

# Massachusetts Municipal Wholesale Electric Company

Financial Statements  
and  
Supplementary Information

Years Ended December 31, 2016 and 2015

# Massachusetts Municipal Wholesale Electric Company

## FINANCIAL STATEMENTS Years Ended December 31, 2016 and 2015

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## INDEPENDENT AUDITORS' REPORT

To the Board of Directors  
Massachusetts Municipal Wholesale Electric Company  
Ludlow, Massachusetts

We have audited the accompanying financial statements of Massachusetts Municipal Wholesale Electric Company and its fiduciary funds, as of and for the years ended December 31, 2016 and 2015, and the related notes to the financial statements, which collectively comprise the Massachusetts Municipal Wholesale Electric Company's basic financial statements as listed in the table of contents.

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

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

### ***Auditors' Responsibility***

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Massachusetts Municipal Wholesale Electric Company'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 Massachusetts Municipal Wholesale Electric Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

### ***Opinions***

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Massachusetts Municipal Wholesale Electric Company and its fiduciary funds as of December 31, 2016 and 2015, 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.

To the Board of Directors  
Massachusetts Municipal Wholesale Electric Company

**Other Matters**

*Required Supplementary Information*

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

*Supplementary Information*

Our audits were conducted for the purpose of forming an opinion on the financial statements as a whole. The supplemental information as listed in the table of contents are presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplemental information is fairly stated in all material respects in relation to the basic financial statements as a whole.

*Other Information*

Our audit was conducted for the purpose of forming an opinion on the basic financial statements as a whole. The Debt Service Coverage Calculation, which is the responsibility of management, 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 express no opinion or provide any assurance on it.

*Baker Tilly Virchow Krause, LLP*

Madison, Wisconsin  
March 31, 2017

# Massachusetts Municipal Wholesale Electric Company

Management's Discussion and Analysis (unaudited)  
Years Ended December 31, 2016 and 2015

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The following discussion and analysis of the Massachusetts Municipal Wholesale Electric Company (MMWEC) provides an overview and analysis of MMWEC's financial performance during the years ended December 31, 2016 and 2015. This discussion and analysis should be read in conjunction with MMWEC's financial statements and the accompanying notes.

## OVERVIEW OF THE FINANCIAL STATEMENTS

MMWEC is a public corporation and a political subdivision of the Commonwealth of Massachusetts formed to be a joint action agency to develop a bulk power supply for its member Massachusetts cities and towns having municipal electric systems (Members) and other utilities. Among other things, MMWEC is authorized to construct, own or purchase ownership interests in energy facilities and to issue revenue bonds for such purposes. MMWEC's ownership interest in energy generation facilities is through various Projects. Pursuant to its General Bond Resolution (GBR), the bonds of any bond issue relating to a Project are secured solely by revenues derived from that Project. Project revenues are derived primarily from Power Sales Agreements (PSAs) with MMWEC's Members and other utilities that are Participants in a Project (Project Participants). MMWEC's bulk power supply program consists of power purchase arrangements, power brokering services, related planning and other financial services.

MMWEC has a fiduciary responsibility over two defined benefit pension plans that are provided to its employees and has included fiduciary financial statements and disclosures for these pension plans.

The accounting records of MMWEC are maintained using the Governmental Accounting Standards Board (GASB), the Uniform System of Accounts of the Federal Energy Regulatory Commission (FERC) and the Generally Accepted Accounting Principles of the United States (GAAP) using the economic resources measurement focus and the accrual basis of accounting. Application of the accounting methods for regulatory operations is also included in these financial statements. This accounting guidance relates to the deferral of revenues and expenses to future periods in which the revenues are earned or the expenses are recovered through the rate-making process, which is governed by the Board of Directors.

MMWEC's financial statements include Statements of Net Position, Statements of Revenues, Expenses and Changes in Net Position, Statements of Cash Flows, Statements of Fiduciary Net Position and Statements of Changes in Fiduciary Net Position. The Statements of Net Position report year-end assets and liabilities based on the original cost adjusted for any depreciation, amortization or unrealized gains/losses as appropriate. The Statements of Revenues, Expenses and Changes in Net Position present MMWEC's operating revenues and expenses incurred as a result of MMWEC's business activity. The Statements of Cash Flows report the cash provided and used for operating activities, as well as investing activities and capital and related financing activities. The Statements of Fiduciary Net Position report the financial resources available for future benefits for MMWEC's administrative and union pension plans. The Statements of Changes in Fiduciary Net Position reflect the additions, deductions and net increase or decrease in net position held in trust for pension benefits.

## MMWEC FINANCIAL ANALYSIS

An analysis of MMWEC's financial position begins with the review of the Statements of Net Position, the Statements of Revenues, Expenses and Changes in Net Position and the Statements of Cash Flows. A summary of MMWEC's Condensed Statements of Net Position is presented in Table 1. The Condensed Statements of Revenues, Expenses and Changes in Net Position are summarized in Table 2 and the Condensed Statements of Cash Flows is summarized in Table 3.

In 2015, MMWEC implemented the provisions of GASB Statement No. 68, Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27 (GASB 68), which modifies how costs and liabilities associated with pension benefits are measured.

# Massachusetts Municipal Wholesale Electric Company

Management's Discussion and Analysis (unaudited)  
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## MMWEC FINANCIAL ANALYSIS...continued

As a result of the adoption of GASB 68, certain prior year information has been revised to conform to the current year presentation.

**Table 1**  
**Condensed Statements of Net Position**

	<u>2016</u>	<u>2015</u>	<u>Restated</u>
		(In Thousands)	2014
Current assets, less current portions of designated and restricted special funds	\$ 97,349	\$ 91,552	\$ 96,093
Restricted special funds, including interest receivable and current portion of restricted special funds	166,224	169,220	177,731
Other assets	204,906	186,811	178,809
Capital assets	578,337	588,920	593,333
Deferred outflows of resources	<u>4,459</u>	<u>3,408</u>	<u>1,702</u>
Total assets and deferred outflows of resources	<u>\$ 1,051,275</u>	<u>\$ 1,039,911</u>	<u>\$ 1,047,668</u>
Current liabilities, less current maturities of long-term debt and accrued interest	\$ 157,188	\$ 152,662	\$ 174,604
Long-term debt, net of premiums, including current maturities and accrued interest	57,602	116,569	175,162
Noncurrent liabilities	246,405	225,436	200,198
Deferred Inflow of resources	<u>590,080</u>	<u>545,244</u>	<u>497,704</u>
Total liabilities and deferred inflows of resources	<u>\$ 1,051,275</u>	<u>\$ 1,039,911</u>	<u>\$ 1,047,668</u>
Net position	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

# Massachusetts Municipal Wholesale Electric Company

Management's Discussion and Analysis (unaudited)  
Years Ended December 31, 2016 and 2015

## MMWEC FINANCIAL ANALYSIS...continued

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

	2016	2015	Restated 2014
		(In Thousands)	
Operating revenues	\$ 265,352	\$ 311,774	\$ 324,917
Depreciation expense	17,485	16,939	16,588
Other operating expenses	207,111	249,447	268,748
Total operating expenses	<u>224,596</u>	<u>266,386</u>	<u>285,336</u>
Operating income	40,756	45,388	39,581
Investment income	11,063	1,890	10,641
Interest and amortization expense	(2,136)	(2,547)	(2,768)
Increase in amounts payable under terms of the power sales agreements	(49,683)	(44,731)	(47,454)
Total non-operating expenses	<u>(40,756)</u>	<u>(45,388)</u>	<u>(39,581)</u>
Change in net position	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

**Table 3**  
**Condensed Statements of Cash Flows**

	2016	2015	Restated 2014
		(In Thousands)	
Net cash provided by operating activities	\$ 84,995	\$ 92,003	\$ 72,603
Net cash provided by (used in) investing activities	(20,116)	21,143	(10,610)
Net cash used in capital and related financing activities	(79,000)	(84,174)	(89,371)
Net cash provided by (used in) noncapital financing activities	3,142	(8,843)	20,264
Net change in cash and cash equivalents	(10,979)	20,129	(7,114)
Cash and cash equivalents – beginning of year	<u>63,655</u>	<u>43,526</u>	<u>50,640</u>
Cash and cash equivalents – end of year	<u>\$ 52,676</u>	<u>\$ 63,655</u>	<u>\$ 43,526</u>

# Massachusetts Municipal Wholesale Electric Company

Management's Discussion and Analysis (unaudited)  
Years Ended December 31, 2016 and 2015

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## STATEMENTS OF NET POSITION

The majority of MMWEC's Statements of Net Position consists of the financial activity relating to various Projects, representing ownership interests in various electric generation facilities for which MMWEC has corresponding PSAs with each Project Participant. MMWEC's joint ownership interests are shown in Note 13 – Project Joint Ownership Agreements in the accompanying notes of the accompanying financial statements.

### Comparison of 2015 Financial Results to 2014 Financial Results

Current assets, excluding the current portions of restricted and designated funds, decreased by \$4.5 million.

Cash and temporary investments increased by \$2.4 million, primarily due to the increase of \$3.1 million in Stony Brook Intermediate and Peaking and Wyman working capital funds, reflecting the replenishment of these funds through participant billings, which were depleted by fuel oil purchases made in late 2014. There were also timing differences in the Mix One and Service portfolios, resulting in a net decrease of \$0.7 million in operating accounts, with a corresponding increase in restricted and designated funds for investments with a maturity of greater than one year.

The increase in accounts receivable and unbilled revenue of \$6.0 million is chiefly attributable to an increase in loans receivable (\$11.1 million) under MMWEC's pooled loan program, which began in late 2014, due to additional Member funding requests through this program in 2015 and higher billings in the Seabrook Station Projects because of higher capital requirements (\$1.6 million). These increases were offset by lower amounts billed due to decreased generation and fuel oil burn forecasts for the Stony Brook Intermediate, Stony Brook Peaking and Wyman Projects (\$3.1 million), and lower average locational marginal prices for Massachusetts and a Member termination in September 2015 resulting in lower Member power purchases (\$3.6 million) in December 2015 than at the same time in the prior year.

Inventories decreased \$12.8 million from the prior year due to fuel oil burn for the Stony Brook Intermediate, Peaking and Wyman Projects. In addition, for the Wyman Project, fuel oil purchases made during 2015 were at a lower cost than those made in 2014. No oil purchases for the Stony Brook Peaking and Intermediate were made during 2015.

Current and noncurrent restricted special funds, including related interest receivable, decreased by \$8.5 million, primarily due to Member withdraws from available loan funds during 2015 (\$3.7 million), decreases in member power purchase working capital funds due to lower average power prices in 2015 reducing requirements and a Member termination in September 2015 (\$2.8 million) and lower Seabrook Station operating reserves and bond reserve funds due to expenditures paid for the refueling and maintenance outage in 2015 and higher lead-owner expenditures in 2015 than in the prior year (\$2.9 million). These decreases were offset by an increase in Millstone operating reserves due to the 2015 replenishment of working capital expended for the maintenance and refueling outage in the prior year.

In 2015, total capital assets had a net decrease of \$4.4 million due primarily to continued depreciation of \$16.9 million and continued amortization of nuclear fuel of \$10.8 million, offset primarily by net in-service asset and construction work in progress additions of \$14.3 million, net of asset retirements of \$0.3 million, and net purchases of nuclear fuel of \$9.3 million.

# Massachusetts Municipal Wholesale Electric Company

Management's Discussion and Analysis (unaudited)  
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## STATEMENTS OF NET POSITION...continued

### Comparison of 2015 Financial Results to 2014 Financial Results...continued

Other assets increased by \$8.0 million from 2014 to 2015, reflecting increases in designated funds (\$6.6 million) primarily due to fuel reserve collection made for the Stony Brook Intermediate Project; improved investment performance and monthly contributions made to the nuclear decommissioning trust funds (\$1.5 million); and market valuation of fuel oil hedging derivatives purchased in 2015 (\$6.0 million). These increases were offset by decreases to pension assets due to valuation changes (\$2.2 million) and lower advances made to the lead owners for the Project operating costs of the Seabrook Station by higher advances made to the lead owners for the Project operating costs of the Millstone Projects (\$3.9 million).

Deferred outflows of resources increased by \$1.7 million due to the deferral of the loss on pension assets.

The \$21.9 million decrease in current liabilities, excluding current maturities of long-term debt and accrued interest, was attributable to decreased draws on the lines of credit of \$8.4 million primarily due to payment in 2015 of fuel oil purchases made in the last quarter of 2014, which were funded through use of the fuel working capital line of credit, offset by additional draws in 2015 for MMWEC's pooled loan program line of credit, resulting in a lower short-term debt balance than in the prior year.

In addition, accounts payable and accrued expenses decreased by \$5.9 million as more payments were made to vendors prior to year-end for operational expenses incurred in 2015, whereas in the prior year, such payments were made after year-end. Finally, MMWEC utilized reserves to fund the planned maintenance and refueling outage for Seabrook Station Projects in 2015, which decreased the amount of advances the Members and Project Participants had at MMWEC by \$7.7 million.

Long-term debt, including current maturities and accrued interest, decreased by \$58.6 million primarily due to principal payments made and maturities of long-term debt during 2015.

Other noncurrent liabilities, excluding long-term debt, increased \$25.2 million due to accretion of asset retirement obligations and additional collections made for Intermediate fuel working capital in 2015.

Deferred inflows of resources increased by \$47.5 million due to the deferral of the gain on fuel oil cash flow hedges in 2015 of \$3.2 million and increases in amounts payable under the terms of the PSAs, which include temporary offsets of unbilled expenses, such as depreciation, unrealized gains/losses, and bond payment activity, offset by continued amortization of deferred gain on extinguishment of debt of \$0.5 million and decreased pension regulatory liability of \$1.6 million.

### Comparison of 2016 Financial Results to 2015 Financial Results

Current assets, excluding the current portions of restricted and designated funds, increased by \$5.8 million.

Cash and temporary investments decreased by \$2.8 million, primarily due to the decrease of \$2.4 million in Stony Brook Intermediate and Peaking operating funds, reflecting lower participant billings due to lower fuel burn forecasts at year-end 2016 than in the prior year. There were also timing differences in the Mix One and Service portfolios, resulting in a net decrease of \$0.4 million in operating accounts, with a corresponding increase in restricted and designated funds for investments with a maturity of greater than one year.

# Massachusetts Municipal Wholesale Electric Company

Management's Discussion and Analysis (unaudited)  
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## STATEMENTS OF NET POSITION...continued

### Comparison of 2016 Financial Results to 2015 Financial Results...continued

The decrease in accounts receivable and unbilled revenue of \$0.3 million is chiefly attributable to lower amounts billed due to decreased generation and fuel oil burn forecasts for the Stony Brook Intermediate, Stony Brook Peaking and Wyman Projects (\$0.8 million), lower amounts billed due to decreased debt service for the Millstone and Seabrook Projects (\$3.1 million) and lower average locational marginal prices for Massachusetts (\$1.0 million) in December 2016 than at the same time in the prior year. These increases were offset by increases in loans receivable (\$4.3 million) under MMWEC's pooled loan program due to additional Member funding requests through this program in 2016 and increased capital billings (\$0.3 million) in the MMWEC's Service company at year-end 2016.

Inventories increased \$8.5 million primarily due to oil market recovery in 2016 resulting in the reversal of the prior year market adjustment on oil inventory for the Stony Brook Intermediate, Peaking and Wyman Projects. In addition, inventory was purchased for the Seabrook Projects during 2016 in anticipation of the next refueling outage scheduled for April 2017.

