The Streetlight conversion project is approximately 75% percent completed. All lights are expected to be installed by December 2018. All solar panels are expected to be installed by March of 2019. Full commissioning of this project is expected to be completed by May 2019. The project is expected to have annual savings of approximately \$2.6 million over 20 years upon full implementation.

### *Rural Utilities Services (RUS) Note*

In November 2015, the Authority obtained a term loan with the RUS in the principal amount of \$13.0 million. The proceeds of the loan were used to finance and refinance the acquisition and installation of an automated metering system and other costs related thereto.

### *General Obligation Notes*

In November 2008, the Authority obtained general obligation notes from FirstBank in the amount of \$40.0 million at an interest rate of 5.50% (the Notes), the proceeds of which were used to finance outstanding invoices from HOVENSA.

The Notes were issued based on a five-year amortization, but with a balloon payment in three years. In October 2008, pursuant to Amended Order No. 05/2009 in Docket No. 289, the Commission ordered (1) the principal and interest payments on the Notes to be recognized for recovery through the LEAC billing factor for the Electric System and the Water System commencing in November 2008, of which 82.5%, or \$7.6 million annually, has been allocated to the Electric System and 17.5%, or \$1.6 million annually, to the Water System and (2) the collection of the fuel costs recoverable balance to be reduced by the principal amount of the Notes. Pursuant to the Guaranty of the Government for the benefit of FirstBank, dated November 13, 2008 (the General Obligation Guaranty), which was authorized by the Legislature in Act 7028, the Government agreed to guarantee the payment of the principal and interest on the Notes.

In October 2010, the Authority petitioned the Commission for approval of a refinancing of the \$40.0 million term loan. Through Order #16/2011 issued by the Commission in December 2010, the loan was approved. On December 22, 2010, the term-loan was refinanced at an interest rate of 5.25%. The term loan was refinanced based on a new five-year amortization but with a balloon payment in three years.

In June 2012, the Authority petitioned the Commission for the approval of a refinancing of the remaining balance of the term loan following the Series 2012 Bond issue. Through Order # 27/2012 issued by the Commission in July 2012, the loan was approved. The term loan was refinanced at an interest rate of 5.50% and final maturity on April 2016. The new allocation of the principal and interest payments of the Notes to be recognized for recovery through the LEAC billing factor for the Electric System is 30% and 70% for the Water System. The Notes were fully paid at June 30, 2017.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

### *Capital Lease Obligation*

The Authority financed certain infrastructure services necessary to import, unload, receive, transfer, store, vaporize, measure, and deliver Liquefied Petroleum Gas (LPG) to each fuel header system at certain of its plants, as well as certain other infrastructure assets through the use of a lease. The project was designed to reduce the Authority's fuel costs by 30% and therefore, intended to allow for significant savings to the Authority's rate payers.

The project was substantially completed during fiscal year 2017 and at the end of the lease term, title to all of the assets, constituting the new infrastructure, transferred to the Authority.

The following is a schedule of future minimum payments under this obligation, along with the present value of the related net minimum payments:

<i>Year Ending June 30,</i>	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
2018	\$ 7,830,990	\$ 23,369,010	\$ 31,200,000
2019	9,137,659	22,062,341	31,200,000
2020	10,662,356	20,537,644	31,200,000
2021	12,441,463	18,758,537	31,200,000
2022	14,517,428	16,682,572	31,200,000
2023-2027	99,364,549	38,635,451	138,000,000
<b>Total</b>	<b>\$ 153,954,445</b>	<b>\$ 140,045,555</b>	<b>\$ 294,000,000</b>

The assets acquired through the capital lease obligation are as follows at June 30, 2017:

<b>Description</b>	<b>Amount</b>
Utility plant in service	\$ 155,616,739
Construction in progress	4,383,261
<b>Total</b>	<b>160,000,000</b>
Less accumulated amortization	2,214,186
<b>Capital lease assets, net</b>	<b>\$ 157,785,814</b>

### *Long-term Changes and Maturities*

The following is a schedule of changes in long-term liabilities and related accounts for the year ended June 30, 2017:

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

Description	Beginning Balance	Increases	Decreases	Ending Balance	Due Within One Year
Revenue bonds	\$ 227,180,000	\$ -	\$ (11,530,000)	\$ 215,650,000	\$ 12,080,000
Bond Anticipation Note	-	33,960,000	-	33,960,000	-
RUS Note	13,000,000	-	-	13,000,000	328,282
Unamortized Premium	3,160,190	-	(604,630)	2,555,560	-
General obligation Notes	477,597	-	(477,597)	-	-
Capital lease obligation	-	160,000,000	(6,045,555)	153,954,445	7,830,990
Lines of credit	25,128,440	2,000,000	-	27,128,440	27,128,440
Net OPEB Obligation	47,925,204	1,128,293	-	49,053,497	-
<b>Total long-term liabilities</b>	<b>\$ 316,871,431</b>	<b>\$ 197,088,293</b>	<b>\$ (18,657,782)</b>	<b>\$ 495,301,942</b>	<b>\$ 47,367,712</b>

The following is a schedule of changes in long-term liabilities and related accounts for the year ended June 30, 2016:

Description	Beginning Balance	Increases	Decreases	Ending Balance	Due Within One Year
Revenue bonds	\$ 238,190,000	\$ -	\$ (11,010,000)	\$ 227,180,000	\$ 11,530,000
RUS Note	-	13,000,000	-	13,000,000	-
Unamortized Premium	3,311,295	-	(151,105)	3,160,190	-
General obligation Notes	3,256,067	-	(2,778,470)	477,597	477,597
Lines of credit	25,128,440	-	-	25,128,440	25,128,440
Net OPEB Obligation	43,178,784	4,746,420	-	47,925,204	-
<b>Total long-term liabilities</b>	<b>\$ 313,064,586</b>	<b>\$ 17,746,420</b>	<b>\$ (13,939,575)</b>	<b>\$ 316,871,431</b>	<b>\$ 37,136,037</b>

Future debt service requirements to maturity as of June 30, 2017, on the long-term debt are as follows:

Year Ending June 30,	Principal	Interest	Total
2018	\$ 12,408,282	\$ 13,340,548	\$ 25,748,830
2019	47,444,577	12,554,195	59,998,772
2020 - 2024	73,750,773	44,987,112	118,737,885
2025 - 2029	70,784,651	25,809,242	96,593,893
2030 - 2034	50,111,749	9,121,736	59,233,485
2035 - 2039	8,109,968	797,617	8,907,585
<b>Total</b>	<b>\$ 262,610,000</b>	<b>\$ 106,610,450</b>	<b>\$ 369,220,450</b>

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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### *Covenants*

Under the terms of the Bond Resolution relating to the Electric System Revenue and Refunding Bonds, payment of the principal and interest is secured by an irrevocable lien on the Authority's net revenues (exclusive of any funds which may be established pursuant to the Bond Resolution for certain other specified purposes), including the investments and income, if any, thereof.