Current and noncurrent restricted special funds, including related interest receivable, decreased by \$3.0 million, primarily due to decreases in Millstone operating reserves of \$4.3 million for working capital expended for the maintenance and refueling outage in fall 2016, offset by additional Member loan funds available during 2016 (\$0.5 million), increases in power purchase working capital funds (\$0.8 million) due to lower average power prices in 2016.

Other assets increased by \$18.1 million from 2015 to 2016, reflecting increases in designated funds (\$19.4 million) primarily due to fuel reserve collection made for the Stony Brook Intermediate Project and increases in nuclear decommissioning trust funds (\$7.7 million) due to improved investment performance and monthly contributions. These increases were offset by decreases market valuation of fuel oil hedging derivatives purchased in 2016 (\$5.9 million), decreases to pension assets due to valuation changes (\$1.6 million), and reduced advances made to the lead owners for the Project operating costs of the Seabrook Station, offset by higher advances made to the lead owners for the Project operating costs of the Millstone Projects (net \$1.5 million).

In 2016, total capital assets had a net decrease of \$10.6 million due primarily to continued depreciation of \$17.5 million and continued amortization of nuclear fuel of \$10.8 million, offset primarily by net in-service asset and construction work in progress additions of \$7.6 million, net of asset retirements of \$0.2 million, and net purchases of nuclear fuel of \$10.1 million.

Deferred outflows of resources increased by \$1.0 million due to the additional deferral of the loss on pension assets (\$0.3 million) and deferral of the loss on fuel oil cash flow hedges in 2016 of \$0.7 million.

The \$4.5 million increase in current liabilities, excluding current maturities of long-term debt and accrued interest, was attributable to increased draws for MMWEC's pooled loan program line of credit (\$3.6 million) and increased advances by Members and Project Participants (\$3.8 million) due to the collection of reserves in late 2016 to fund the planned maintenance and refueling outage for Seabrook Station Projects in April 2017. These increases were offset by decreases in accounts payable and accrued expenses of \$2.9 million as more payments were made to vendors prior to year-end for operational expenses incurred in 2016, whereas in the prior year, such payments were made after year-end.

Long-term debt, including current maturities and accrued interest, decreased by \$59.0 million primarily due to principal payments made and maturities of long-term debt during 2016.

# Massachusetts Municipal Wholesale Electric Company

Management's Discussion and Analysis (unaudited)  
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## STATEMENTS OF NET POSITION...continued

### Comparison of 2016 Financial Results to 2015 Financial Results...continued

Other noncurrent liabilities, excluding long-term debt, increased \$21.0 million due to accretion of asset retirement obligations and additional collections made for Intermediate fuel working capital in 2016.

Deferred inflows of resources increased by \$44.8 million due to increases in amounts payable under the terms of the PSAs (\$49.7 million), which include temporary offsets of unbilled expenses, such as depreciation, unrealized gains/losses, and bond payment activity, offset by continued amortization of deferred gain on extinguishment of debt (\$0.4 million), the reversal of the prior year deferral of the gain on fuel oil cash flow hedges (\$3.2 million), and decreased pension regulatory liability (\$1.3 million).

## STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

The majority of MMWEC's Statements of Revenues, Expenses and Changes in Net Position consist of the financial activity relating to revenues and expenses from power purchases and the PSAs for the Projects. Project revenues are derived, primarily, from PSAs with Project Participants. Under all PSAs, the Project Participants are required to pay their respective shares of MMWEC's actual costs relating to the Projects, including debt service. Thus, MMWEC's revenues for an individual Project are dependent on debt service and the costs associated with that particular Project. Revenues for the individual Projects vary from year to year as the costs MMWEC incurs relating to a Project vary. MMWEC bills under the PSAs only the expenses and costs it incurs from the lead owner of the generating facility and its own expense associated with each Project plus certain other amounts required pursuant to MMWEC's General Bond Resolution.

### Comparison of 2015 Financial Results to 2014 Financial Results

For 2015, revenue decreased by \$13.1 million due to lower generation in the Seabrook Station and Peaking Projects, decreased fuel costs in the Stony Brook Intermediate Project and lower maintenance costs in the Millstone Project, offset by higher generation in the Wyman and Millstone Projects.

Purchased power expenses increased by \$5.0 million during 2015 as compared to 2014 due to higher fixed contract prices for power, which were negotiated assuming continued instability in the natural gas markets and more extreme temperatures in 2015, although, actual locational marginal power prices for Massachusetts were at near-record lows for most of 2015 due to moderate temperatures and decreased demand. Power prices were also impacted by higher regional network service (transmission) costs, which grew by approximately 12% during mid-2015.

The \$8.0 million decrease in fuel used in electric generation was driven by decreased generation at Peaking and Seabrook Station and lower fuel costs at Stony Brook Intermediate, offset by increased generation at Wyman and Millstone, as Millstone had a planned refueling and maintenance outage in 2014 and no outage in 2015.

Other operating expense decreased \$5.6 million primarily due to the impairment of Stony Brook Unit 3, which was recognized in 2014. There were no impairments in 2015.

Maintenance expense decreased \$2.4 million in 2015, primarily driven by Millstone, as there was no planned refueling or major maintenance outage at Millstone in 2015, whereas in 2014, both Seabrook Station and Millstone had planned refueling and maintenance outages.

# Massachusetts Municipal Wholesale Electric Company

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## **STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION...continued**

### Comparison of 2015 Financial Results to 2014 Financial Results...continued

In 2015, depreciation expense increased \$0.4 million. This was the result of higher depreciation from fixed asset additions offset by retirements during 2015.

The decrease in inventory market adjustment of \$8.4 million reflects adjustments made to present fuel oil inventory at the lower of cost or market. Market value of fuel oil purchased for the Stony Brook Peaking and Intermediate continued to decline December 2015, below the prior valuation.

The \$0.1 million increase in taxes other than income was attributable to slightly higher Seabrook Station property valuations in 2015 than in the prior year.

Investment income, which is a result of varying fund balances and interest rates, decreased by \$8.8 million in 2015, due to weaker investment performance in 2015 as opposed to 2014.

Interest expense decreased by \$2.1 million due to lower interest costs incurred in 2015 than in 2014 as a result of reduced long-term debt balances due to scheduled principal payments and maturities.

Amortization expense decreased by \$1.8 million due to continued amortization of premiums and gains associated with various bond issues.

The increase in amounts payable under terms of the PSAs is primarily related to bond payments made during the period and is discussed in Notes 1 and 7 of the accompanying financial statements.

### Comparison of 2016 Financial Results to 2015 Financial Results

For 2016, revenue decreased by \$46.4 million due to lower generation in the Stony Brook Intermediate, Millstone and Wyman Projects, lower purchased power costs and lower maintenance and other operating costs in the Seabrook Projects, offset by higher maintenance and other operating costs in the Millstone Projects due to the planned refueling and maintenance outage in late 2016.

Purchased power expenses decreased by \$16.6 million during 2016 as compared to 2015 primarily due to lower fixed contract prices for power, which were negotiated assuming continued lower locational marginal power prices for Massachusetts.

The \$11.5 million decrease in fuel used in electric generation was driven by decreased generation at Stony Brook Intermediate, Millstone and Wyman, offset by increased generation at Stony Brook Peaking and Seabrook, as Seabrook had a planned refueling and maintenance outage in 2015 and no outage in 2016.

Other operating expense decreased \$2.6 million primarily driven by Seabrook Station, as there was no planned refueling or major maintenance outage at Seabrook Station in 2016, whereas in 2015, Seabrook Station incurred additional maintenance expenses due to their planned refueling and maintenance outage. In addition, Stony Brook Intermediate expenses decreased from the prior year due to decreased generation resulting in lower regional greenhouse gas charges and open staff positions during 2016 resulting in decreased administrative and operating costs. These decreases were offset by increased other operating expenses at Millstone, which had a planned refueling and maintenance outage in 2016 and no major maintenance or refueling outage in 2015.

# Massachusetts Municipal Wholesale Electric Company

Management's Discussion and Analysis (unaudited)  
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## **STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION...continued**

### Comparison of 2016 Financial Results to 2015 Financial Results...continued

Maintenance expense decreased \$0.9 million in 2016, primarily driven by Seabrook Station, as there was no planned refueling or major maintenance outage at Seabrook Station in 2016, whereas in 2015, Seabrook Station incurred additional maintenance expenses due to their planned refueling and maintenance outage. These decreases were offset by increased maintenance expenses at Millstone, which had a planned refueling and maintenance outage in 2016 and no major maintenance or refueling outage in 2015.

In 2016, depreciation expense increased \$0.5 million, as a result of depreciation from fixed asset additions, offset by retirements during 2016.

The decrease in inventory market adjustment of \$9.9 million reflects adjustments made to present fuel oil inventory at the lower of cost or market. Market value of fuel oil purchased for the Stony Brook Peaking, Intermediate and Wyman Projects recovered as of late 2016, resulting in the prior valuation being reversed.

The \$0.8 million decrease in taxes other than income was attributable to reduced Seabrook Station property valuations in 2016 than in the prior year.

Investment income, which is a result of varying fund balances and interest rates, increased by \$9.2 million in 2016, due to the gain on ineffective cash flow hedges exercised in 2016 and stronger investment performance in 2016 as opposed to 2015.

Interest expense decreased by \$2.3 million due to lower interest costs incurred in 2016 than in 2015 as a result of reduced long-term debt balances due to scheduled principal payments and maturities.

Amortization expense decreased by \$1.9 million due to continued amortization of premiums and gains associated with various bond issues.

The decrease in amounts payable under terms of the PSAs is primarily related to bond payments made during the period and is discussed in Notes 1 and 7 of the accompanying financial statements.

## **STATEMENTS OF CASH FLOWS**

For purposes of the Statements of Cash Flows, cash equivalents are cash and investments having an original maturity of three months or less from the date of acquisition. Cash and cash equivalents increased by \$20.1 million from 2014 to 2015. This is due to purchases of investments during 2015 and increased operating cash due to timing of payments for operational activities in 2015. Cash and cash equivalents decreased by \$11.0 million from 2015 to 2016. This is primarily due to purchases of investments during 2016 and decreased operating cash due to timing of payments for operational activities in 2016.

# Massachusetts Municipal Wholesale Electric Company

Management's Discussion and Analysis (unaudited)  
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## DEBT SERVICE COVERAGE

For the PSAs' contract years ended June 30, 2016 and June 30, 2015, MMWEC met the GBR debt service coverage requirements for all of MMWEC's Projects. In accordance with the provisions of MMWEC's GBR, MMWEC covenants that it will fix, revise and collect rates, tolls, rents and other fees and charges sufficient to produce revenues to pay all Project operating and maintenance expenses as well as principal, premium, if any, and interest on the Bonds associated with each Project. Revenues for each Project, which include applicable interest earnings from investments associated with funds required to be maintained by the GBR, are required to equal 1.10 times the annual debt service for the PSA contract year ending June 30, after deduction of certain operating and maintenance expenses and exclusive of depreciation. Further details can be found in the Supplementary Information to the financial statements.

## DEBT RATINGS

During 2016, following their annual credit review of MMWEC, two major credit rating agencies rated the MMWEC bonds as follows:

Investment Type	Standard & Poor's	Fitch Ratings
Nuclear Project No. 3, Series 2011	A+	A+
Nuclear Project No. 4, Series 2011	A+	A+
Nuclear Project No. 5, Series 2011	A	A+
Project No. 6, Series 2011	A-	A+
Nuclear Project No. 3, Series One	A+	A+
Nuclear Project No. 4, Series One	A+	A+
Nuclear Project No. 5, Series One	A	A+
Project No. 6, Series One	A-	A+

# Massachusetts Municipal Wholesale Electric Company

Management's Discussion and Analysis (unaudited)  
Years Ended December 31, 2016 and 2015

## MMWEC PROJECT OPERATIONS

The following tables provide operating information for the MMWEC Projects for the corresponding years for which financial information and analysis was presented above. See Note 13 – Project Joint Ownership Agreements in the accompanying financial statements for additional information.

### MMWEC Project Operations January 1 through December 31, 2016

	<u>Stony Brook Intermediate</u>	<u>Stony Brook Peaking</u>	<u>Seabrook</u>	<u>Millstone 3</u>	<u>Wyman</u>
Availability	95.64%	86.45%	98.67%	85.83%	90.30%
Capacity Factor	3.55%	0.22%	98.32%	85.43%	1.61%
Generation MWH	96,663	2,992	1,247,514	437,629	3,151

*The capacity factor represents the percentage of electricity actually produced as compared with potential production.*

### MMWEC Project Operations January 1 through December 31, 2015

	<u>Stony Brook Intermediate</u>	<u>Stony Brook Peaking</u>	<u>Seabrook</u>	<u>Millstone 3</u>	<u>Wyman</u>
Availability	94.79%	95.11%	87.96%	100.00%	80.37%
Capacity Factor	7.15%	0.17%	86.89%	100.08%	7.23%
Generation MWH	194,272	2,321	1,099,477	511,237	14,052

## CONTACT INFORMATION

This financial report is designed to provide a general overview of MMWEC's finances. Questions or requests for additional information should be addressed to MMWEC Attn: Director of Accounting & Financial Reporting, PO Box 426, Ludlow, Massachusetts 01056.

## Massachusetts Municipal Wholesale Electric Company

Statements of Net Position  
December 31, 2016 and 2015  
(In Thousands)

	2016	2015
<b>ASSETS</b>		
Current assets:		
Cash and temporary investments	\$ 3,665	\$ 6,501
Accounts receivable	41,851	40,621
Unbilled revenues	16,817	18,334
Inventories	33,385	24,859
Prepaid expenses	1,631	1,237
Current portion of restricted special funds	62,708	76,284
Current portion of designated funds	344	382
Total current assets	<u>160,401</u>	<u>168,218</u>
Noncurrent assets:		
Restricted assets:		
Restricted special funds	103,143	92,594
Interest receivable	373	342
Nuclear decommissioning trust	107,246	99,511
Net pension asset	2,152	3,747
Noncurrent charges:		
Designated funds	84,926	65,596
Designated funds interest receivable	217	153
Derivative financial instruments	103	6,010
Other noncurrent charges	9,918	11,412
Total noncurrent assets	<u>308,078</u>	<u>279,365</u>
Capital assets:		
In service	1,415,312	1,412,911
Accumulated depreciation	(877,254)	(862,672)
Construction work in progress	15,764	13,385
Nuclear fuel, net of amortization	24,515	25,296
Total capital assets	<u>578,337</u>	<u>588,920</u>
<b>DEFERRED OUTFLOWS OF RESOURCES</b>		
Deferred loss on pension asset	3,716	3,408
Deferred loss on derivative	743	-
Total deferred outflows of resources	<u>4,459</u>	<u>3,408</u>
Total assets and deferred outflows of resources	<u>\$ 1,051,275</u>	<u>\$ 1,039,911</u>
<b>LIABILITIES</b>		
Current liabilities:		
Accounts payable	\$ 7,739	\$ 6,877
Member and participant advances	109,504	105,661
Short-term debt	20,752	17,112
Accrued expenses	19,193	23,012
Current liabilities payable from restricted assets:		
Accrued interest payable	962	2,047
Current maturities of long-term debt, net of premiums	45,451	57,122
Total current liabilities	<u>203,601</u>	<u>211,831</u>
Noncurrent liabilities:		
Long-term debt, net of premiums and current maturities	11,189	57,400
Asset retirement obligations	154,163	146,850
Long-term member and participant advances	92,242	78,586
Total noncurrent liabilities	<u>257,594</u>	<u>282,836</u>
<b>DEFERRED INFLOWS OF RESOURCES</b>		
Pension regulatory liability	4,892	6,241
Amounts payable under terms of the power sales agreements	584,573	534,888
Deferred gain on pension asset	60	-
Deferred gain on cash flow hedges	-	3,192
Deferred gain on extinguishment of debt, net of amortization	555	923
Total deferred inflows of resources	<u>590,080</u>	<u>545,244</u>
Total liabilities and deferred inflows of resources	<u>\$ 1,051,275</u>	<u>\$ 1,039,911</u>
<b>NET POSITION</b>		
Net investment in capital assets	\$ 528,160	\$ 478,515
Restricted for:		
General bond resolution	20,387	22,120
Decommissioning Trust	107,246	99,511
Pension	2,152	3,747
Unrestricted	<u>(657,945)</u>	<u>(603,893)</u>
Total net position	<u>\$ -</u>	<u>\$ -</u>

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

# Massachusetts Municipal Wholesale Electric Company

Statements of Revenues, Expenses and Changes in Net Position

Years Ended December 31, 2016 and 2015

(In Thousands)

	<u>2016</u>	<u>2015</u>
Operating revenues:		
Revenues	<u>\$ 265,352</u>	<u>\$ 311,774</u>
Operating expenses:		
Fuel used in electric generation	16,358	27,892
Purchased power	138,752	155,394
Other operating	45,449	48,025
Maintenance	9,651	10,561
Depreciation	17,485	16,939
Inventory market adjustment	(7,197)	2,679
Taxes other than income	4,098	4,896
	<u>224,596</u>	<u>266,386</u>
Operating income	<u>40,756</u>	<u>45,388</u>
Non-operating revenues (expenses):		
Investment income	11,063	1,890
Interest expense on long-term debt	(3,680)	(5,967)
Amortization of premium	1,167	2,926
Amortization of gain on extinguishment of debt	369	479
Interest charged to projects during construction	8	15
Increase in amounts payable under terms of the power sales agreements	<u>(49,683)</u>	<u>(44,731)</u>
Total non-operating expenses	<u>(40,756)</u>	<u>(45,388)</u>
Change in net position	-	-
Net position, beginning of year	-	-
Net position, end of year	<u>\$ -</u>	<u>\$ -</u>

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

# Massachusetts Municipal Wholesale Electric Company

## Statements of Cash Flows

Years Ended December 31, 2016 and 2015

(In Thousands)

	2016	2015
Cash flows from operating activities:		
Received from sales to members and participants	\$ 283,138	\$ 314,314
Paid to suppliers for goods and services	(188,621)	(214,167)
Paid to employees	(9,522)	(8,144)
Net cash provided by operating activities	<u>84,995</u>	<u>92,003</u>
Cash flows from investing activities:		
Purchases of investments	(261,495)	(246,954)
Proceeds from sales and maturities of investments	237,087	266,619
Investment income (loss) received	4,292	1,478
Net cash provided by (used in) investing activities	<u>(20,116)</u>	<u>21,143</u>
Cash flows from capital and related financing activities:		
Construction expenditures and purchases of nuclear fuel	(16,956)	(21,835)
Principal payments on long-term debt	(56,715)	(54,600)
Decommissioning trust payments	(1,059)	(1,172)
Interest payments on long-term debt	(4,270)	(6,567)
Net cash used in capital and related financing activities	<u>(79,000)</u>	<u>(84,174)</u>
Cash flows from noncapital financing activities:		
Proceeds from issuance of short-term debt	16,746	31,001
Principal payments on short-term debt	(13,106)	(39,409)
Interest payments on short-term debt	(498)	(435)
Net cash provided by (used in) noncapital financing activities	<u>3,142</u>	<u>(8,843)</u>
Net change in cash and cash equivalents	<u>(10,979)</u>	20,129
Cash and cash equivalents, beginning of year	<u>63,655</u>	<u>43,526</u>
Cash and cash equivalents, end of year	<u>\$ 52,676</u>	<u>\$ 63,655</u>

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

# Massachusetts Municipal Wholesale Electric Company

Statements of Cash Flows...continued

Years Ended December 31, 2016 and 2015

(In Thousands)

	2016	2015
<b>Reconciliation of operating income to net cash provided by operating activities:</b>		
Operating income	\$ 40,756	\$ 45,388
Noncash items included in operating income:		
Depreciation	17,485	16,939
Amortization of nuclear fuel and accretion of asset retirement obligations	17,375	18,321
(Gain) Loss on market valuation of inventory	(13,724)	2,679
Changes in assets and liabilities:		
(Increase) decrease in:		
Accounts receivable	(1,230)	(6,910)
Unbilled revenues	1,517	890
Inventories	5,198	10,076
Prepaid expenses	(394)	218
Derivative financial instruments	5,907	(6,010)
Net pension asset	1,595	2,206
Other deferred charges	1,494	3,950
Increase (decrease) in:		
Accounts payable	863	(3,614)
Member and participant advances	2,492	(8,940)
Accrued expenses	(3,815)	(2,272)
Long term member and participant advances	15,007	17,500
Pension regulatory liability	(1,348)	(1,623)
Amounts payable under terms of the power sales agreements	-	1,730
Changes in deferred outflows of resources	(1,051)	(1,706)
Changes in deferred inflows of resources	(3,132)	3,181
Net cash provided by operating activities	<u>\$ 84,995</u>	<u>\$ 92,003</u>
<b>Reconciliation of cash and cash equivalents to the statement of net position:</b>		
Cash and temporary investments	\$ 3,665	\$ 6,501
Total restricted and designated funds and decommissioning trust	251,121	334,367
Total cash and investments	254,786	340,868
Less - investments included in restricted and designated funds and decommissioning trust	<u>(202,110)</u>	<u>(277,213)</u>
Total cash and cash equivalents	<u>\$ 52,676</u>	<u>\$ 63,655</u>
<b>Supplemental disclosures of cash flow information:</b>		
Noncash investing, capital and financing transactions:		
Amortization of debt premiums	<u>\$ 1,167</u>	<u>\$ 2,926</u>
Amortization of gain on extinguishment of debt	<u>\$ 369</u>	<u>\$ 479</u>

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

# Massachusetts Municipal Wholesale Electric Company

Fiduciary Financial Statements

December 31, 2016 and 2015

(In Thousands)

## STATEMENTS OF FIDUCIARY NET POSITION

	2016	2015
<b>ASSETS</b>		
Investments at fair value:		
Mutual funds	\$ 22,551	\$ 23,527
Guaranteed income funds	4,709	5,126
Total investments	<u>27,260</u>	<u>28,653</u>
Net position available for pension benefits	<u>\$ 27,260</u>	<u>\$ 28,653</u>

## STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

	2016	2015
<b>ADDITIONS</b>		
Employer contributions	\$ 231	\$ 598
Investment activity:		
Net appreciation in fair value of investments	1,334	227
Interest and dividends	162	192
Total investment activity	<u>1,496</u>	<u>419</u>
Total additions	<u>1,727</u>	<u>1,017</u>
<b>DEDUCTIONS</b>		
Benefits paid directly to participants	3,094	2,556
Administrative expenses	26	26
Total deductions	<u>3,120</u>	<u>2,582</u>
Net increase (decrease) in net position	(1,393)	(1,565)
Net position available for pension benefits, beginning of year	<u>28,653</u>	<u>30,218</u>
Net position available for pension benefits, end of year	<u>\$ 27,260</u>	<u>\$ 28,653</u>

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

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

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## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NATURE OF OPERATIONS

### Reporting Entity/Nature of Business

The Massachusetts Municipal Wholesale Electric Company (MMWEC) is a public corporation and a political subdivision of the Commonwealth of Massachusetts formed to be a joint action agency to develop a bulk power supply for its member Massachusetts cities and towns having municipal electric systems (Members) and other utilities, both public and private. Among other things, MMWEC is authorized to construct, own, or purchase ownership interests in energy facilities and to issue revenue bonds for such purposes. MMWEC's ownership interests in energy generation facilities are through various Projects (Note 13 – Project Joint Ownership Agreements). Pursuant to its General Bond Resolution (GBR), the bonds of any bond issue relating to a Project are secured solely by revenues derived from that Project. Project revenues are derived primarily from Power Sales Agreements (PSAs) with MMWEC's Members and other utilities who are Participants in a Project (Project Participants). MMWEC's bulk power supply program consists of power purchase arrangements, power brokering services, planning and financial services, and the Projects relating to generating facilities built and operated either by MMWEC or other entities.

A Massachusetts city or town having a municipal electric system, authorized by majority vote of the city or town, may become a Member of MMWEC by applying for admission and agreeing to comply with the terms and conditions of membership as MMWEC By-Laws may require. As of December 31, 2016 and 2015, twenty (20) Massachusetts cities and towns having municipal electric systems were Members.

MMWEC has determined it has a fiduciary responsibility over two defined benefit pension plans that are provided to its employees. The financial statement presentation includes business-type activities and the fiduciary fund financial statements for the defined benefit pension plans.

### Measurement Focus, Basis of Accounting and Financial Statement Presentation

The accounting records of MMWEC are maintained using the Governmental Accounting Standards Board (GASB), the Uniform System of Accounts of the Federal Energy Regulatory Commission (FERC) and the Generally Accepted Accounting Principles of the United States of America (GAAP) using the economic resources measurement focus and the accrual basis of accounting. Application of the accounting methods for regulatory operations is also included in these financial statements. This accounting guidance relates to the deferral of revenues and expenses to future periods in which the revenues are earned or the expenses are recovered through the rate-making process, which is governed by the Board of Directors.

### Assets, Deferred Outflows of Resources, Liabilities and Deferred Inflows of Resources

#### Cash and Investments

For purposes of the Statements of Cash Flows, cash equivalents are cash and investments having an original maturity of three months or less from the date of acquisition. Unrestricted cash and cash equivalents are presented within cash and temporary investments in the accompanying Statements of Net Position. Restricted cash and cash equivalents are presented within the current or long-term portion of restricted special funds in the accompanying Statements of Net Position.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

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## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NATURE OF OPERATIONS...continued

### Assets, Deferred Outflows of Resources, Liabilities and Deferred Inflows of Resources ...continued

#### Cash and Investments...continued

MMWEC has adopted an investment policy, which is approved annually by MMWEC's Board of Directors as required by MMWEC's GBR. Although certain cash and temporary investment amounts used for power purchases and working capital requirements of MMWEC are not subject to the provisions of the GBR, they are subject to the provisions of the investment policy.

Investments are stated at fair value, as defined under fair value measurements above. No investments are reported at amortized cost. Adjustments necessary to record investments at fair value are recorded in the Statements of Revenues, Expenses and Changes in Net Position as increases or decreases in investment income.

Through its investment policy, MMWEC is restricted to investing in certain types of securities and investments, which are:

- a. Direct obligations of the United States of America
- b. Bonds, debentures, notes or other indebtedness issued by various federal agencies
- c. New housing authority bonds issued by public agencies or municipalities
- d. Bonds or notes issued by states and municipalities that are rated in one of the two highest rated categories by rating agencies
- e. Bank time deposits
- f. Repurchase agreements
- g. Federal funds or bankers acceptances
- h. Investment agreements

#### Accounts Receivable

Accounts receivable are stated at the amount management expects to collect from outstanding balances. Based on the validity of contracts and collection history, an allowance for doubtful accounts is not considered necessary. Should these circumstances change, an allowance for doubtful accounts would be provided for those accounts receivable considered to be uncollectible at the end of the year, and the bad debts would be written off against the allowance when identified.

#### Unbilled Revenue

Unbilled revenues are revenues that are not yet billed under the MMWEC Member and Participant agreements and other power arrangements and represent a portion of December services rendered that are collectible in January of the subsequent year.

#### Prepaid Expenses

Prepaid expenses represent insurance premiums, property taxes, payment in lieu of taxes and other similar contracts and arrangements paid in the current fiscal year benefiting future periods.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

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## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NATURE OF OPERATIONS...continued

### Assets, Deferred Outflows of Resources, Liabilities and Deferred Inflows of Resources ...continued

#### Inventories

Fuel oil and spare parts inventories are valued at the lower of cost or market and recorded and accounted for by the average cost method. At December 31, 2016 and 2015, total fuel oil inventory was at \$18.3 million and \$10.7 million, respectively, and spare parts inventory amounted to \$15.1 million and \$14.1 million, respectively.

Adjustments resulting from valuation of inventory are operating costs charged to inventory market adjustment on the accompanying Statements of Revenues, Expenses and Changes in Net Position. Such adjustments resulted in a gain of \$7.2 million and a loss of \$2.7 million for the years ended December 31, 2016 and 2015, respectively.

#### Restricted Funds

MMWEC's practice is to use restricted funds on hand before using unrestricted funds when an expense is incurred for purposes for which both restricted and unrestricted funds are available.

#### Nuclear Decommissioning Trust

As required by the Nuclear Regulatory Commission (NRC) and respective state statutes and/or regulations, as well as MMWEC's own determinations, MMWEC has funded trust funds maintained by external trustees to provide for the estimated future decommissioning activities of Millstone Unit 3 and Seabrook Station. The balances at December 31, 2016 and 2015 for Millstone Unit 3 were \$42.5 million and \$39.2 million, respectively, and for Seabrook Station were of \$64.7 million and \$60.3 million, respectively, and are stated at fair value and are included in noncurrent charges and amounts recoverable (payable) under terms of the PSAs on the Statements of Net Position. Decommissioning balances for the Seabrook Station include funds in the New Hampshire Nuclear Decommissioning Trust and in an escrow account into which payments are made by MMWEC as a funding assurance mechanism. Depending on future circumstances, the funds held in the escrow account will be placed either in the Decommissioning Trust Fund for Seabrook Station, or will be returned to MMWEC, per order of the Nuclear Decommissioning Financing Committee of the State of New Hampshire.

#### Net Pension Asset

The Massachusetts Municipal Wholesale Electric Company Pension Plans (Plans) are two single-employer, defined benefit pension plans administered by MMWEC. One plan covers union employees (Union Plan) and the other plan covers non-union employees (Administration Plan). All full-time active administration employees hired before December 1, 2006, and all full-time active union employees hired before January 1, 2008 are covered by their respective plans. At December 31, 2016 and 2015, the net pension asset was \$2.2 million and \$3.7 million, respectively. The calculation and related assumptions of the net pension asset and terms of the Plans are discussed in Note 12 – Benefit Plans.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

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## 1. **SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NATURE OF OPERATIONS**...continued

### Assets, Deferred Outflows of Resources, Liabilities and Deferred Inflows of Resources ...continued

#### Designated Funds

Designated funds are held by MMWEC for a specific internal use.

#### Derivative Financial Instruments

MMWEC enters into contracts to hedge its exposure to fluctuating fuel oil prices for its ownership interest in Stony Brook Intermediate. MMWEC applies hedge accounting for derivatives that are deemed effective hedges. During 2016, as a result of changes to MMWEC's fuel oil burn projections, it was determined that the existing fuel oil put options contracts were no longer effective, resulting in a total gain of \$3.2 million, which was recognized in investment income. MMWEC's outstanding derivative instruments at December 31, 2016 and 2015 meet the effectiveness tests.

#### Other Noncurrent Charges

MMWEC advances both Millstone Unit 3 and Seabrook Station operating and capital expenditures based on budgeted levels. These advances are reduced when actual expenditures are incurred. At December 31 2016 and 2015, these advances totaled \$9.5 million and \$10.8 million, respectively and are included in other noncurrent charges on the Statements of Net Position.