Under the General Resolution, the Authority is required to maintain a Debt Service coverage ratio at least equal to 1.25 times the principal and interest on all Outstanding Senior Bonds for the current and each future fiscal year (the Senior Coverage). Under the Electric System Subordinated Revenue Bond Resolution, adopted by the Authority on May 17, 2007, as amended and supplemented (the Subordinated Bond Resolution), the Authority must satisfy the Debt Service coverage ratio of the General Resolution for the Senior Bonds, must maintain a Subordinated Debt Service coverage ratio at least equal to 1.15 times the principal of and interest on all Outstanding Bonds (the Senior and Subordinate Coverage) and all Outstanding Subordinated Bonds for the current and each future fiscal year, and must maintain at least 1.0 times the Maximum Aggregate Debt Service for each such fiscal year (total debt coverage).

For the year ended June 30, 2017, the Authority's Debt Service Coverage ratio was 1.92 for total Debt Coverage. Section 606(2) of the Resolution provided that if the Authority fails to achieve such 1.00 coverage in a particular year, the Authority must "take whatever steps it can to produce the amount of net electric revenues required in the following fiscal year ..." Section 701 (3) of the Resolution relates to covenant defaults and makes them an event of default if such covenant default continues for 60 days after notice unless the Authority is proceeding with diligence to cure such default.

The Authority's net electric revenues for the years 2017 and 2016, yielded the following coverage ratios:

	Requirement	2017	2016
Senior Coverage	125%	324%	207%
Senior and Subordinate Coverage	115%	206%	131%
Total Debt Coverage	100%	192%	112%

The Electric System Revenue Bonds are subject to mandatory redemption if (1) any significant part of the Electric System shall be damaged, destroyed, taken, or condemned or (2) any for-profit, nongovernmental investor shall acquire an ownership interest in some or all of the assets of the Authority.

### **8. Net Pension Liability**

As required, the Authority follows the provisions of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions - an amendment of GASB Statement No. 27*, as amended by GASB Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date - an amendment of GASB Statement No. 68*.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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Following is a description of the pension plan and accounting for pension expense, liabilities, and deferred outflows/inflows of resources.

### *Plan Description and Benefits*

Full time employees of the Authority are members of the Government of the Virgin Islands Employees' Retirement System (GERS), a cost sharing multi-employer, defined benefit pension plan (the plan) established as of October 1, 1959 Title 3, Chapter 27 of the Virgin Islands Code to provide retirement, death, and disability benefits. Benefits may be extended to beneficiaries of plan members. The plan covers all employees of the Government, including the Authority, except employees compensated on a contract fee basis, casual, per diem or provisional and part time employees who work less than 20 hours per week. Persons over the age of 55 may opt out of the plan by providing formal notification to the plan. Vesting of benefits occurs after 10 years of service. Benefits may be extended to beneficiaries of plan members.

There are two tiers within the plan:

Tier I: Employees hired prior to September 30, 2005

Tier II: Employees hired on or after October 1, 2005

Regular employees who have completed 30 years of credited service or have attained age 60 with at least 10 years of credited service are eligible for a full service retirement annuity. Members who are considered "safety employees" as defined in the Virgin Islands Code are eligible for full retirement benefits when they have earned at least 20 years of service or have reached the age of 55 with at least 10 years of credited service. Regular and safety employees who have attained age 50 with at least 10 years of credited service may elect to retire early with a reduced benefit.

The monthly annuity benefit payment is determined by applying a stipulated benefit ratio to the member's average compensation. Average compensation for Tier I members is determined by averaging the five highest years of credited service within the last ten years of service, subject to the maximum salary limitations in effect during such service. Average compensation for Tier II members is determined by averaging the most recent five years of credited service within the last ten years of service, subject to the maximum salary limitations in effect during the service. The maximum annual salary that can be used in this computation is \$65,000, except for senators and judges, whose annual salary is used.

### *Funding and Contribution Policy*

Contributions to GERS are established by the Board of Trustees of GERS. The Government's required employer contribution for Tier I and Tier II members through December 31, 2015, was 20.50% of the member's annual salary.

Effective January 1, 2016, Tier I member contributions increased by 1.0% to 10.0% of annual salary for regular employees. Member contributions increased an additional 1.0% on January 1, 2017, and January 1, 2018. Effective January 1, 2016, Tier II member contributions increased by 1.0% to 10.5% of annual salary for regular employees, and increased an additional 1.0% on January 1, 2017, and January 1, 2018. Prior to June 29, 2000, member contributions were refundable without interest upon withdrawal from employment before retirement. Effective July 1, 2009, the Board of Trustees of GERS approved an effective annual interest rate on refunded contributions of 2.00% per annum.



# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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The Plan has a September fiscal year end, which differs from the Authority's fiscal year end. GASB Statement No. 68 requires that the reported results must pertain to liability and asset information within certain defined time frames. For this report, the following time frames are used:

	2017	2016
Valuation Date	October 1, 2016	October 1, 2015
Measurement Date	September 30, 2016	September 30, 2015
Measurement Period	October 1, 2015 - September 30, 2016	October 1, 2014 - September 30, 2015

The Authority is considered an employer of the plan with a proportionate share of 7.156% and 7.663% as of the measurement dates at September 30, 2016 and 2015, respectively. The Authority's percentage was determined based on its respective contributions as a percentage of the total contributions to the plan. Management has determined an allocation percentage to apply to the Electric System and Water System based on those systems' employment burdens to the Authority as a whole (approximately 83% and 17%, respectively).

The Authority's proportionate share of employer contributions recognized by GERS was \$5.1 million and \$5.2 million for the plan's fiscal year ended September 30, 2016 and 2015, respectively. The Electric System's allocated share of employer contributions for the same period was \$4.3 and \$4.4 million, respectively.

### *Pension Liabilities, Expense, and Deferred Outflows/Inflows of Resources*

As of June 30, 2017 and 2016, the Authority's proportionate share of the net pension liability of the plan was \$331.1 million and \$312.0 million, respectively, and the allocation to the Electric System was \$274.8 million and \$259.0 million, respectively. The net pension liability of the plan is measured as of September 30, 2016 and 2015, and the total pension liability for the plan used to calculate the net pension liability was determined by an actuarial valuation as of October 1, 2016 and 2015, respectively.