#### Capital Assets – In Service

Capital assets – in service are generally defined by MMWEC as assets with an initial, individual cost of more than \$1,000 and an estimated useful life in excess of one year. Capital assets of MMWEC are recorded at cost at the date of acquisition. MMWEC capitalizes interest as an element of the cost of electric plant and nuclear fuel in process. The amount of interest capitalized is based on the cost of debt, including amortization of premiums, related to each Project, net of investment gains and losses, and interest income derived from unexpended restricted special funds. MMWEC capitalized interest costs of \$8,000 and \$14,000 for the years ended December 31, 2016 and 2015, respectively.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NATURE OF OPERATIONS...continued

### Assets, Deferred Outflows of Resources, Liabilities and Deferred Inflows of Resources ...continued

#### Capital Assets – In Service...continued

Provisions for depreciation are computed using the straight-line method based on estimated useful lives for the underlying assets at Stony Brook and the administrative and general office on MMWEC's site (Service). Seabrook Station, Millstone and Wyman are depreciated based on the group life basis. The lives are as follows:

#### Stony Brook

Building	25 years
Building improvements	20 years
Equipment	20-30 years
Computer equipment and vehicles	3-4 years

#### Service

Office equipment and software	3-8 years
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#### Other Generation Facilities

Seabrook Station	60 years
Millstone Unit 3	60 years
W.F. Wyman No. 4	51 years

NextEra Energy Seabrook, LLC, the lead owner of Seabrook Station, has filed for approval from the Nuclear Regulatory Commission to extend Seabrook Station's operating license for an additional 20 years to 2050. The estimated useful life of 60 years for Seabrook Station incorporates the assumption that the license extension will be granted.

#### Construction Work in Progress

Construction work in progress is stated at cost. Any internal costs that are capitalized are limited to those costs that can be directly identified with the design, engineering or construction of a specific Project and do not include any costs related to production, general corporate overhead or similar activities. Depreciation of these costs will commence once placed in service.

#### Nuclear Fuel

Nuclear fuel, net of amortization, includes MMWEC's ownership interest in spent nuclear fuel, fuel in reactor, in stock and in process for both Millstone Unit 3 and Seabrook Station. The cost of nuclear fuel is amortized to fuel used in electric generation for each nuclear unit based on the relationship of energy produced in the current period to total expected energy production for fuel in the reactor.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

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## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NATURE OF OPERATIONS...continued

### Assets, Deferred Outflows of Resources, Liabilities and Deferred Inflows of Resources ...continued

#### Nuclear Fuel...continued

Fuel used in electric generation includes the annual assessment, under the Energy Policy Act of 1992, for the cost of decontamination and decommissioning of uranium enrichment plants operated by the U.S. Department of Energy (DOE). This assessment was discontinued as of May 15, 2014. In addition, a provision for fuel disposal costs is included in fuel used in electric generation based upon disposal contracts with the DOE. MMWEC, along with all of the other joint owners of both Millstone Unit 3 and Seabrook Station, has filed claims against the DOE in the United States Court of Claims for partial breach of the disposal contracts with the DOE.

With respect to Seabrook Station, in 2009, MMWEC and the other Seabrook Station joint owners settled their claims against the DOE, with the U.S. Department of Justice (DOJ), who represented the DOE. As the DOE has agreed in principle to settlements in regard to ongoing costs incurred related to the disposal contracts, accounts receivable related to these ongoing cost settlements have been recorded at December 31, 2016 and 2015 in the amount of \$943,000 and \$753,000, respectively. During 2016 and 2015, \$752,000 and \$359,000, respectively, in cost settlements were received by MMWEC. All of the amounts received in 2016 and 2015, were disbursed to Seabrook Station and Millstone Unit 3 Project Participants as a credit on billings.

#### Deferred Outflows of Resources

Deferred outflows of resources are comprised of pension-related amounts and changes in fair value of cash flow hedges.

#### Accounts Payable and Accrued Expenses

At December 31, 2016, accounts payable and accrued liabilities total \$27.9 million which include \$7.7 million related to standard operating supplier and vendor accounts payable; \$15.7 million for power purchase accruals; \$1.0 million for accrued interest on long term debt; and \$3.5 million for other miscellaneous accounts payable and accrued liabilities.

At December 31, 2015, accounts payable and accrued liabilities total \$31.9 million which include \$6.9 million related to standard operating supplier and vendor accounts payable; \$19.5 million for power purchase accruals; \$2.0 million for accrued interest on long term debt; and \$3.5 million for other miscellaneous accounts payable and accrued liabilities.

#### Member and Participant Advances and Reserves

MMWEC maintains numerous operating reserves and advances from its Members and Project Participants in accordance with the PSAs, Power Purchase Agreements (PPAs) and other contractual arrangements. Member and Participant advances that are considered current liabilities were \$109.5 million and \$105.7 million for the years ended December 31, 2016 and 2015, respectively.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NATURE OF OPERATIONS...continued

### Assets, Deferred Outflows of Resources, Liabilities and Deferred Inflows of Resources ...continued

#### Member and Participant Advances and Reserves...continued

Other Member and Participant reserves for 2016 and 2015, which are considered long-term, were \$92.4 million and \$78.6 million, respectively. A reconciliation of the beginning and ending aggregate carrying amount of long-term Member and Participant Advances for the years ended December 31, 2016 and 2015 is as follows:

	2016	2015
	(In Thousands)	
Long-term member and participant advances, beginning of year	\$ 78,586	\$ 62,348
Additions	15,006	17,698
Deletions	(1,350)	(1,460)
Long-term member and participant advances, end of year	<u>\$ 92,242</u>	<u>\$ 78,586</u>

#### Asset Retirement Obligations

MMWEC has identified certain asset retirement obligations (AROs), which are primarily associated with the decommissioning of MMWEC's ownership interest in Millstone Unit 3 and Seabrook Station and Wyman. There were no additional liabilities incurred or revisions to the estimated cash flows during 2016. During 2015, MMWEC revised its estimate of the decommissioning costs required for Seabrook Station, resulting in an increase in the recorded obligation. There were no additional liabilities incurred or revisions to the estimated cash flows during 2015 for Millstone Unit 3 and Wyman. A reconciliation of the beginning and ending aggregate carrying amount of AROs for the years ended December 31, 2016 and 2015 is as follows:

	2016	2015
	(In Thousands)	
Asset retirement obligations, beginning of year	\$ 146,850	\$ 137,850
Revisions in estimated cash flows	-	1,797
Accretion expense	7,313	7,203
Asset retirement obligations, end of year	<u>\$ 154,163</u>	<u>\$ 146,850</u>

Accretion expense is included in other operating expenses in the Statements of Revenues, Expenses and Changes in Net Position. MMWEC's AROs, other than those associated with these assets, are not significant.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

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## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NATURE OF OPERATIONS...continued

### Assets, Deferred Outflows of Resources, Liabilities and Deferred Inflows of Resources ...continued

#### Asset Retirement Obligations...continued

AROs are recorded at the present value of amounts expected to be paid and capitalized as part of the cost of the related tangible long-lived assets. In the absence of quoted market prices, MMWEC estimated the present value of AROs using techniques involving discounted cash flow analysis.

Using such measurement techniques is dependent upon many subjective factors, including the selection of discount and cost escalation rates, identification of planned retirement activities and related cost estimates, and assertions of probability regarding the timing, nature and costs of such activities. Inputs and assumptions are based on the best information available at the time the estimates are made. However, estimates of future cash flows are highly uncertain by nature and may vary significantly from actual results.

#### Long-term Obligations

Long-term debt and other obligations are reported as noncurrent liabilities. Bond premiums are amortized over the life of the bonds using the effective interest method. The balance at year end for premiums is shown as an increase to long-term debt in the liability section of the accompanying Statements of Net Position.

#### Deferred Inflows of Resources

Deferred inflows of resources are comprised of pension-related amounts, changes in fair value of cash flow hedges and deferred gain on extinguishment of debt. Gains on prior refundings are amortized over the remaining life of the old debt or the life of the new debt, whichever is shorter.

#### Amounts Payable Under Terms of the Power Sales Agreements

Billings to Project Participants are structured to recover costs in accordance with the PSAs, which generally provide for billing debt service, operating expenses and reserve requirements. Expenses are reflected in the Statements of Revenues, Expenses and Changes in Net Position in accordance with GAAP. The timing difference between amounts billed and expensed is charged, or credited, to amounts recoverable (payable) under terms of the PSAs.

The principal differences include depreciation, fuel amortization, costs associated with canceled Projects (or assets abandoned within a Project), asset retirement obligations, cost of refinancing, billing for certain interest, reserves, net unrealized gains or losses on investments and other costs. Individual Projects have cumulative billings in excess of costs, which total \$584.6 million and \$534.9 million at December 31, 2016 and 2015, respectively. In accordance with the PSAs, these amounts have been offset in amounts payable under terms of the PSAs on the Statements of Net Position.

The December 31, 2016 and 2015 amounts payable balances of \$584.6 million and \$534.9 million, respectively, reflect the Statements of Revenues, Expenses and Changes in Net Position net increase of \$49.7 million and \$44.7 million for the years then ended.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NATURE OF OPERATIONS...continued

### Revenues and Expenses

#### Revenues

Operating revenues include electric sales for resale provided through MMWEC's bulk power supply program. Revenues consist, in significant part, of billings under the PSAs, PPAs, and other power arrangements. MMWEC also records service revenues by providing its Members with power supply planning and related services, which are billed pursuant to the MMWEC Service Agreement or the All-Requirements Bulk Power Sales Agreement. Revenues related to financing and other activities are reflected as non-operating.

Revenues are comprised of the following:

	2016	2015
	(In Thousands)	
Electric sales for resale	\$ 260,642	\$ 307,204
Service and other	4,710	4,570
	<u>\$ 265,352</u>	<u>\$ 311,774</u>

#### Taxes

Chapter 775 of the Massachusetts Acts of 1975 (the Act) specifically exempts MMWEC from paying any taxes upon its income, existence or franchise, and any revenues from the transfer or sale of bonds issued by MMWEC. Chapter 775 exempts real and personal property situated within the Commonwealth from property taxation. However, the Act requires MMWEC to pay an amount in lieu of property taxes with respect to MMWEC assets in Massachusetts to any governmental body authorized to levy local taxes in Massachusetts. MMWEC pays an amount in lieu of property taxes for its interest in the Stony Brook Peaking and Intermediate fossil-fuel burning plants located in Ludlow, Massachusetts.

MMWEC pays property taxes for its ownership interest in Millstone Unit 3 located in Waterford, Connecticut, Seabrook Station, which is mostly located in Seabrook, New Hampshire and Wyman Unit 4 fossil-fuel burning plant, which is located in Yarmouth, Maine. In addition, MMWEC pays taxes for electric generation related to Millstone Unit 3.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

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## 1. **SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NATURE OF OPERATIONS**...continued

### Net Position Classification

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

Net investment in capital assets - consists of capital assets, net of accumulated depreciation and costs recoverable from future billings, reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt also should be included in this component of net position. If there are significant unspent related debt proceeds at year-end, the portion of the debt attributable to the unspent proceeds is not included in the calculation of net investment in capital assets.

Restricted - consists of restricted assets, reduced by liabilities related to those assets, with constraints placed on their use either by a) external groups such as creditors (such as through debt covenants), contributors, or laws or regulations of other governments or b) law through constitutional provisions or enabling legislation.

Unrestricted - consists of the assets, deferred outflows of resources, liabilities and deferred inflows of resources that are not included in the net investment in capital assets or restricted component of net position.

### Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes, and disclosure of contingent liabilities at the date of the financial statements. Estimates are used for, but not limited to, the selection of the useful lives of capital assets, provision necessary for contingent liabilities, accrued expenses, asset retirement obligations and other similar charges. Management believes that the estimates utilized in preparing its financial statements are reasonable and prudent. Actual results could differ from these estimates.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NATURE OF OPERATIONS...continued

### Comparative Data

Certain prior year amounts have been reclassified in the calculation of the pension regulatory liability and deferred gain and loss on pension asset with no impact on net position. The following table shows the impacts to the Statements of Net Position. The reclassification had no effect on the Statements of Revenues, Expenses, and Changes in Net Position.

	As Previously Reported 2015	Reclassification of Deferred Outflows (Inflows)	As Adjusted 2015
	In Thousands		
<b>Statement of Net Position Items Affected</b>			
Deferred loss on pension asset	\$ 2,062	\$ 1,346	\$ 3,408
Pension regulatory liability	(5,254)	(987)	(6,241)
Amounts payable under terms of the power sales agreement	(533,159)	(1,729)	(534,888)

### Implementations of New Accounting Principles

In 2016, MMWEC implemented the provisions of GASB Statement No. 72, *Fair Value Measurement and Application*; defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at a measurement date. Statement No. 72 requires that investments should generally be measured at fair value, with certain investments, such as short-term money market instruments, being specifically excluded from the requirement. Disclosures required by the standard include a description of the inputs and methods used to measure fair value. The adoption of Statement No. 72 resulted in the addition of new disclosures to MMWEC's financial statement footnotes, describing assets and liabilities reported at fair value and the valuation techniques used to determine fair value.

### Effect of Future Accounting Standards on Current Period Financial Statements

GASB has approved GASB Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*, Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, Statement No. 80, *Blending Requirements for Certain Component Units, an amendment of GASB Statement No. 14*, Statement No. 81, *Irrevocable Split-Interest Agreements*, Statement No. 82, *Pension Issues, an amendment of GASB Statements No. 67, No. 68, and No. 73* Statement No. 83, *Certain Asset Retirement Obligations* and Statement No. 84, *Fiduciary Activities*. When they become effective, application of these standards may restate portions of these financial statements.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 2. CASH AND INVESTMENTS

MMWEC'S cash and investments (exclusive of the fiduciary funds and decommissioning trust) at December 31, 2016 and 2015 were comprised of the following:

Type of Investment or Cash Equivalent	2016		2015		Associated Risks
	Carrying Value	Bank & Investment Value	Carrying Value	Bank & Investment Value	
	(In Thousands)				
Cash and Cash Equivalents:					
Government Money Market Funds	\$ 538	\$ 538	\$ 957	\$ 957	Custodial Credit Risk
U.S. Treasury Bills	38,841	38,841	48,249	48,249	Credit Risk, Interest Rate Risk
U.S. Agency Discount Notes	155	155	1,149	1,149	Credit Risk, Concentration of Credit Risk, Interest Rate Risk
Deposits	13,143	13,719	13,300	14,202	Custodial Credit Risk
<b>Total Cash and Cash Equivalents</b>	<b>52,677</b>	<b>53,253</b>	<b>63,655</b>	<b>64,557</b>	
Other Investments:					
U.S. Treasury Bills	2,749	2,749	15,625	15,625	Credit Risk, Interest Rate Risk
U.S. Treasury Notes	34,898	34,898	32,865	32,865	Credit Risk, Interest Rate Risk
U.S. Agency Bonds	109,621	109,621	76,312	76,312	Credit Risk, Concentration of Credit Risk, Interest Rate Risk
U.S. Agency Discount Notes	29,113	29,113	29,051	29,051	Credit Risk, Concentration of Credit Risk, Interest Rate Risk
Municipal Bonds	25,728	25,728	23,849	23,849	Credit Risk, Concentration of Credit Risk, Interest Rate Risk
<b>Total Other Investments</b>	<b>202,109</b>	<b>202,109</b>	<b>177,702</b>	<b>177,702</b>	
<b>Totals</b>	<b>\$ 254,786</b>	<b>\$ 255,362</b>	<b>\$ 241,357</b>	<b>\$ 242,259</b>	

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 2. CASH AND INVESTMENTS...continued

MMWEC's investments in the Decommissioning Trust are held by independent trustees. Investments are limited to those defined by the investment policy, and are comprised of the following at December 31:

Type of Investment or Cash Equivalent	2016		2015		Associated Risks
	Carrying Value	Bank & Investment Value	Carrying Value	Bank & Investment Value	
	(In Thousands)				
Cash and Cash Equivalents:					
Money Market Fund	\$ 9,319	\$ 9,319	\$ 10,416	\$ 10,416	Custodial Credit Risk
Total Cash and Cash Equivalents	9,319	9,319	10,416	10,416	
Other Investments:					
Mutual Funds - equity	44,559	44,559	40,767	40,767	Credit Risk, Concentration of Credit Risk
FPL Minority Owner Trust	22,685	22,685	21,219	21,219	Credit Risk, Interest Rate Risk, Concentration of Credit Risk,
Common stock - equities	9,304	9,304	8,291	8,291	Credit Risk, Concentration of Credit Risk
US Treasury securities	9,059	9,059	7,745	7,745	Credit Risk, Interest Rate Risk, Concentration of Credit Risk
Corporate Bonds	7,784	7,784	5,510	5,510	Credit Risk, Interest Rate Risk, Concentration of Credit Risk
US Agency Securities	3,545	3,545	4,013	4,013	Credit Risk, Interest Rate Risk, Concentration of Credit Risk
Municipal Bonds	699	699	1,344	1,344	Credit Risk, Interest Rate Risk, Concentration of Credit Risk
Mutual Funds - fixed	283	283	136	136	Credit Risk, Concentration of Credit Risk
Commercial Mortgage Securities	9	9	70	70	Credit Risk, Interest Rate Risk, Concentration of Credit Risk
Total Other Investments	97,927	97,927	89,095	89,095	
Totals	\$ 107,246	\$ 107,246	\$ 99,511	\$ 99,511	

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 2. CASH AND INVESTMENTS...continued

MMWEC's investments in the defined benefit pension plans fiduciary funds are held by an independent trustee. Investments are limited to those defined by the investment policy, and are comprised of the following at December 31:

Type of Investment or Cash Equivalent	2016		2015		Associated Risks
	Carrying Value	Bank & Investment Value	Carrying Value	Bank & Investment Value	
(In Thousands)					
Other Investments:					
Mutual Funds - equity	\$ 17,451	\$ 17,451	\$ 18,394	\$ 18,394	Credit Risk, Concentration of Credit Risk
Mutual Funds - bonds	5,101	5,101	5,132	5,132	Credit Risk, Interest Rate Risk, Concentration of Credit Risk
Guaranteed Income Account	4,709	4,709	5,126	5,126	Credit Risk, Concentration of Credit Risk
Total Other Investments	<u>\$ 27,261</u>	<u>\$ 27,261</u>	<u>\$ 28,652</u>	<u>\$ 28,652</u>	

Investments are stated at fair value, which is the amount at which an investment could be exchanged in a current transaction between willing parties. Fair values are based on methods and inputs as outlined below. No investments are reported at amortized cost. The difference between the bank and investment value and carrying value is due to outstanding checks and/or deposits in transit.

### Custodial Credit Risk

#### Deposits and Money Market Funds

Custodial credit risk is the risk that, in the event of a financial institution failure, MMWEC's deposits may not be returned to MMWEC. The aggregate amount of noninterest bearing and interest bearing accounts are insured by the FDIC up to at least \$250,000. There was \$14.0 million and \$14.9 million uninsured and uncollateralized bank balances subject to custodial credit risk at December 31, 2016 and 2015, respectively. There was \$8.6 million and \$9.7 million uninsured and uncollateralized decommissioning trust balances subject to custodial credit risk at December 31, 2016 and 2015, respectively.

MMWEC's investment policy and decommissioning trust investment policy do not address custodial credit risk.

#### Investments

For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, MMWEC will not be able to recover the value of its investment or collateral securities that are in the possession of the custodians.

At December 31, 2016 and 2015, all investments were held in MMWEC's name by custodians consisting of the Bond Fund Trustee (as defined in the GBR), or MMWEC's depository bank.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 2. CASH AND INVESTMENTS...continued

### Custodial Credit Risk...continued

#### Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations.

As of December 31, MMWEC's investments were rated as follows:

Investments Type	Fair Value		Credit Rating
	2016	2015	
U.S. Agency	\$ 138,889	\$ 106,512	AA+
Municipal Bonds	25,728	23,849	AAA - AA-
U.S. Treasuries	76,488	96,739	AA+
Totals	\$ 241,105	\$ 227,100	

MMWEC's investment policy addresses credit risk by defining allowable investments and a maximum allocation to each asset class.

#### Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of MMWEC's investment in a single issuer.

At December 31, 2016 and 2015, MMWEC's investment portfolio was concentrated as follows:

Issuer	Investment Type	Percentage of Portfolio	
		2016	2015
Federal National Mortgage Assn.	U.S. Agency Securities	13.04%	23.41%
Federal Farm Credit Bank	U.S. Agency Securities	7.57%	7.95%
Federal Home Loan Bank	U.S. Agency Securities	25.50%	2.29%
Federal Home Loan Mortgage	U.S. Agency Securities	8.14%	10.53%
Municipal Bond Anticipation Notes	Municipal Bonds	10.08%	9.93%

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 2. CASH AND INVESTMENTS...continued

### Concentration of Credit Risk...continued

MMWEC's investment policy minimizes concentration of credit risk in a single issuer by diversification of investment types using the following maximum limits, which are established for MMWEC's total portfolio at December 31, 2016 and 2015, as follows:

Repurchase Agreements	10%
Certificates of Deposits	10%
U.S. Treasury Securities	100%
U.S. Agencies	65%
Municipal Securities	20%

Deviation from the approved portfolio limits requires written authorization and approval from the MMWEC Board of Directors.

In accordance with the investment policy for the decommissioning trust, exposure to concentration of credit risk is managed through diversification by limiting investments to no more than 5% of the total portfolio's value in one single issuer, with the exception of fixed income permissible direct investments listed below:

Foreign Securities	10%
Mortgage-backed Securities	25%
Individual Corporate Sector	20%

In accordance with the investment guidelines for the defined benefit pension fiduciary funds, assets should be invested to provide a rate of return sufficient to meet the investment assumptions inherent in the actuarial projection for the plans.

### Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment.

At December 31, 2016, the maturities of MMWEC's investments were as follows:

Investment Type	Fair Value	Maturity In Years		
		Less than 1	1 – 5	Over 5
		(In Thousands)		
U.S. Treasury Securities	\$ 76,488	\$ 61,826	\$ 12,591	\$ 2,071
U.S. Agency Securities	138,889	51,055	87,834	-
Municipal Bonds	25,728	4,387	21,341	-
Totals	<u>\$ 241,105</u>	<u>\$ 117,268</u>	<u>\$ 121,766</u>	<u>\$ 2,071</u>

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements  
Years Ended December 31, 2016 and 2015

## 2. CASH AND INVESTMENTS...continued

At December 31, 2015, the maturities of MMWEC's investments were as follows:

Investment Type	Fair Value	Maturity In Years		
		Less than 1	1 – 5	Over 5
(In Thousands)				
U.S. Treasury Securities	\$ 96,739	\$ 71,625	\$ 23,039	\$ 2,075
U.S. Agency Securities	106,512	34,005	71,281	1,226
Municipal Bonds	23,849	6,220	17,629	-
<b>Totals</b>	<b>\$ 227,100</b>	<b>\$ 111,850</b>	<b>\$ 111,949</b>	<b>\$ 3,301</b>

MMWEC's investment policy specifies that MMWEC shall seek to maximize the return on investments consistent with requirements for safety, minimization of risk and liquidity. Monies will not be invested for terms in excess of the projected use of funds nor exceed an average life of ten years.

### Decommissioning Trust - Credit Risk and Interest Rate Risk

As of December 31, 2016, MMWEC's decommissioning trust investments were rated as follows:

Investment Type	Credit Rating	Fair Value	Maturity In Years		
			Less than 1	1 – 5	Over 5
(In Thousands)					
U.S. Treasuries	n/a	\$ 9,059	\$ 2,248	\$ 3,329	\$ 3,482
Corporate Bonds	AAA - BBB+, n/a	7,784	281	2,681	4,822
U.S. Agency Securities	AAA, n/a	3,545	54	2,277	1,214
Municipal Bonds	AAA - AA-, n/a	699	200	311	188
FPL Minority Investment Trust	n/a	22,685	22,685	-	-
Commercial Mortgage Securities	AA+	9	9	-	-
<b>Totals</b>		<b>\$ 43,781</b>	<b>\$ 25,477</b>	<b>\$ 8,598</b>	<b>\$ 9,706</b>

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 2. CASH AND INVESTMENTS...continued

### Decommissioning Trust - Credit Risk and Interest Rate Risk...continued

As of December 31, 2015, MMWEC's decommissioning trust investments were rated as follows:

Investment Type	Credit Rating	Fair Value	Maturity In Years		
			Less than 1	1 – 5	Over 5
(In Thousands)					
U.S. Treasuries	n/a	\$ 7,746	\$ -	\$ 4,565	\$ 3,181
Corporate Bonds	AA+ - BBB-, n/a	5,510	363	2,442	2,705
U.S. Agency Securities	AAA, n/a	4,013	72	3,173	768
Municipal Bonds	AAA - A-, n/a	1,344	183	327	834
FPL Minority Investment Trust	n/a	21,219	21,219	-	-
Commercial Mortgage Securities	AA	70	70	-	-
Totals		<u>\$ 39,902</u>	<u>\$ 21,907</u>	<u>\$ 10,507</u>	<u>\$ 7,488</u>

Investments held in mutual funds and common stock are not rated and do not have a specified maturity date. MMWEC's decommissioning trust investment policy does not address credit risk or interest rate risk.

### Fiduciary Funds - Credit Risk and Interest Rate Risk

MMWEC's investments in the defined benefit pension fiduciary funds were rated as follows at December 31:

Investment Type	Fair Value		Credit Rating	Maturity Date
	2016	2015		
(In Thousands)				
Mutual Funds - bonds	\$ 5,101	\$ 5,132	BBB+	Less than 1 year

Investments held in equity mutual funds and guaranteed income account are not rated and do not have a specified maturity date. MMWEC's fiduciary fund investment policy does not address credit risk or interest rate risk.

### Investment Income

For the year ended December 31, 2016, net unrealized gains on investments totaled \$4.0 million. For the year ended December 31, 2015, net unrealized losses on investments totaled \$3.1 million. The net unrealized losses and gains are excluded from operating revenue and are reported within investment income on the Statements of Revenues, Expenses and Changes in Net Position.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 2. CASH AND INVESTMENTS...continued

### Investment Income...continued

During the years ended December 31, 2016 and 2015, investment income consisted of interest income, realized gains/(losses) and unrealized gains/(losses) as follows:

	2016	2015
	(In Thousands)	
Interest income:		
Restricted funds	\$ 1,735	\$ 1,523
Designated funds	95	470
Decommissioning funds	2,725	2,949
Total interest income	<u>4,555</u>	<u>4,942</u>
Realized gains (losses):		
Restricted funds	18	11
Designated funds	3,201	60
Decommissioning funds	-	-
Net realized gains	<u>3,219</u>	<u>71</u>
Unrealized gains (losses):		
Restricted funds	(293)	(707)
Designated funds	(366)	172
Decommissioning funds	3,948	(2,588)
Net unrealized gains (losses)	<u>3,289</u>	<u>(3,123)</u>
Total investment income	<u>\$ 11,063</u>	<u>\$ 1,890</u>

## 3. RESTRICTED AND DESIGNATED ASSETS

Mandatory segregations of assets are presented as restricted funds. Such segregations are required by bond agreements and other external parties.

Segregations of assets determined internally by MMWEC management are presented as designated funds.

Numerous restricted funds are required by the GBR pursuant to which MMWEC issued its long-term debt. The restricted funds are invested in accordance with the provisions of the GBR. Certain working capital and other funds are not mandated by the GBR and are classified as designated funds; however, they are invested in accordance with the provisions of the investment policy under the GBR. The restricted net position is less than the total restricted funds, as the advances collected from Project Participants are in excess of the related restricted funds.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

### 3. RESTRICTED AND DESIGNATED ASSETS...continued

The composition of restricted and designated fund is as follows for the year ended December 31:

	2016	2015
	(In Thousands)	
<u>Restricted Funds</u>		
Bond Fund Interest, Principal and Retirement Accounts to pay principal and interest on bonds	\$ 23,580	\$ 30,406
Bond Fund Reserve Account set at the maximum annual interest obligation to make up any deficiencies in the Bond Fund Interest, Principal and Retirement Account	37,457	37,696
Reserve and Contingency Fund to make up deficiencies in the Bond Funds and pay for repairs and extraordinary costs	19,579	20,358
Revenue Fund to receive revenues and disburse them to the Bond Funds and other funds	50,918	47,457
Funds obtained from terminated power purchase contract	7,953	9,253
Working Capital Funds to maintain funds to cover operating expenses	23,811	20,851
Pooled loan lines of credit	<u>2,926</u>	<u>3,199</u>
Total Restricted Funds and Interest Receivable	<u>166,224</u>	<u>169,220</u>
Less – current portion	(62,708)	(76,284)
Interest receivable	<u>(373)</u>	<u>(342)</u>
Total Restricted Funds, Long-term	<u>\$ 103,143</u>	<u>\$ 92,594</u>
<u>Nuclear Decommissioning Funds</u>		
Nuclear decommissioning funds	<u>\$ 107,246</u>	<u>\$ 99,511</u>
<u>Designated Funds</u>		
Capital Reserve Fund to pay Nuclear Capital Expenditures	\$ 5,712	\$ 4,191
Other Funds for indemnification or purchase of insurance, funds contributed for an agreement where MMWEC acts as agent and long-term investments for the Nuclear Mix No. 1, Intermediate, Peaking and Wyman Projects and fuel line of credit	<u>79,775</u>	<u>61,940</u>
Designated Funds and Interest Receivable	85,487	66,131
Less - current portion	(344)	(382)
Interest receivable	<u>(217)</u>	<u>(153)</u>
Total Designated Funds, Long-Term	<u>\$ 84,926</u>	<u>\$ 65,596</u>

For financial reporting purposes, interest receivable has been disclosed separately on the Statements of Net Position.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 4. CHANGES IN CAPITAL ASSETS

A summary of changes in capital assets for 2016 and 2015 is as follows:

	Balance	Additions/	Deletions/	Balance
	1/1/2016	Reclassifications	Reclassifications	12/31/2016
(In Thousands)				
Capital assets not being depreciated:				
Land	\$ 3,869	\$ -	\$ -	\$ 3,869
Capital assets being depreciated:				
Plant in service	1,409,042	5,388	(2,987)	1,411,443
Less - accumulated depreciation	<u>862,672</u>	<u>17,390</u>	<u>(2,808)</u>	<u>877,254</u>
Net plant	<u>\$ 550,239</u>	<u>\$ (12,002)</u>	<u>\$ (179)</u>	<u>\$ 538,058</u>

	Balance	Additions/	Deletions/	Balance
	1/1/2015	Reclassifications	Reclassifications	12/31/2015
(In Thousands)				
Capital assets not being depreciated:				
Land	\$ 3,649	\$ 220	\$ -	\$ 3,869
Capital assets being depreciated:				
Plant in service	1,392,680	17,562	(1,200)	1,409,042
Less - accumulated depreciation	<u>846,883</u>	<u>16,712</u>	<u>(923)</u>	<u>862,672</u>
Net plant	<u>\$ 549,446</u>	<u>\$ 1,070</u>	<u>\$ (277)</u>	<u>\$ 550,239</u>

A summary of changes in nuclear fuel for 2016 and 2015 is as follows:

Year	Balance at January 1,	Additions	Deletions	Amortization	Balance at December 31,
(In Thousands)					
2016	<u>\$ 25,296</u>	<u>\$ 10,069</u>	<u>\$ -</u>	<u>\$ (10,850)</u>	<u>\$ 24,515</u>
2015	<u>\$ 26,740</u>	<u>\$ 9,321</u>	<u>\$ -</u>	<u>\$ (10,765)</u>	<u>\$ 25,296</u>

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

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## 5. SHORT-TERM DEBT

MMWEC maintains a \$25.0 million loan facility which allows for borrowings by MMWEC to finance, temporarily, certain power purchases made by MMWEC for resale to the Members and other municipal systems under various power contracts between MMWEC and the municipal systems (Power Contracts). Borrowings attributable to a Power Contract under this loan facility are secured by the following: a lien on and/or security interest in all proceeds of any loans prior to disbursement by MMWEC, all amounts payable to MMWEC by the Power Contract Participants under the Power Contract, and earnings from MMWEC's temporary investments of such proceeds and amounts payable. The amount payable by a Power Contract Participant with respect to a Power Contract is limited to the amount allocated to that Participant.