For the measurement date September 30, 2015, there was a change in assumptions for calculating the proportionate share. Actuarially determined proportionate share information from GERS was estimated by management based on an average three-year respective share of the Authority's contributions to the plan relative to all contributions to the plan. Previously, the proportionate share information from GERS was estimated by management based on the respective single year contributions.

For the year ended June 30, 2017 and 2016, the Authority recognized pension expense of \$25.4 million and \$7.3 million, respectively, inclusive of amortization of deferred outflows of pension related items. Of those amounts, \$21.1 million and \$6.1 million was allocated to the Electric System's pension expense, respectively.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

Given the limited historical information provided to the Authority by GERS, it was not practical for the Authority to determine the amounts of all applicable deferred inflows of resources and deferred outflows of resources related to pensions in 2015. As such, and consistent with GASB Statement No. 71, the Authority recognized beginning deferred outflows of resources only for its pension contributions made subsequent to the measurement date of the beginning net pension liability but before the start of the plan's fiscal year. No beginning balances for other deferred outflows of resources and deferred inflows of resources related to pensions have been recognized.

Following is a schedule of deferred outflows of resources and deferred inflows of resources allocated to the Electric System in the computation of net pension liability for the year ended June 30, 2017:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes in assumptions	\$ 56,686,500	\$ -
Net difference between projected and actual earnings on pension plan investments	3,306,367	-
Difference between expected and actual experience	8,645,663	317,956
Changes in proportionate share	10,267,725	25,003,875
Contributions made subsequent to measurement date	3,139,239	-
	<b>\$ 82,045,494</b>	<b>\$ 25,321,831</b>

Following is a schedule of deferred outflows of resources and deferred inflows of resources allocated to the Electric System in the computation of net pension liability for the year ended June 30, 2016:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes in assumptions	\$ 48,017,000	\$ -
Net difference between projected and actual earnings on pension plan investments	4,835,023	-
Difference between expected and actual experience	6,575,497	-
Changes in proportionate share	15,401,585	15,931,551
Contributions made subsequent to measurement date	3,099,640	-
	<b>\$ 77,928,745</b>	<b>\$ 15,931,551</b>

Amounts reported as deferred outflows and inflows, exclusive of contributions made after the measurement date, will be recognized in pension expense as follows:

*Year ending June 30,*

2018	\$ 10,937,140
2019	14,076,379
2020	11,075,089
2021	10,336,695
2022	3,579,560
Thereafter	3,579,560

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

### Actuarial Assumptions

A summary of the actuarial assumptions and methods used to calculate the total pension liability as of the measurement dates at September 30, 2016 and 2015 is provided below, including any assumptions that differ from those used in the corresponding October 1, 2016 and 2015 actuarial valuations. Refer to the October 1, 2016 and 2015 actuarial valuation reports for a complete description of all other assumptions, which can be found on GERS' website.

<i>September 30,</i>	<b>2016</b>	<b>2015</b>
Inflation Rate	2.50%	2.50%
Salary Increases	3.25% including inflation	3.25% including inflation
Actuarial Cost Method	Entry age normal	Entry age normal
Expected Rate of Return	7.00%	7.00%
Municipal Bond Yield	3.06%	3.71%
Discount Rate	3.20%	3.84%
Mortality Table	RP-2014 Blue Collar	RP-2014 Blue Collar

### Investment Rate of Return

The long-term expected rates of return of 7.00% for the years ending 2016 and 2015, respectively, on plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of 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. Best estimates of arithmetic real rates of return for each major asset class included in the plan's target asset allocation, as of the measurement date at September 30, 2016, are summarized below:

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-Term Expected Real Rate of Return</b>
Domestic equity	29%	6.59%
International equity	12%	8.29%
Fixed income	27%	1.59%
Cash	2%	0.99%
Alternative	30%	5.50%

Best estimates of arithmetic real rates of return for each major asset class included in the plan's target asset allocation, as of the measurement date at September 30, 2015, are summarized below:

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-Term Expected Real Rate of Return</b>
Domestic equity	28%	6.82%
International equity	10%	8.44%
Fixed income	26%	1.72%
Cash	4%	1.12%
Alternative	32%	6.50%

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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### *Discount Rate*

The discount rate used to measure the total pension liability was 3.20% as of the measurement date at September 30, 2016, and 3.84% as of the measurement date at September 30, 2015. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate, including the future increases in the employee contribution rates legislated. Based on those assumptions, the plan's fiduciary net position was not projected to be available to make all projected future benefit payments of current plan members.

Therefore, the long-term expected rate of return on plan investments of 7.00% was applied to all periods of projected benefit payments that are covered by projected assets. For periods where projected future benefit payments are not covered by projected assets, the yield on a 20-year AA Municipal Bond Index was applied, which was 3.06% and 3.71% as of the measurement date at September 30, 2016 and 2015, respectively.

### *Sensitivity of Proportionate Share of the Net Pension Liability to Changes in the Discount Rate*

The following presents the Electric System's allocation of the Authority's proportionate share of the net pension liability (NPL) for the plan, calculated using the discount rate, as well as what the Electric System's allocation of the Authority's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate for the year ended June 30, 2017:

1.0% Decrease - Share of NPL @ 2.20%	Share of NPL @ 3.20%	1.0% Increase - Share of NPL @ 4.20%
\$ 321,348,646	\$ 274,794,360	\$ 236,605,481

The following presents the Authority's proportionate share of the net pension liability (NPL) for the plan, calculated using the discount rate, as well as what the Authority's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1.0% lower or 1.0% higher than the current rate for the year ended June 30, 2016:

1.0% Decrease - Share of NPL @ 2.84%	Share of NPL @ 3.84%	1.0% Increase - Share of NPL @ 4.84%
\$ 302,618,549	\$ 258,982,351	\$ 222,875,475

Detailed information about the pension plan's fiduciary net position is available in the separately issued GERS financial report.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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

#### *Policy Description*

The Authority provides certain postemployment health care benefits to retirees under a health insurance plan. These benefits are extended at the discretion of the Authority, which reserves the right to change or terminate benefits and to change premium contributions required from retirees in the future as circumstances change. All employees who are eligible for service retirement with the GERS (see Note 8) qualify for the Authority's postemployment health care benefits.

As this is a plan administered as a trust, a standalone report is issued which can be obtained from the Authority's management through the Chief Financial Officer at P.O. Box 1450, St. Thomas, USVI 00804.

#### *Annual OPEB Cost and Net OPEB Obligation*

The Authority employs an actuary to assist in estimating the OPEB liability for the Authority as a whole and then allocates that liability and related cost systematically to the Water and Electric Systems.