There were no borrowings outstanding under the loan facility as of December 31, 2016 and 2015. During 2016 and 2015, the maximum outstanding balance under the line of credit was \$2.7 million and \$3.3 million, respectively. The interest rate for the borrowings under this line of credit after December 31, 2015 is at MMWEC's election prior to the last day of any interest period of either the LIBOR rate plus 1.50% per annum, or at a variable rate selected by MMWEC, which is either the prime rate or the BBA LIBOR Daily Floating Rate plus 1.50%. In addition, a commitment fee of .250% per annum is charged on the unused portion of the loan facility based on the average daily principal amount of the borrowing outstanding. This loan facility expires December 16, 2017. MMWEC has historically renewed this line of credit annually.

MMWEC also maintains a \$15.0 million revolving line of credit for the purpose of financing purchases of fuel oil and selling such fuel oil from the Stony Brook Fuel Oil Project to the Intermediate and Peaking Projects. In 2014, the revolving line of credit was amended to \$20.0 million, until June 30, 2015 at which point it reverted back to \$15.0 million. Borrowings under this line of credit are secured by the following: a lien on and/or security interest in all proceeds of any borrowings prior to disbursement by MMWEC, all amounts payable by the Intermediate and Peaking Projects to the Stony Brook Fuel Oil Project for fuel oil, and all earnings from MMWEC's investments of any such proceeds and amounts payable to the bank. There were no borrowings outstanding under the loan facility as of December 31, 2016 and 2015. During 2016 and 2015, the maximum outstanding balance under the line of credit was \$0 and \$15.0 million, respectively. The interest rate for the borrowings under this line of credit after December 31, 2016 is at MMWEC's election prior to the last day of any interest period of either the LIBOR rate plus 1.50% per annum, or at a variable rate selected by MMWEC, which is either the prime rate or the BBA LIBOR Daily Floating Rate plus 1.50%. If no such selection is made, the variable rate is in effect. In addition, a commitment fee of .250% per annum is charged on the unused portion of the loan facility based on the average daily principal amount of the borrowing outstanding. This line of credit expires December 16, 2017. MMWEC has historically renewed this line of credit annually.

In 2014, MMWEC established a \$50.0 million short term revolving facility for the purpose of borrowing funds to either make loans to Members to finance the acquisition of various utility assets, or to purchase various utility assets to be leased to Members. At December 31, 2016 and 2015, the outstanding balance under this line of credit was \$20.8 million and \$17.1 million, respectively. The maximum outstanding balance during 2016 and 2015 was \$21.2 million and \$17.2 million, respectively. Subject to certain tax and default events, the interest rate for the borrowings under the line of credit is set at a rate per annum equal to the sum of (i) 70% of the LIBOR daily floating rate plus (ii) 1.15%. At December 31, 2016, the outstanding borrowings are at 1.69%. In addition, a commitment fee of .250% per annum is charged on the unused portion of the revolving loan facility based on the average daily principal amount of the borrowing outstanding. On December 15, 2015, this loan facility was amended to \$34.2 million. This loan facility expires February 16, 2017.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 5. SHORT-TERM DEBT...continued

The following short-term debt activity occurred in 2016 and 2015:

Year	Balance at January 1,	Additions	Deletions	Balance at December 31,
	(In Thousands)			
2016	\$ 17,112	\$ 16,746	\$ (13,106)	\$ 20,752
2015	\$ 25,520	\$ 31,001	\$ (39,409)	\$ 17,112

## 6. LONG-TERM DEBT

### General Bond Resolution and Power Supply System Revenue Bonds

MMWEC issued separate issues of Bonds for each Project, which are payable solely from, and secured solely by, the revenues derived from the Project to which such issue relates, plus available funds pledged under the GBR for the Bonds of such issues. The revenues derived from each Project are used solely to provide for the payment of the Bonds of any Bond issue relating to such Project, and to pay MMWEC's cost of owning and operating such Project, and are not used to provide for the payment of the Bonds of any Bond issue relating to any other Project.

Pursuant to all of the Project PSAs, each Project Participant is obligated to pay its share of the actual costs relating to the Project's generating units, and its share of all principal, premium and interest associated with the Bonds for the Projects in which the Project Participant has a PSA, and for which the Project Participant is obligated to set rates at levels sufficient to pay such costs. These obligations are not contingent upon the operational status of the Project's units.

MMWEC's issuance of debt, other than obligations with a maturity of less than one year, requires authorization by the Massachusetts Department of Public Utilities.

#### Series 2012A Revenue Bonds

Interest on the Series 2012A is payable in semi-annual installments beginning July 1, 2012 and on January 1 and July 1 for each year thereafter. The Series 2012A Bonds bear interest at a fixed rate ranging from 4.0% to 5.0% for the various issues.

#### Series 2011 Revenue Bonds

Interest on the Series 2011 is payable in semi-annual installments on January 1 and July 1. The Series 2011 Bonds bear interest at a fixed rate ranging from 3.0% to 5.0% for the various issues.

#### Series One Revenue Bonds

The Series One Bonds of each issue are subject to redemption at the option of MMWEC, in whole or in part, at a redemption price of 100% of the principal amount.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 6. LONG-TERM DEBT...continued

### General Bond Resolution and Power Supply System Revenue Bonds...continued

#### Power Supply System Revenue Bonds

At December 31, 2016 and 2015, bonds payable on the accompanying Statement of Net Position consist of serial and variable-rate bonds dated November 2001, June 2011 and January 2012 and are comprised of the following issues:

Issue	Net Interest Cost	December 31,	
		2016	2015
		(In Thousands)	
Project No. 6, Series 2012A (Original Issue \$104,570)	1.20%	\$ -	\$ 17,185
Nuclear Project No. 3, Series 2011 (Original Issue \$31,895)	2.40%	3,115	11,385
Nuclear Project No. 4, Series 2011 (Original Issue \$22,065)	2.60%	6,780	17,000
Nuclear Project No. 5, Series 2011 (Original Issue \$2,580)	2.70%	1,020	2,485
Project No. 6, Series 2011 (Original Issue \$36,180)	3.10%	28,880	36,180
Nuclear Project No. 3, Series One (Original Issue \$62,975)	Variable	3,425	8,925
Nuclear Project No. 4, Series One (Original Issue \$35,325)	Variable	1,675	3,950
Nuclear Project No. 5, Series One (Original Issue \$9,025)	Variable	1,950	4,050
Project No. 6, Series One (Original Issue \$52,100)	Variable	8,950	11,350
Long-term debt		55,795	112,510
Unamortized premium		845	2,012
Less: Current maturities, including unamortized premiums		(45,451)	(57,122)
Total Long-Term Debt, net of premiums and current maturities		<u>\$ 11,189</u>	<u>\$ 57,400</u>

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 6. LONG-TERM DEBT...continued

### General Bond Resolution...continued

#### Power Supply System Revenue Bonds...continued

The following is a summary of total estimated debt service requirements for bonds outstanding at December 31, 2016:

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
		(In Thousands)	
2017	\$ 45,115	\$ 2,626	\$ 47,741
2018	3,570	514	4,084
2019	7,110	346	7,456
Totals	<u>\$ 55,795</u>	<u>\$ 3,486</u>	<u>\$ 59,281</u>

Future interest requirements on variable rate debt were calculated using 4.5% per annum.

The interest rates on the Series One variable rate Bonds may be converted, at the option of MMWEC, to a daily, weekly, flexible, term or fixed mode. The realized interest rate on the Series One variable rate Bonds during 2016 and 2015 was .17% and .16%, respectively.

Financial and credit market disruption in 2008 resulted in failed auctions for MMWEC Series One variable rate debt. MMWEC Series One variable rate bonds have subsequently priced at the Maximum Auction Rate. The Maximum Auction Rate means, as of any Auction Date, the product of the Index multiplied by the Auction Mode Multiple. The index on any Auction Date with respect to the Series One Bonds of a particular Issue in any Auction Period of 35 days or less will be the Seven-Day "AA" Composite Commercial Paper Rate on such date. The Auction Mode Multiple, means, as of any Auction Date and with respect to the Series One Bonds of a particular Issue, the Percentage of Index determined based on the prevailing Rating of the Series One Bonds.

At December 31, 2016, the following are the detail terms of all variable rate debt:

<u>Project</u>	<u>2016 Average Auction Rate</u>	<u>Auction Mode</u>
Nuclear Project No. 3, Series One	.62%	Weekly
Nuclear Project No. 4, Series One	.62%	Daily
Nuclear Project No. 5, Series One	.62%	Weekly
Project No. 6, Series One	.62%	Daily

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 6. LONG-TERM DEBT...continued

### General Bond Resolution...continued

#### Power Supply System Revenue Bonds...continued

The following summarizes changes in long-term debt, net of premiums, for 2016 and 2015:

Year	Balance at January 1,	Additions	Payments	Amortization of Premium	Balance at December 31,
(In Thousands)					
2016	\$ 114,522	\$ -	\$ (56,715)	\$ (1,167)	\$ 56,640
2015	\$ 172,048	\$ -	\$ (54,600)	\$ (2,926)	\$ 114,522

Interest paid for long-term debt during 2016 and 2015 was \$4.8 million and \$7.0 million, respectively.

## 7. AMOUNTS PAYABLE UNDER TERMS OF THE POWER SALES AGREEMENTS

Differences between amounts billed to Members and Project Participants and revenues and expenses recognized are included in amounts payable under the terms of the power sales agreements. These differences are made up of debt service collections, including amounts collected for the Reserve & Contingency fund, capital expenditures funded through reserve billings and unbilled operating and non-operating expenses and revenues. A summary of the items included in amounts payable in the future under the terms of the power sales contract for the years ended December 31, 2016 and 2015 is as follows:

	2016	2015
(In Thousands)		
Beginning balance - January 1	\$ 534,888	\$ 488,428
Unbilled operating and nonoperating expenses and revenues:		
Depreciation/amortization	(17,096)	(16,277)
Accretion	(7,312)	(7,203)
Change in net pension obligation	-	1,133
Amortization of bond premiums and discounts	1,182	2,967
Fuel inventory loss due to market adjustment	6,557	(2,679)
Realized and unrealized gains and interest income	6,556	(201)
Lease revenue	38	63
Capital funded through reserve billings	7,785	11,828
Decommissioning fund contributions, net of fees	1,060	1,172
Debt service collections:		
Billed principal on long-term debt	50,915	55,657
Ending Balance - December 31	<u>\$ 584,573</u>	<u>\$ 534,888</u>

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 8. DERIVATIVE INSTRUMENTS

### Summary of Notational Amounts and Fair Values

MMWEC enters into contracts to hedge its exposure to fluctuating fuel oil prices for its ownership interest in Stony Brook Intermediate. 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, if so, whether they effectively hedge the expected cash flows associated with fuel oil.

MMWEC applies hedge accounting for derivatives that are deemed effective hedges. Under hedge accounting, the increase (decrease) in the fair value of a hedge is reported as a deferred inflow (outflow) on the Statements of Net Position. Outstanding hedging derivative instruments were evaluated for effectiveness as of December 31, 2016 and 2015 using the consistent critical terms method. MMWEC purchases oil puts in the same quantity of the hedged item at the same delivery location and uses reference pricing from the same hub. The derivative instruments outstanding at December 31, 2016 and 2015 meet the effectiveness tests.

During 2016, as a result of changes to MMWEC's fuel oil burn projections, it was determined that the existing fuel oil put options contracts were no longer effective. The fair value of the ineffective hedges resulted in a total gain of \$3.2 million, which was recognized in investment income.

The fair value of MMWEC's effective cash flow hedges, fuel oil put options contracts, was \$103,000, representing a notional value of 7.1 million gallons at December 31, 2016 and \$6.0 million, representing a notional value of 4.0 million gallons at December 31, 2015. The fair value from date of purchase to December 31, 2016 decreased \$743,000 and is included in deferred outflows of resources on the accompanying Statements of Net Position. The fair value from date of purchase to December 31, 2015 increased \$3.2 million and is included in deferred inflows of resources on the accompanying Statements of Net Position. Fair value was determined using an estimate obtained from MMWEC's counterparty, which was independently verified.

### Objectives and Terms of Hedging Derivative Instruments

The objectives and terms of MMWEC's fuel oil options that were outstanding at December 31, 2016 are summarized in the table below.

<u>Objective</u>	<u>Effective Date</u>	<u>Maturity Date</u>	<u>Terms</u>	<u>Counterparty Rating (Standard &amp; Poor's)</u>
Hedge cash flows on Stony Brook Intermediate fuel oil purchases	Feb-16	Feb-17	Puts with \$1.06/gal; Settle on NYMEX	BBB+
Hedge cash flows on Stony Brook Intermediate fuel oil purchases	May-16	Mar-18	Puts with \$1.33/gal; Settle on NYMEX	BBB+

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 8. DERIVATIVE INSTRUMENTS...continued

### Objectives and Terms of Hedging Derivative Instruments...continued

The objectives and terms of MMWEC's fuel oil options that were outstanding at December 31, 2015 are summarized in the table below.

<u>Objective</u>	<u>Effective Date</u>	<u>Maturity Date</u>	<u>Terms</u>	<u>Counterparty Rating (Standard &amp; Poor's)</u>
Hedge cash flows on Stony Brook Intermediate fuel oil purchases	May-15	Feb-16	Puts with \$2.76-2.93/gal; Settle on NYMEX	BBB+

MMWEC hedges its fuel oil costs so that it can offer predictable rates to the Stony Brook Intermediate Project Participants. MMWEC maintains an Enterprise Risk Management Program, which controls the credit and operational risks arising from its fuel oil market activities.

### Credit Risk

Credit risk is the risk of loss due to a counterparty defaulting on its obligations. MMWEC seeks to minimize credit risk by transacting with creditworthy counterparties. MMWEC's Enterprise Risk Management Program restricts MMWEC from executing transactions with counterparties rated lower than BBB-, or equivalent.

### Basis Risk

Basis risk is the risk that arises when a hedged item and a derivative that is attempting to hedge that item are based on different indices. MMWEC's hedged items and derivatives are priced on the same index, so there is no basis risk for the derivative instruments outstanding at December 31, 2016 and 2015.

### Termination Risk

Termination risk is the risk that a derivative will terminate prior to its scheduled maturity due to a contractual event. Contractual events include bankruptcy, illegality, default and mergers in which the successor entity does not meet credit criteria. Termination risk is associated with MMWEC's derivative instruments outstanding at December 31, 2016 and 2015 up to the fair value amounts.

## 9. FAIR VALUE MEASUREMENT

MMWEC records assets and liabilities in accordance with GASB Statement No. 72, *Fair Value Measurement and Application*, which determines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurement.

Fair value is defined in Statement No. 72 as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). Fair value is a market-based measurement for a particular asset or liability based on assumptions that market participants would use in pricing the asset or liability. Such assumptions include observable and unobservable inputs of market data, as well as assumptions about risk and the risk inherent in the inputs to the valuation technique.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

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## 9. FAIR VALUE MEASUREMENT...continued

As a basis for considering market participant assumptions in fair value measurements, Statement No. 72 establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels:

- **Level 1** inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date. Equity securities and U.S. Government Treasury securities are examples of Level 1 inputs.
- **Level 2** inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Government agency and mortgage-backed securities are examples of Level 2 inputs.
- **Level 3** inputs are unobservable inputs that reflect MMWEC's own assumptions about factors that market participants would use in pricing the asset or liability (including assumptions about risk).

Valuation methods of the primary fair value measurements disclosed below are as follows:

- The majority of investments in equity securities are valued using Level 1 measurements. Investments in equity securities are typically valued at the closing price in the principal active market. For equity securities, these markets include published exchanges such as the National Association of Securities Dealers Automated Quotations and the New York Stock Exchange.
- Most investments in debt securities are valued using Level 2 measurements because the valuations use interest rate curves and credit spreads applied to the terms of the debt instrument (maturity and coupon interest rate) and consider the counterparty credit rating.
- Commodity derivatives, such as futures, swaps and options, which are ultimately settled using prices at locations quoted through clearinghouses are valued using level 1 inputs. Options included in this category are those with an identical strike price quoted through a clearinghouse.

Financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. MMWEC's assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of fair value assets and liabilities and their place within the fair value hierarchy levels.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 9. FAIR VALUE MEASUREMENT...continued

The following table presents fair value balances and their levels within the fair value hierarchy as of December 31, 2016 and 2015:

MMWEC	2016				2015			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Investments and Cash Equivalents								
U.S. Treasury Bills	\$ 41,590	-	-	\$ 41,590	\$ 63,874	-	-	\$ 63,874
U.S. Treasury Notes	34,898	-	-	34,898	32,865	-	-	32,865
U.S. Agency Bonds	-	109,621	-	109,621	-	76,312	-	76,312
U.S. Agency Discount Notes	-	29,268	-	29,268	-	30,200	-	30,200
Municipal Bonds	-	25,728	-	25,728	-	23,849	-	23,849
Investments and Cash Equivalents	<u>\$ 76,488</u>	<u>\$ 164,617</u>	<u>\$ -</u>	<u>\$ 241,105</u>	<u>\$ 96,739</u>	<u>\$ 130,361</u>	<u>\$ -</u>	<u>\$ 227,100</u>
<b>Decommissioning</b>								
Investments and Cash Equivalents								
Mutual Funds-Equity	-	\$ 44,559	-	\$ 44,559	-	\$ 40,767	-	\$ 40,767
FPL Minority Owner Trust	22,685	-	-	22,685	21,219	-	-	21,219
Common Stock-Equity	9,304	-	-	9,304	8,291	-	-	8,291
U.S. Treasury Securities	9,059	-	-	9,059	7,745	-	-	7,745
Corporate Bonds	-	7,784	-	7,784	-	5,510	-	5,510
U.S. Agency Securities	-	3,545	-	3,545	-	4,013	-	4,013
Municipal Bonds	-	699	-	699	-	1,344	-	1,344
Mutual Funds-Fixed	-	283	-	283	-	136	-	136
Commercial Mortgage Securities	-	9	-	9	-	70	-	70
Investments and Cash Equivalents	<u>\$ 41,048</u>	<u>\$ 56,879</u>	<u>\$ -</u>	<u>\$ 97,927</u>	<u>\$ 37,255</u>	<u>\$ 51,840</u>	<u>\$ -</u>	<u>\$ 89,095</u>
<b>Fiduciary Funds</b>								
Investments and Cash Equivalents								
Mutual Funds-Equity	-	\$ 17,451	-	\$ 17,451	-	\$ 18,394	-	\$ 18,394
Mutual Funds-Fixed	-	5,101	-	5,101	-	5,132	-	5,132
Investments and Cash Equivalents	<u>\$ -</u>	<u>\$ 22,552</u>	<u>\$ -</u>	<u>\$ 22,552</u>	<u>\$ -</u>	<u>\$ 23,526</u>	<u>\$ -</u>	<u>\$ 23,526</u>
<b>Financial Instruments</b>								
Derivative Financial Instruments								
Cash Flow Hedges - Fuel Oil	\$ 103	\$ -	-	\$ 103	\$ 6,010	\$ -	-	\$ 6,010
	<u>\$ 103</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 103</u>	<u>\$ 6,010</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 6,010</u>

## 10. LABOR AGREEMENTS

At December 31, 2016, approximately 27% of MMWEC's 79 employees work under collective bargaining agreements, whose existing labor agreements expire on December 31, 2018. At December 31, 2015, approximately 28% of MMWEC's 74 employees worked under the collective bargaining agreements.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 11. POOLED LOAN PROGRAM

In 2014, MMWEC began a Pooled Loan Program which enables MMWEC to borrow funds to either make loans to Members that would be used by the utility to finance the acquisition of various utility assets, or purchase and own various utility assets that would be leased to member utilities. The Program utilizes a short term revolving loan facility to provide initial funding of the loans and leases, as described in Note 5 – Short-term Debt.

MMWEC issues Promissory Notes to Members who borrow funds under this program and the interest and any fees associated with the Notes are payable solely by each Member who utilizes the program funds for their portion of the funds used.

As of December 31, 2016 and 2015, loans receivable of \$18.2 million and \$14.0 million are included in accounts receivable on the accompanying Statement of Net Position. The accounts receivable relate to three and two Members as of December 31, 2016 and 2015, respectively.

## 12. BENEFIT PLANS

### Defined Benefit Plans

The Massachusetts Municipal Wholesale Electric Company Pension Plans (Plans) are two single-employer, defined benefit pension plans administered by MMWEC. One plan covers union employees (union plan) and the other plan covers non-union employees (administration plan). All full-time active administration employees hired before December 1, 2006, and all full-time active union employees hired before January 1, 2008 are covered by their respective plans. The Plans provide a defined benefit to employees based on years of service and average earnings. The Plans provide retirement, disability, and death benefits to plan members and beneficiaries. Administrative or union employees hired after these dates qualify for a Defined Contribution plan as described below. Certain other financial information concerning the plans, in addition to the information contained here, is provided annually to plan participants. No standalone financial statements are issued for the Plans.

Plan participants providing the basis of the actuarial valuations used to calculate, as of the measurement dates, the net pension liability for the years ended December 31, were:

Status	Administrative		Union	
	2016	2015	2016	2015
Active	26	30	14	17
Terminated vested	26	24	9	9
Retirees and beneficiaries	20	20	5	5
	72	74	28	31

All MMWEC employees are eligible to make a voluntary contribution in accordance with prescribed annual dollar limits to a deferred compensation plan sponsored by the Commonwealth of Massachusetts. The deferred compensation plan is maintained pursuant to Section 457(b) of the Internal Revenue Code and the General Laws of Massachusetts.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 12. BENEFIT PLANS...continued

### Defined Benefit Plans...continued

MMWEC's net pension asset at December 31, 2016 and 2015 was measured as of December 31, 2016 and 2015, respectively. The total pension liability used to calculate the net pension asset was determined by actuarial valuations as of January 1, 2016 and 2015 rolled forward using generally accepted actuarial procedures to the December 31, 2016 and 2015, measurement dates, respectively.

MMWEC's change in net pension asset for the years ended December 31, 2016 and 2015 are as follows:

	Administration Plan		Union Plan	
	2016	2015	2016	2015
<u>Total pension liability</u>	(In Thousands)			
Service cost	\$ 139	\$ 191	\$ 89	\$ 106
Interest cost	1,401	1,353	327	340
Difference between expected and actual experience	(391)	748	(764)	709
Changes of assumptions	1,395	(200)	1,238	(52)
Benefit payments	(1,789)	(1,275)	(1,302)	(1,281)
Net change in total pension liability	755	817	(412)	(178)
Total pension liability, beginning of period	20,242	19,425	4,663	4,841
Total pension liability, end of period	<u>\$ 20,997</u>	<u>\$ 20,242</u>	<u>\$ 4,251</u>	<u>\$ 4,663</u>
<u>Plan fiduciary net position</u>				
Employer contributions	\$ 174	\$ 480	\$ 197	\$ 118
Net investment income	1,303	314	194	104
Benefit payments	(1,789)	(1,275)	(1,302)	(1,281)
Administrative expenses	(19)	(16)	(10)	(10)
Net change in fiduciary net position	(331)	(497)	(921)	(1,069)
Fiduciary net position, beginning of period	24,319	24,816	4,333	5,402
Fiduciary net position, end of period	<u>23,988</u>	<u>24,319</u>	<u>3,412</u>	<u>4,333</u>
Net pension (asset) liability, end of period	<u>\$ (2,991)</u>	<u>\$ (4,077)</u>	<u>\$ 839</u>	<u>\$ 330</u>

MMWEC recorded \$1.7 million and \$1.1 million in pension expense related to these Plans for the years ended December 31, 2016 and 2015, respectively, which are included in other operating expenses on the accompanying Statements of Revenues, Expenses and Changes in Net Position.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 12. BENEFIT PLANS...continued

### Defined Benefit Plans...continued

The annual contribution was determined as part of the January 1 actuarial valuation using the entry age normal with frozen initial liability cost method. All contributions to the plans are authorized by the Board of Directors and made by MMWEC. Since 2008, MMWEC has targeted its contributions with the goal of establishing a funding ratio of approximately 100%, giving consideration to actuarial information and budget controls. The actuarial assumptions for both Plans included a 7.0% investment rate of return, a discount rate of 7.0% on Plan liabilities and a 3.0% projected salary increase. Mortality rates for the Administrative Plan were based on the RP-2014 White Collar Employee Annuitant Table for Males or Females, as appropriate, projected using Scale MP-2016 generational improvements from 2006. Mortality rates for the Union Plan were based on the RP-2014 Blue Collar Table for Males or Females, as appropriate, projected using Scale MP-2016 generational improvements from 2006.

The long-term expected rate of return on Plan investments was determined based on a blend of historical performance data and future expectations for each major asset class, while also reflecting current capital market conditions, developed on a geometric basis.

The assumed allocation and expected real rates of return for each major asset class are summarized in the following table:

<u>Asset Class</u>	<u>Administrative</u>		<u>Union</u>	
	<u>Target Asset Allocation</u>	<u>Long Term Expected Rate of Return</u>	<u>Target Asset Allocation</u>	<u>Long Term Expected Rate of Return</u>
Fixed income	20.00%	3.00%	10.00%	3.00%
Mutual Funds	80.00%	8.00%	90.00%	7.45%
Total investments	<u>100.00%</u>		<u>100.00%</u>	

The following table presents the sensitivity of net pension (asset) liability calculation to a 1% increase and 1% decrease in the discount rate to measure the total pension (asset) liability:

	<u>Administrative</u>		<u>Union</u>	
	<u>2016</u>	<u>2015</u>	<u>2016</u>	<u>2015</u>
<u>Discount rate</u>	(In Thousands)			
1% decrease - 6.0%	\$ (921)	\$ (1,456)	\$ 1,316	\$ 980
Current discount rate - 7.0%	(2,991)	(4,077)	839	330
1% increase - 8.0%	(4,765)	(7,641)	420	(214)

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 12. BENEFIT PLANS...continued

The following table presents information about the pension-related deferred outflows and inflows of resources at December 31:

	Administration Plan		Union Plan	
	2016	2015	2016	2015
Deferred outflows (inflows) of resources	(In Thousands)			
Difference between expected and actual experience	\$ 20	\$ 521	\$ (60)	\$ 724
Changes of assumptions	1,230	725	1,048	80
Difference between projected and actual earnings on plan investments	1,170	1,149	248	209
Total deferred outflows of resources	<u>\$ 2,420</u>	<u>\$ 2,395</u>	<u>\$ 1,236</u>	<u>\$ 1,013</u>

### Defined Benefit Plans...continued

The following table presents the future amortization of pension-related deferred outflows of resources, which will be recognized in pension expense, at December 31:

	Administration	Union
	(In Thousands)	
2017	\$ 1,295	\$ 363
2018	686	363
2019	362	339
2020	77	168
2021	-	3
	<u>\$ 2,420</u>	<u>\$ 1,236</u>

The Required Supplementary Information following the Notes to the Financial Statements presents additional multiyear trend information demonstrating the components of change in the net pension liability from year to year, as well as trends in related statistical information and employer contributions to the Plans.

### Defined Contribution Plan

In 2007, MMWEC established a defined contribution (DC) pension plan in compliance with Section 401 (a) of the Internal Revenue Code for non-union employees hired after December 1, 2006 and for union employees hired after January 1, 2008. Thereafter, all new employees are no longer eligible to participate in MMWEC Defined Benefit plans. Under the DC plan, MMWEC contributes 6% of an employee's base salary and matches 50% of employee contributions to the defined contribution plan up to a maximum employee contribution of 6%. For the years ended December 31, 2016 and 2015, MMWEC contributed \$223,000 and \$212,000 and the employees contributed \$17,000 and \$30,000, respectively.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 12. BENEFIT PLANS...continued

### Employee Savings Plan

MMWEC contributes to an employee savings plan administered by a mutual insurance company. All eligible full-time employees meeting the service and eligibility requirements participate in this plan. Under the provisions of the plan, MMWEC's contributions are vested immediately. For the years ended December 31, 2016, 2015 and 2014, MMWEC contributed \$71,000, \$82,000 and \$86,000 respectively, and the employees contributed \$121,000, \$129,000 and \$129,000, respectively. All employees eligible or participating in the DC pension plan established in 2007 are not eligible to participate in the employee savings plan.

Benefit provisions of all plans are determined and authorized by the MMWEC Board of Directors.

## 13. PROJECT JOINT OWNERSHIP AGREEMENTS

MMWEC's power supply capacity includes ownership interests in the Stony Brook Peaking and Stony Brook Intermediate Units, both of which MMWEC operates. MMWEC is a nonoperating joint owner in the W.F. Wyman Unit No. 4, Millstone Unit 3 and Seabrook Station. Electric plant in service and construction work in progress also includes assets related to MMWEC's service company operations, which totaled \$6.1 million in 2016 and 2015. The following is a summary of the balances by Project included in electric plant in service and construction work in progress, as well as MMWEC's share of capability in megawatts (MW).