In anticipation of implementing GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, the Authority opted to forego its regularly scheduled biennial valuation as of July 1, 2017. Instead, in order to determine the OPEB costs for fiscal year 2017, a roll-forward from the previous valuation as of July 1, 2015, was prepared. The resulting differential in the calculation of the year-end unfunded actuarial accrued liability is not deemed significant to the Authority.

The actuary's estimate of the Authority's accrued OPEB liability, also known as the actuarial accrued liability, which approximates the present value of all future expected postemployment medical premiums (which are attributable to the past service of active and retired employees), was \$59.0 million and \$57.6 million at June 30, 2017 and 2016, respectively, and the Electric System 2017 and 2016 share was \$49.1 million and \$47.9 million, respectively.

The Authority's annual OPEB cost is calculated based on the annual required contribution (ARC), an amount actuarially determined in accordance with GASB Statement No. 45, *Accounting and Financial Reporting by Employers for 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 (current and future benefits earned) each year and to amortize any unfunded actuarial liabilities over a period of time not to exceed 22 years.

The Authority's annual OPEB cost for fiscal years 2017 and 2016 was \$8.0 million and \$7.8 million, respectively. Of this, the Electric System share for fiscal years 2017 and 2016, was \$7.0 million and \$6.8 million, respectively.

The Authority's ARC as of June 30, 2017 and 2016, was \$8.4 million and \$8.1 million, respectively. Of this, the Electric System share as of June 30, 2017 and 2016, was \$7.3 million and \$7.1 million, respectively.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

Description	2017	2016
Normal Cost (service cost for one year)	\$ 3,916,633	\$ 3,774,132
Amortization of Unfunded Actuarial Accrued liability	3,432,927	3,300,889
Annual Required Contribution (ARC)	7,349,560	7,075,021
Interest on Net OPEB Obligation	1,917,008	1,720,832
Adjustment to ARC	(2,282,153)	(1,962,396)
Annual OPEB Cost	6,984,415	6,833,457
Contributions Made	(5,856,122)	(2,087,037)
Increase in Net OPEB Obligation	1,128,293	4,746,420
Net OPEB Obligation, beginning of year	47,925,204	43,178,784
Net OPEB Obligation, end of year	\$ 49,053,497	\$ 47,925,204

The Electric System's annual OPEB Cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation as of June 30, 2017, 2016, and 2015, was as follows:

Fiscal Year Ended	Annual OPEB Cost	Amount Contributed	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation
6/30/2015	\$ 8,399,909	\$ 2,001,146	24%	\$ 43,178,784
6/30/2016	\$ 6,833,457	\$ 2,087,037	31%	\$ 47,925,204
6/30/2017	\$ 6,984,415	\$ 5,856,122	84%	\$ 49,053,497

### Funding Policy, Status, and Progress

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 are increasing or decreasing over time relative to the actuarial accrued liability for benefits. As of June 30, 2017, there was \$4.4 million in funded contributions by the Authority, of which \$3.6 million is allocated to the Electric System. The funded status of the Electric System's portion of the policy as of June 30, 2017 and 2016, was as follows:

	2017*	2016
Actuarial Accrued Liability (a)	\$ 71,209,356	\$ 71,209,356
Actuarial Value of Plan Assets (b)	-	-
Unfunded Actuarial Accrued Liability (UAAL) (c) = (a-b)	\$ 71,209,356	\$ 71,209,356
Funded Ratio (b/a)	0%	0%
Covered Payroll (Active Plan Members) (d)	\$ 21,225,988	\$ 24,262,587
UAAL as a Percentage of covered payroll (c/d)	335%	293%

\*A valuation as of July 1, 2017, was not available due the Authority's anticipated implementation of GASB Statement No. 75. See separate Plan financial statements for further information.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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### *Actuarial Methods and Assumptions*

Projections of benefits for financial reporting purposes are based on the substantive policy (the policy as understood by the employer and policy 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 policy members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

The Individual Entry Age Normal Cost Method was used in the June 30, 2017. Actuarial assumptions include a 21-year amortization period, a 4% discount rate, projected salary increases of 5.5% including inflation of 3%, payroll growth of 4%, an initial healthcare cost trend rate of 27.5%, and an ultimate trend rate of 5.25%. The Authority's unfunded actuarial accrued liability is being amortized in a rolling closed amortization, calculated as a level percent of payroll over a 25-year period.

## 10. Derivative Instruments

### *Background*

Beginning in 2015, the Authority began using derivative instruments, namely swaps, to hedge its commodity price risk associated with short-term and long-term changes in fuel prices. Derivative instruments are used by the Authority in its normal course of business to attempt to manage the impact to its customers of market price fluctuations for the purchase of propane. The Authority does not use derivative instruments for trading or speculative purposes. These contracts are evaluated pursuant to GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*, to determine whether they meet the definition of derivative instruments, and whether they effectively hedge the expected cash flows associated with commodity price risk exposures. The fair values of the Authority's derivatives are reported on the accompanying Statements of Net Position as derivative instruments.

The Authority applies hedge accounting for derivative instruments that are deemed effective under GASB Statement No. 53. Under hedge accounting, changes in the fair value of such hedging derivative instruments is a component of deferred inflows or deferred outflows on the accompanying Statements of Net Position until the contract is settled or hedge accounting is terminated. Derivative instruments that do not meet the definition of a hedging derivative instrument are economic hedges, intended to mitigate exposure to fluctuations in commodity prices and are referred to as investment derivative instruments. Changes in the fair value of investment derivative instruments are recognized as gains or losses in nonoperating revenues/expenses. All settlement payments or receipts for hedging and investment derivative instruments are recorded as fuel expense for commodity derivatives in the accompanying Statements of Revenues, Expenses and Changes in Net Position in the period settled.

### *Hedging*

The Authority uses derivative instruments to partially hedge its commodity price risk associated with fossil fuel, namely propane, which it will purchase to generate electricity under fuel purchase agreements.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

The hedges seek to turn certain purchase volumes of fuel under contracts based on variable 'spot' prices into effective fixed prices with the intention to safeguard ratepayers from drastic changes in fuel costs required to be recovered in rates. The Authority has no intention to take delivery of fuel with derivative instrument contracts.

The derivative agreements require monthly payments to be paid or received based on the difference between the spot market price and the contract strike price on notional volumes. None of the Authority's derivatives require a cash payment at inception.

The fair value estimates reflected on the accompanying Statements of Net Position are based on pertinent information available to management. The fair value estimates for the Authority's derivative instruments represent the present value of the differences of the fixed prices in the related instruments less the OPIS Propane Mont Belvieu (Non-TET) forward price curve, multiplied by the corresponding monthly volume using the LIBOR forward interest rate curve as a discount rate.

The fair value balances of derivative instruments outstanding at June 30, 2017 and 2016, are as follows (losses and liabilities in parentheses):

<i>June 30,</i>	<b>2017</b>	<b>2016</b>
Mont Belvieu Swap - Propane	Receive Fixed	Receive Fixed
Notional Amount (in Gallons)	107,562,000	76,650,000
Fair Value	\$ 4,266,367	\$ 9,825,177
Change in Fair Value	\$ (5,558,810)	\$ 9,825,177

The following are the key terms of the Authority's derivative instruments as of June 30, 2017:

<u>Instrument</u>	<u>Effective Dates</u>	<u>Notional Amount (in Gallons)</u>	<u>Strike Prices</u>	<u>Fair Value</u>
Mont Belvieu Swap - Propane Receive Fixed	Jan 2017 through Dec 2017	107,562,000	\$ 0.35 - 0.635	\$ 4,266,367

The following are the key terms of the Authority's derivative instruments as of June 30, 2016:

<u>Instrument</u>	<u>Effective Dates</u>	<u>Notional Amount (in Gallons)</u>	<u>Strike Prices</u>	<u>Fair Value</u>
Mont Belvieu Swap - Propane Receive Fixed	Jan 2016 through Dec 2016	76,650,000	\$ 0.34 - 0.5575	\$ 9,825,177



# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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### *Risks*

Basis risk - The OPIS-based commodity hedging transactions are subject to locational basis risk. The Authority's derivative instruments are based on pricing at the Mont Belvieu, Texas delivery point; however, the Authority may purchase propane at local Territory delivery points.

Credit Risk - The Authority intends to hold all derivative instruments to maturity. The Authority is exposed to market price risk in the event of nonperformance by any of its counterparties; however, the Authority does not anticipate nonperformance.

The counterparties to these contracts are affiliates of major financial institutions or commodity companies with credit ratings of at least A with one of the major rating agencies.

The following are the key counterparty terms of the Authority's derivative instruments as of June 30, 2017:

<u>Counterparty</u>	<u>Counter Party Credit Ratings</u>	<u>Fair Market Value of Derivative Instrument at June 30, 2017 Asset / (Liability)</u>
J. Aron & Company (Goldman Sachs)	Jan 2017 - Dec 2017	\$ 2,300,607
Shell Trading Risk Management, LLC (Royal Dutch Shell)	Jan 2017 - Dec 2019	\$ 1,965,760

The following are the key counterparty terms of the Authority's derivative instruments as of June 30, 2016:

<u>Counterparty</u>	<u>Counter Party Credit Ratings</u>	<u>Fair Market Value of Derivative Instrument at June 30, 2016 Asset / (Liability)</u>
J. Aron & Company (Goldman Sachs)	Jan 2016 - Dec 2018	\$ 4,306,398
Shell Trading Risk Management, LLC (Royal Dutch Shell)	Jan 2016 - Mar 2018	\$ 5,518,779

Termination Risk - Termination risk is the risk that a derivative could be terminated by a counterparty prior to its scheduled maturity due to a contractual event with the Authority owing a termination payment and no longer meeting the objective of the hedge. As long as the Authority fulfills its obligations under the contracts and does not default under the agreements, the counterparties do not have the right to terminate these agreements. The Authority believes that termination risk is low because the counterparties may terminate the agreements only upon the occurrence of specific events such as payment defaults or bankruptcy. If, at the time of termination, the mark-to-market of the derivative is a liability of the Authority, the Authority could be required to pay that amount to the counterparty. Termination risk associated with all of the Authority's derivatives is limited to the fair value.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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### 11. Commitments and Contingencies

#### *Litigation*

The Authority is involved in various claims and legal actions arising in the ordinary course of business. In the opinion of management, the ultimate disposition of these matters will not have a material adverse effect on the Electric System's financial position, changes in net position, or liquidity. Additionally, Title 30, Section 111(a) of the Virgin Islands Code exempts the Authority's Electric System property from lien, levy, and sale as the result of any judgment against the Authority, except by bondholders.

#### *Grant Funds*

The Authority is subject to audit examination by funding sources to determine compliance with grant conditions. In the event that expenditures would be disallowed, repayment could be required. Management believes that the impact of any disallowed grant expenditures would not have a material adverse effect on the Electric System's financial position, changes in net position, or liquidity.

#### *Insurance Program*

The Electric System is exposed to various risks of loss related to damage and destruction of assets, errors and omissions, injuries to employees, and natural disasters. The Authority mitigates this risk of loss by purchasing commercial insurance, including general liability, excess liability, workers' compensation, property, and employee health, life, and accident.

The Authority's commercial insurance policies cover catastrophic exposures as well as those risks required to be insured by law or contract. It is the policy of the Authority to retain a significant portion of certain losses related primarily to physical loss to property, business interruption resulting from such loss, and comprehensive general and vehicle liability. There were no reductions in coverage from the prior year, and the amounts of settlements have not included insurance coverage for each of the past two years. Also see Note 15.

#### *Purchase Power Agreements*

The Authority has signed purchase power agreements with several companies to integrate a combined 18-megawatt of solar electricity into the Authority's electrical grid system. The agreements expire between 2022 and 2027. The Authority will not own the solar assets, but will be able to purchase solar generated electricity at contracted rates.

#### *Construction Contracts*

During the normal course of business, the Authority contracts with various construction companies to help the Authority maintain, replace, and expand its utility plant. These construction costs are expected to be paid for using proceeds from government grants, contributions from developers, and cash from operations.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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### *Operating Leases*

A temporary 22-megawatt mobile power plant was leased for \$14.6 million for 18 months from April 2012 through October 2013. In November 2013, management and the vendor extended the original lease agreement for an additional twelve months through November 2014 for \$7.8 million. The lease term was then amended for an additional twenty-four months through November 2016, for \$13.2 million. Total lease payments for 2017 and 2016 were \$6.1 million and \$7.3 million, respectively.

During the normal course of business, the Authority leases additional and various property and equipment to support Electric System operations. The leases are generally short term in nature and lease payments are not significant to the overall operations of the Electric System.

### *Hurricane Hugo*

Both at June 30, 2017 and 2016, the Electric System has recorded a liability of \$4.1 million respectively for amounts owed to the Federal Emergency Management Agency (FEMA) for overpayments related to certain questioned costs. Currently, FEMA and its sub-recipient, the Government of the Virgin Islands, do not have a mechanism in place for recovering the overpayment of disaster-related funds. In addition, FEMA has not made a formal request for repayment of these funds. In management's opinion, the resolution of this matter will not have a material adverse effect on the Authority's changes in financial position or cash flows.

### *Hurricane Omar*

In October 2008, the U.S. Virgin Islands were impacted by Hurricane Omar. The majority of the damage was inflicted to the electric distribution system on the island of St. Croix with minimal damage on St. Thomas, St. John, and Water Island. The Authority expended \$2.7 million for storm cleanup and system restoration as of June 2010.

The Territory was declared a federal disaster after the hurricane and was eligible for reimbursement of 75% of what was expended according to the category of the damage. Both at June 30, 2017 and 2016, the Electric System has recorded a grant receivable from FEMA amounting to approximately \$1.0 million.

### *Hurricane Earl*

On August 30, 2010, the U.S. Virgin Islands were impacted by Hurricane Earl. The damage was inflicted on the electric distribution system on all the islands. The Authority has expended over \$2.0 million for storm clean-up and restoration, which was completed the end of October 2010. The Territory was declared a Federal disaster area after the Hurricane and was eligible for reimbursement of 75% - 80% of what was expended according to the category of the damage. Both at June 30, 2017 and 2016, the Electric System has recorded a grant receivable from FEMA amounting to approximately \$1.3 million.

## **12. viNGN In-Kind Contribution**

On July 21, 2011, the Governing Board of the Authority approved a proposed strategy with terms and conditions to allow the Authority to negotiate and enter into an agreement with Virgin Islands Next Generation Network (viNGN) for the Broadband Expansion Project.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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On September 30, 2011, the Authority entered into a Memorandum of Agreement (MOA) with viNGN, a Virgin Islands Corporation and wholly owned subsidiary of the Virgin Islands Public Finance Authority (PFA), an autonomous instrumentality of the Government of the United States Virgin Islands.

The term of the MOA is twenty-five (25) years, following execution and upon expiration of the initial twenty-five years (25), it will be automatically renewed for two additional consecutive twenty-five (25) year terms unless either party provides a written notice of non-renewal to the other party not less than twelve (12) months but no sooner than twenty-four (24) months prior to the expiration of the original term or any additional term.

As part of the Broadband Expansion Project, the Authority is expected to provide in-kind contributions intended to satisfy a portion of the non-federal cost share requirement of the Comprehensive Community Infrastructure (CCI) grant. The Authority's in-kind contribution share consists of the use of certain of the Authority facilities, equipment, and communications infrastructure. The total in-kind match for the project was budgeted at \$15,247,966.

### 13. Management's Plan

The Electric System is in a precarious financial position based largely on outstanding receivables, lower sales revenues, operating losses, outstanding debt, and projected budget deficits, all resulting in a general lack of liquidity. All these matters have been made worse subsequently by the hurricanes of 2017. Also see Note 15.

Management has been working to stabilize and solidify this financial position through the implementation of an aggressive multi-pronged plan. The Authority has successfully petitioned the Virgin Islands Legislature to increase its debt ceiling limit and is working with the Authority's internal and external financial team to restructure the Authority's debt and access additional financing to sustain the Authority's operations and internally fund capital projects.

Specifically, the Authority is reassessing the customer service, billing, collection, and meter reading functions with the aim of reorganizing specific departments to substantially increase governmental and non-governmental collections and decrease account receivables; reevaluating capital projects to validate cost benefit analyses and re-prioritize capital improvement projects; and developing and implementing austerity measures to reflect the reality of the Authority's financial situation.

Management is also preparing a comprehensive base rate petition and semi-annual LEAC filings for submission to the Commission prior to the end of calendar year 2019 which will produce additional liquidity and allow the Authority to build working capital reserves. The plan also includes a strategy to right-size and streamline the Authority's processes. The Authority continues to aggressively pursue Federal funding for the acquisition of new high efficiency generation and renewables which will improve reliability, resiliency, and efficiency and reduce operating costs.

### 14. Regulatory Matters

In April 1998, the Governor signed into law Virgin Islands Act No. 6224, which provides that the Authority, as well as certain other instrumentalities of the Government, make a payment to the Government in lieu of taxes equal to 10% of net revenues or \$500,000, whichever is greater.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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The term “net revenues” is not defined in the legislation. Subject to further clarification from the Legislature, the Authority has interpreted net revenues as net income calculated in accordance with accounting principles generally accepted in the United States of America. For both of the years ended June 30, 2017 and 2016, the Electric System incurred \$500,000 in expenses related to this tax.

### 15. Subsequent Events

#### *Natural Disasters - Hurricanes Irma and Maria*

On September 6 and 19, 2017, the United States Virgin Islands were struck by two Category 5 hurricanes. The extent and severity of the storms was unprecedented and resulted in catastrophic damage to the Territory, as a whole.

The catastrophic damage to the transmission and distribution system Territory-wide rendered 90% of the system destroyed. At the Randolph Harley Power Plant (RHPP) on St. Thomas, all generation was lost during both storms and as a result the entire district (St. Thomas, St. John, Water Island, and Hassel Island) was without power throughout both storms and in the initial aftermath. The RHPP regained the ability to generate power approximately 7 days after Hurricane Maria. On St. Croix, while the Richmond Plant did not lose generation during the storms, three generating units sustained minor damages. The solar facility on St. Thomas sustained major damage and is currently inoperable while the solar facility on St. Croix sustained moderate damage but resumed operations in February 2018. The Authority had purchased commercial insurance to cover its risk of loss from destruction of assets. The commercial insurance policies carry a \$5.0 million deductible per event. The transmission and distribution system which sustained the most damage is not covered under this policy. To date, the Authority has not filed a claim as the estimated damage to insurable assets is less than the \$5.0 million deductible.

On or about September 7 and 20, 2017, the President of the United States declared the United States Virgin Islands a disaster area and eligible for Federal Emergency Management Agency (FEMA) recovery assistance. The Public Assistance Grant Program administered by FEMA provides federal support to include assistance for debris removal, life-saving emergency protective measures, and the repair, replacement, or restoration of disaster-damaged facilities. As of October 1, 2018, the Authority has been approved for approximately \$481.5 million in grant funding and has received \$413.0 million of the award based upon a reimbursement process.

Additionally, starting in December 2017, the Authority began working with FEMA to request mitigation funding to permanently strengthen the Authority's electrical distribution system. Funding under the Hazard Mitigation Grant Program was initially being implemented on a 75/25 cost-share basis of the approved costs; however, on May 18, 2018, the President of the United States approved the cost-share formula in the United States Virgin Islands to 90/10. To date, FEMA has approved, and the Authority is eligible to receive, approximately \$625.0 million in mitigation funding. Of the \$625.0 million that FEMA has approved, \$480.0 million is for underground and submarine transmission and distribution and drops directly to customer meters. The Authority expects the local match will be paid from U.S. Department of Housing and Urban Development's Community Development Block Grants.

Furthermore, in order to fund its working capital needs in the aftermath of the hurricanes, the Authority obtained \$31.0 million under the Community Disaster Loan program administered by FEMA. This loan was originally issued under the Electric System, subordinate to all existing Electric System indebtedness including outstanding bonds, notes, and bank facilities.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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In March 2018, the Authority entered into another loan for \$44.0 million and refinanced the existing \$31.0 million for a combined loan of \$75.0 million, secured now as a first lien of the Water System's revenues. The proceeds of these loans were used to provide working capital mostly for fuel invoices, payroll, and other critical operating expenses. While the loan is reflected under the Water System, the payment of principal and interest is subject to an intercompany agreement whereby 17% will be allocated to the Water System and 83% to the Electric System.

In August 2018, the Authority closed on an additional allocation of the Community Disaster Loan program of up to \$16.0 million. This loan is structured as a Senior Electric System Bond Anticipation Note which will convert to Senior Electric System Bonds upon the delivery of a consulting engineer's report. However, on November 14, 2018, the Authority adopted the Ninth Supplementary Bond Resolution, which authorized the issuance of its Electric System Revenue Bond Anticipation Notes, Series 2018C in a principal amount to include, among other things, a Community Disaster Loan allocation of \$19.5 million approved by FEMA, which amount includes \$16.0 million to refund the Series 2018A Notes and \$3.5 million of additional Community Disaster Loan allocation to be subsequently drawn upon by the Authority (the Series 2018C Senior Notes).

The Series 2018A Senior Notes are expected to be exchanged by FEMA for the Series 2018C Senior Notes, which will mature on July 1, 2021.

In addition to incurring significant storm related expenses, recurring operating revenues of the Authority have been reduced. In the interim, the Authority has revised its fiscal year 2019 budget to reflect the reality of the Authority's financial situation and is considering implementing a number of austerity measures.

In an effort to close potential shortfalls and to serve returning citizens, the Authority continues to work closely with Federal agencies, to maximize its recovery from all available sources, subject to any sublimits and retentions. While inflows of Federal and private funds continue to bolster the reconstruction activity, the eventual amount and timing for receipt of such funds cannot be predicted at this time. As such, the full impact of these hurricanes on the Authority remains unknown and therefore, it is also not yet possible for the Authority to estimate the impact of hurricane-related losses on revenue collections or expenditures.

### *Rate Case*

On November 30, 2015, the Authority's Governing Board authorized the Authority's management to file a petition (the Petition) with the Commission for permanent rates for the Electric System. On December 2015, the Authority filed for such rate increase before the Commission. On May 13, 2016, the Authority filed for an emergency interim Electric System base rate relief in the form of a cash reserve. The Commission voted to merge the petition for emergency relief into the existing base rate case.

On November 4, 2016, the Authority executed an Interim Agreement with the Commission that would provide interim rate relief of \$14.5 million annually. On January 12, 2017, the Commission voted to grant the Authority interim rate relief effective February 1, 2017. On January 26, 2017, the Commission held a special meeting and rescinded the rate approval that was granted two weeks prior.

# Electric System of the Virgin Islands Water and Power Authority

## Notes to Financial Statements

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The Authority filed a petition to stay the Commission's decision with the Superior Court of the Virgin Islands. In the interim, the Authority was allowed to implement the interim rates on February 1, 2017. On February 22, 2017, the Commission voted to have the base rate case finalized for a decision by May 31, 2017. On June 27, 2017, the Commission voted to implement the interim rates as the permanent electric rates.

On May 1, 2018, the Authority requested the Commission to close docket 651 (the Electric System Rate Case) and new rate petitions will be filed. The Authority took this action due to the impact of Hurricanes Irma and Maria on its operations, in addition to the significant time lapse since the original petition.

### *Bond Anticipation Notes (BAN)*

As the maturity date of the Series 2016A Subordinated BANs approached in the aftermath of Hurricanes Irma and Maria, the Authority decided to reissue another short-term note to keep rates low until a long-term financing option became available.

Accordingly, on November 14, 2018, the Authority and the beneficial owners of the Series 2016A Subordinated BANs entered into an agreement to extend the original maturity date of the Series to no later than December 7, 2018.

Further, on November 14, 2018, the Authority's Board authorized the issuance of the 2018B Senior BANs. The Authority anticipates refinancing the Series 2016A Subordinated BANs with its Series 2018B Senior BANs, in the principal amount of \$33.9 million. The Series 2018B BANs will mature on July 1, 2020.

### *Management's Evaluation*

Management has evaluated any events or transactions occurring after June 30, 2017, the statement of net position date, through December 7, 2018, the date the financial statements were available to be issued, and noted that there have been no additional events or transactions which would require adjustments to or disclosure in the Electric System's financial statements for the year ended June 30, 2017.

Required  
Supplementary Information

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# Electric System of the Virgin Islands Water and Power Authority

## Schedule of Funding Progress - Other Postemployment Benefits Obligation

Actuarial Valuation Date*	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
7/1/2011	\$ -	\$ 50,612,225	\$ 50,612,225	0.00%	\$ 22,324,435	227%
7/1/2013	\$ -	\$ 84,957,401	\$ 84,957,401	0.00%	\$ 23,551,148	361%
7/1/2015	\$ -	\$ 71,209,356	\$ 71,209,356	0.00%	\$ 24,262,587	293%
7/1/2017	\$ -	\$ 71,209,356	\$ 71,209,356	0.00%	\$ 21,225,988	335%

\*A valuation as of July 1, 2017, was not available due the Authority's anticipated implementation of GASB Statement No. 75. See separate Plan financial statements for further information.

# Electric System of the Virgin Islands Water and Power Authority

## Schedule of the System's Share of the Net Pension Liability

<i>Fiscal Year</i>	2017	2016	2015
Electric System's proportion of the net pension liability	5.939%	6.3710%	7.0146%
Electric System's proportionate share of the net pension liability	\$ 274,794,360	\$ 258,982,351	\$ 216,472,978
Electric System's covered-employee payroll	\$ 24,262,587	\$ 23,551,148	\$ 23,551,148
Electric System's proportionate share of the net pension liability as a percentage of its covered-employee payroll	1133%	1100%	919%
Plan fiduciary net position as a percentage of the total pension liability	16.54%	19.58%	27.26%

*This schedule is intended to show a 10-year trend. Additional years will be reported as they become available. The amounts presented for each fiscal year are as of the measurement date (September 30 of the previous year).*

# Electric System of the Virgin Islands Water and Power Authority

## Schedule of the System's Pension Contributions

<i>Fiscal Year</i>	2017	2016	2015
Actuarially required contributions	\$ 17,513,940	\$ 15,746,445	\$ 14,035,498
Contributions in relation to the actuarially required contributions	3,588,610	3,136,986	3,816,049
Contribution deficiency (excess)	\$ 13,925,330	\$ 12,609,459	\$ 10,219,449
Covered-employee payroll	\$ 21,225,988	\$ 24,262,587	\$ 23,551,148
Contributions as a percentage of covered-employee payroll	16.91%	12.93%	16.20%

*This schedule is intended to show a 10-year trend. Additional years will be reported as they become available. The amounts presented for each fiscal year are as of the latest fiscal year.*

## Supplementary Schedule

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# Electric System of the Virgin Islands Water and Power Authority

## Five-Year Comparative Summary of Operations (Unaudited)

<i>Years ended June 30,</i>	2017	2016	2015	2014	2013
<b>Operating revenues:</b>					
Electricity sales to customers	\$ 70,823,169	\$ 47,984,195	\$ 43,375,725	48,818,266	\$ 60,160,624
Electricity sales to Virgin Islands Government	21,924,227	14,281,634	13,863,086	15,316,764	16,217,759
Fuel escalator revenues	129,667,740	127,996,405	175,052,995	227,236,715	242,864,638
LEAC Revenue - RFM	-	7,803,370	12,602,237	14,743,793	15,652,442
OPEB surcharge	2,922,132	5,239,552	5,706,057	3,064,093	-
Maintenance surcharge	15,619,170	15,954,156	15,241,488	8,802,335	-
Payment in lieu of taxes	430,946	433,566	428,394	435,562	462,412
Line Loss Surcharge	1,379,712	1,388,032	1,372,130	1,379,693	1,480,347
Other operating revenues	2,381,069	3,167,926	3,145,643	3,405,191	4,319,351
Bad debt (expense) recovery	(917,688)	61,431	(477,931)	(1,986,868)	(2,156,712)
<b>Total operating revenues</b>	<b>244,230,477</b>	<b>224,310,267</b>	<b>270,309,824</b>	<b>321,215,544</b>	<b>339,000,861</b>
<b>Operating and production expenses:</b>					
Production:					
Fuel	142,627,941	125,688,066	172,209,703	231,710,866	248,812,136
Operations and maintenance	38,602,721	32,596,030	30,896,793	26,121,817	29,590,585
Expenses allocated to Water System	-	-	3,759,873	(231,548)	(7,937,629)
<b>Total production expenses</b>	<b>181,230,662</b>	<b>158,284,096</b>	<b>206,866,369</b>	<b>257,601,135</b>	<b>270,465,092</b>
Distribution	8,031,632	8,185,087	10,060,768	10,546,466	10,215,931
Customer service	4,567,186	5,274,266	5,996,523	6,597,527	6,499,685
Administrative and general	51,323,689	37,332,025	57,931,486	31,394,703	27,877,954
Payment in lieu of taxes	500,000	500,000	500,000	500,000	500,000
Depreciation and amortization	16,176,649	17,553,806	10,770,895	15,906,038	23,319,980
<b>Total operating and production expenses</b>	<b>261,829,818</b>	<b>227,129,280</b>	<b>292,126,041</b>	<b>322,545,869</b>	<b>338,878,642</b>
<b>Operating (loss) income</b>	<b>(17,599,341)</b>	<b>(2,819,013)</b>	<b>(21,816,217)</b>	<b>(1,330,325)</b>	<b>122,219</b>
<b>Nonoperating revenues (expenses):</b>					
Loss on retirement of capital assets	-	(13,772,676)	-	-	-
Investment derivative instruments (loss) gain	(5,558,810)	9,825,177	-	-	-
Interest expense	(28,053,069)	(13,711,701)	(14,025,824)	(13,520,973)	(13,888,691)
Investment earnings	99,479	42,679	26,221	90,676	119,391
Allowance for funds used during construction	102,310	133,116	562,849	352,219	308,567
<b>Total nonoperating expenses</b>	<b>(33,410,090)</b>	<b>(17,483,405)</b>	<b>(13,436,754)</b>	<b>(13,078,078)</b>	<b>(13,460,733)</b>
<b>Capital grants and contributions</b>	<b>4,872,796</b>	<b>4,358,798</b>	<b>7,306,087</b>	<b>-</b>	<b>4,944,004</b>
<b>Decrease in net position</b>	<b>\$ (46,136,635)</b>	<b>\$ (15,943,620)</b>	<b>\$ (27,946,884)</b>	<b>\$ (14,408,403)</b>	<b>\$ (8,394,510)</b>
<b>Electricity sales:</b>					
Residential	\$ 30,899,051	\$ 20,661,002	\$ 18,258,074	\$ 20,757,253	\$ 24,784,698
Commercial	17,125,514	11,897,278	10,804,383	12,302,477	14,791,196
Industrial	38,483,116	24,950,450	23,295,343	26,198,536	32,257,346
Street lighting	5,023,751	3,547,327	3,708,284	4,237,273	4,545,291
Fuel escalator	129,667,740	127,996,405	175,052,995	227,236,715	242,864,638
LEAC Revenue - RFM	-	7,803,370	12,602,237	14,743,793	15,652,442
Payment in lieu of taxes surcharge	430,946	433,566	428,394	435,562	462,412
Waste heat recovery boiler surcharge	-	-	(3)	(162)	(18)
OPEB Surcharge	2,922,132	5,239,552	5,706,057	3,064,093	-
Maintenance surcharge	15,619,170	15,954,156	15,241,488	8,802,335	-
Emergency surcharge	-	-	(279)	-	(6)
Self-insurance surcharge	1,215,964	1,209,787	1,173,010	639,654	(3)
Asbestos surcharge	-	-	-	-	(3)
Line loss surcharge	1,379,712	1,388,032	1,372,130	1,379,693	1,480,347
<b>Total</b>	<b>\$ 242,767,096</b>	<b>\$ 221,080,925</b>	<b>\$ 267,642,113</b>	<b>\$ 319,797,222</b>	<b>\$ 336,838,340</b>
<b>Kilowatt-hour sales (in thousands):</b>					
Residential	228,987	224,268	211,753	219,402	231,148
Commercial	112,187	115,464	108,148	113,517	123,234
Industrial	260,910	281,609	283,558	291,037	309,304
Street lighting	17,450	17,350	17,422	17,078	16,854
<b>Total</b>	<b>619,534</b>	<b>638,691</b>	<b>620,881</b>	<b>641,034</b>	<b>680,540</b>
<b>Number of customers at year-end</b>	<b>55,249</b>	<b>54,881</b>	<b>54,881</b>	<b>54,917</b>	<b>54,571</b>