Projects	Facility and MMWEC Share of Capability in MW	Amount as of December 31,	
		2016	2015
		(In Thousands)	
Peaking Project	Stony Brook	172.7	
Intermediate Project	Stony Brook	321.3	
Wyman Project	W.F. Wyman No. 4	22.4	
Nuclear Project No. 3	Millstone Unit 3	39.5	
Nuclear Mix No. 1	Millstone Unit 3	19.8	
Nuclear Mix No. 1	Seabrook Station	2.0	
Nuclear Project No. 4	Seabrook Station	54.0	
Nuclear Project No. 5	Seabrook Station	13.7	
Project No. 6	Seabrook Station	74.7	
Totals			

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 14. RELATED PARTY TRANSACTIONS

MMWEC, together with Massachusetts municipal utility systems, has formed six cooperatives under Massachusetts General Laws to conduct business for the mutual benefit of the members of the cooperatives. The following is a summary of each Cooperative and the associated Cooperative members and purpose for each Cooperative.

<u>Cooperative Name</u>	<u>Other Cooperative Members</u>	<u>Year Founded</u>	<u>Cooperative Purpose</u>
Southwest Cooperative Corporation	Westfield Gas & Electric Light Department (WG&E)	2006	Financing, constructing and operating a natural gas pipeline to provide natural gas transportation service to WG&E
Massachusetts Municipal Light Department Wind Energy Cooperative Corporation	Princeton Municipal Light Department and Templeton Municipal Light Department	2007	Financing, owning, constructing and operating wind generation facilities located in the town of Princeton & Templeton
Berkshire Wind Power Cooperative Corporation	Fourteen municipal light departments	2008	Financing, owning, constructing and operating wind turbines and ancillary equipment located in Hancock and Lanesborough, Massachusetts
Massachusetts Municipal Light Department Solar Energy Cooperative Corporation	West Boylston Municipal Light Plant	2008	Financing, owning, constructing and operating a solar energy production facility in West Boylston, Massachusetts
Wakefield Municipal Cooperative Corporation	Wakefield Municipal Gas & Light Department	2012	Financing, constructing, purchasing, owning, leasing, maintaining and operating real and personal property located in Wakefield
Massachusetts Clean Energy Cooperative Corporation	Holyoke Gas & Electric Department (HG&E)	2013	Purchasing, acquiring, generating, transforming, distributing, selling, reselling, supplying and providing energy, telecommunications, or any related products or service and financing, owning, leasing or otherwise acquiring, holding, using and improving interests therein for the benefit of HG&E

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 14. RELATED PARTY TRANSACTIONS...continued

Pursuant to contracts, MMWEC provides accounting, financial, power supply and administrative services to all six of these cooperatives. As such, although MMWEC is a member of each cooperative and has one representative on the Board of each cooperative, MMWEC has no rights to the entities' assets nor has management oversight of the six cooperatives. Thus, the entities are not required to be reported as component units of MMWEC under rules established GASB 61, *The Financial Reporting Entity*.

MMWEC billed a total of \$534,000 and \$383,000 for MMWEC services and outside professional services during 2016 and 2015, respectively, for all cooperatives. At December 31, 2016 and 2015, \$54,000 and \$81,000 was due to MMWEC from all cooperatives. There were no amounts due to the Cooperatives from MMWEC at December 31, 2016 or 2015.

## 15. CONTRACTS AND COMMITMENTS

### Long-Term Contracts – Cooperatives

MMWEC has contracts with each Cooperative described in Note 14 – Related Party Transactions, whereby MMWEC is to serve as the Cooperative's agent in the sale of power, transportation or lease to the municipal utility systems. The sale agreements between MMWEC and the Cooperatives are offset in each case by a purchase agreement between the Cooperative and the municipal utility systems, the revenues and expenses associated with these agreements are not included in the accompanying Statements of Revenues, Expenses and Changes in Net Position and are disclosed below.

<u>Contract</u>	<u>Purchases and Sales for the Year Ended</u>	
	<u>2016</u>	<u>2015</u>
	(In Thousands)	
Transportation Agreement between MMWEC and the Southwest Cooperative Corporation	\$ 540	\$ 402
Power Sales Agreement between MMWEC and the Massachusetts Municipal Light Department Wind Energy Cooperative Corporation	305	343
Power Sales Agreement between MMWEC and the Berkshire Wind Power Cooperative Corporation	6,890	6,927
Power Sales Agreement between MMWEC and the Massachusetts Municipal Light Department Solar Energy Cooperative Corporation	113	183
Lease Agreement between MMWEC and the Wakefield Municipal Cooperative Corporation	366	242
Power Sales Agreement between MMWEC and the Massachusetts Clean Energy Cooperative Corporation	686	2,650
Total	<u>\$ 8,900</u>	<u>\$ 10,747</u>

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

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## 15. CONTRACTS AND COMMITMENTS...continued

### Long-Term Contracts – Power Purchases

MMWEC entered into agreements for participation in the transmission interconnection between New England utilities and the Hydro-Quebec electric system near Sherbrooke, Quebec (Phase I), which began commercial operation in October 1986. The New England portion of the interconnection was constructed at a total cost of approximately \$140.0 million, of which 3.65% (or initially \$5.0 million) was MMWEC's share to support Phase I. In 1990, MMWEC's participation share in Phase I changed to 3.45% (or initially \$4.8 million). MMWEC also entered into similar agreements for participation in the interconnection between New England utilities and the Hydro-Quebec electric system. This agreement is for the expansion of the Hydro-Quebec interconnection (Phase II), which went into commercial operation in November 1990. MMWEC's Phase II equity investment is approximately 0.6% (or initially \$3.3 million). MMWEC has corresponding agreements with certain of its Members and another utility to recover MMWEC's share of the costs associated with the Phase II interconnection. Beginning in 1995, capital refunds from Phase II have been received, reducing MMWEC's total equity investment. The remaining equity balance of \$34,000 at both December 31, 2016 and 2015 is included in other noncurrent charges on the Statement of Net Position.

On a limited basis, MMWEC may enter into agreements providing financial assurance to third parties. At December 31, 2016 and 2015, there were no outstanding guarantees related to its equity interest in the Hydro-Quebec transmission companies. Management believes that the likelihood MMWEC would be required to perform or otherwise incur any significant losses associated with this guarantee is remote.

In 2013, MMWEC entered into a twenty-year power purchase agreement with Clement Dam Hydroelectric LLC, Franklin Power LLC, Greggs Falls Hydroelectric Associates LP, Pembroke Hydro Associates LP and HDI Associates I Partnership for 100% of the output of five hydroelectric generating facilities in New Hampshire with a combined nominal rating at 11.53 MW, effective January 1, 2014. This resource has been subscribed to by thirteen Members. Power purchased under this contract totaled \$1.4 million and \$1.8 million for the years ended December 31, 2016 and 2015, respectively.

Also, in 2013, MMWEC entered into a twenty-five year power purchase agreement with Hancock Wind LLC for 73.5% of the output of a wind generating facility in Hancock County, Maine (Hancock Facility) with a nominal rating at 51 MW. This resource has been subscribed to by seventeen Members. The Hancock Facility began commercial operations on December 14, 2016. The total power purchased under this contract was \$213,000 for the year ended December 31, 2016.

### Claims and Judgments

During 2012 and 2011, MMWEC received invoices totaling \$0.6 million and \$3.5 million, respectively, (cumulatively \$4.1 million), from North Atlantic Energy Services Corporation (NAESCO) for costs allegedly related to pensions as associated with NAESCO's former employees at Seabrook. The calculation and basis of those invoices were unclear to MMWEC. MMWEC conveyed its questions to NAESCO. On May 29, 2013, NAESCO (and another Northeast Utilities subsidiary) filed a demand for arbitration against MMWEC seeking payment of those invoices and other pension related costs not yet billed, plus interest, attorneys' fees and arbitration costs.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

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## 15. CONTRACTS AND COMMITMENTS...continued

### Claims and Judgments...continued

During 2015, the Arbitrator ruled that the amount of pensions billed to MMWEC was incorrect as it was based on contribution cost and that MMWEC did owe NAESCO Seabrook-related pension expense beginning in 1993 to date totaling \$1.8 million, with interest beginning in 2014, which are included in accrued expenses at December 31, 2015. MMWEC and NAESCO executed a settlement agreement dated May 6, 2016, which provided that MMWEC would pay NAESCO \$2.0 million and that each party would release the other from any and all claims or expenses, concerning or relating to past, current or future pension costs or expenses. On May 17, 2016, MMWEC paid NAESCO the \$2.0 million settlement, and a satisfaction of judgment was filed with the Superior Court on May 27, 2016.

In 2013, a complaint was filed by the owner of property for which MMWEC had recorded an Order of Taking in 2012 seeking an assessment of damages in connection with taking. The assessment of damages of \$220,000 was received and paid to the property owner in February 2015 and is collectible under MMWEC's service agreement with the Cooperative for which MMWEC recorded the Order of Taking.

MMWEC is involved in various legal actions. Management believes that the ultimate resolution of litigation in which MMWEC is currently involved will not have a material, adverse effect on the financial position of MMWEC.

## 16. RISK MANAGEMENT

MMWEC is exposed to various risks of loss related to torts; theft of, damage to, or destruction of assets; errors and omissions; workers compensation; and health care of its employees. These risks are covered through the purchase of commercial insurance, with minimal deductibles. There were no settled claims in any of the past three years. There has been no material decrease in insurance coverage of MMWEC in the past year.

### Nuclear Insurance

The Price-Anderson Act (the Act), a federal statute, mandates an industry-wide program of liability insurance for nuclear facilities. The \$375.0 million primary layer of insurance for the liability has been purchased in the commercial insurance market. Secondary coverage is to be provided through an assessment on each of the currently licensed nuclear units in the United States of approximately \$127.3 million, not to exceed \$19.0 million per incident in any year. The assessment is to be adjusted for inflation every five years. Under the Act, MMWEC's ownership interests in Millstone Unit 3 and Seabrook Station could result in a maximum assessment of approximately \$6.1 million and \$14.8 million, respectively, limited to payments of \$1.2 million and \$2.5 million per incident per year, respectively. Originally enacted in 1957, the Act has been renewed several times and in July 2005, Congress extended the Act until the end of 2025, as part of the Energy Policy Act of 2005.

Insurance has been purchased from Nuclear Electric Insurance Limited (NEIL) to cover the cost of repair, replacement, decontamination or premature decommissioning of utility property resulting from insured occurrences at Millstone Unit 3 and Seabrook Station. The NEIL insurance is subject to retroactive assessments if losses exceed the accumulated funds available to the insurer. MMWEC is potentially subject to a \$1.2 million and \$2.5 million assessment for its participation in Millstone Unit 3 and Seabrook Station, respectively, for excess property damage, decontamination and premature decommissioning.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

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## 17. CONCENTRATION OF CREDIT RISK / SIGNIFICANT CUSTOMERS

Credit risk represents the risk of loss that would occur if customers do not meet their financial obligations to MMWEC. Concentration of credit risk occurs when significant customers possess similar characteristics that would cause their ability to meet contractual obligations to be affected by the same events.

As of December 31, 2016, MMWEC had two municipal customers who were considered significant customers, which accounted for approximately \$42.8 million (15%) and \$31.0 million (11%) of MMWEC revenues in 2016. In 2015, MMWEC had two municipal customers who were considered a significant customer, which accounted for approximately \$44.0 million (14%) and \$35.2 million (11%) of MMWEC revenues in 2015. As of December 31, 2016, two municipal customers had significant account receivable balances of \$4.9 million (22%) and \$2.4 million (11%). At December 31, 2015, two municipal customers had significant account receivable balances of \$9.4 million (23%) and \$6.1 million (15%).

## 18. ENVIRONMENTAL AND OTHER ISSUES

Nothing has come to management's attention concerning any material pollution liability claims made during 2016 and 2015 or outstanding as of December 31, 2016 and 2015.

MMWEC has established a trust fund to enhance its Directors' and Officers' liability coverage. The purpose of the trust fund is to make available funds for the purchase of Directors' and Officers' liability insurance and/or as a supplement to insurance for indemnification of the Directors or Officers. At December 31, 2016 and 2015, MMWEC has \$10.6 million and \$10.8 million, respectively, recorded in designated funds related to the trust fund with a corresponding liability in the same amount, representing advances from Members.

MMWEC has a guaranty with ISO New England, Inc. (ISO-NE) with respect to certain MMWEC Members' financial assurance obligations to ISO-NE. These Members do not have credit ratings and MMWEC provides financial assurances for their transactions in ISO-NE. MMWEC's financial assurance is backed by the NEPEX Account Agreement between MMWEC and each of these Members. Pursuant to the NEPEX Account Agreement, each Member has an absolute and unconditional obligation to pay MMWEC for its respective ISO-NE transactions. Management believes that the likelihood MMWEC would be required to perform or otherwise incur any significant losses associated with this guarantee is remote.

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 19. SEGMENT INFORMATION

MMWEC issues separate revenue bonds for each Project, which are payable solely from, and secured solely by, the revenues derived from the Project to which such bond issue relates, plus available funds pledged under the GBR for the bonds of such issues. Each Project operates various electric generation facilities, as shown in Note 12 – Project Joint Ownership Agreements. Following is a summary of the financial information for each Project.

	2016			
	NUCLEAR	NUCLEAR	NUCLEAR	NUCLEAR
CONDENSED STATEMENT OF NET POSITION	PROJ. 3	PROJ. 4	PROJ. 5	PROJ. 6
Assets:	(In Thousands)			
Advances from projects	\$ (41)	\$ (10)	\$ (8)	\$ (20)
Other current assets	7,495	15,710	4,344	31,542
Noncurrent assets	47,084	43,998	11,637	92,259
Capital assets, net	61,000	154,098	41,067	268,528
Total assets	115,538	213,796	57,040	392,309
Liabilities:				
Current liabilities	13,835	20,986	5,674	32,035
Noncurrent liabilities	22,409	56,988	15,253	105,510
Deferred inflows of resources:	79,294	135,822	36,113	254,764
Total liabilities	115,538	213,796	57,040	392,309
Net position:				
Net investment in capital assets	55,080	138,375	36,317	245,988
Restricted for general bond resolution	5,022	7,757	133	7,475
Decommissioning Trust	28,339	24,183	6,121	33,492
Pension	-	-	-	-
Unrestricted	(88,441)	(170,315)	(42,571)	(286,955)
Total net position	\$ -	\$ -	\$ -	\$ -

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 19. SEGMENT INFORMATION...continued

	2016			
	NUCLEAR	NUCLEAR	NUCLEAR	NUCLEAR
	PROJ. 3	PROJ. 4	PROJ. 5	PROJ. 6
	(In Thousands)			
<b>CONDENSED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION</b>				
Operating revenues	\$ 21,438	\$ 23,683	\$ 6,525	\$ 48,392
Depreciation	(1,871)	(4,263)	(1,141)	(7,561)
Other operating expenses	(11,997)	(13,086)	(3,368)	(18,196)
Operating income (loss)	7,570	6,334	2,016	22,635
Non-operating revenues (expenses):				
Investment income	2,009	1,713	433	2,354
Interest expense on long-term debt	(399)	(551)	(106)	(2,130)
Other nonoperating expenses	300	351	52	841
(Increase) decrease in amounts payable under terms of the power sales agreements	(9,480)	(7,847)	(2,395)	(23,700)
Total non-operating revenues (expenses)	(7,570)	(6,334)	(2,016)	(22,635)
Change in net position	-	-	-	-
Net position, beginning of year	-	-	-	-
Net position, end of year	\$ -	\$ -	\$ -	\$ -
<b>CONDENSED STATEMENT OF CASH FLOWS</b>				
Net cash provided by (used in):				
Operating activities	\$ 9,197	\$ 18,897	\$ 5,312	\$ 41,383
Investing activities	4,361	1,165	142	(5,323)
Capital and related financing activities	(14,069)	(19,978)	(5,391)	(38,851)
Net change in cash and cash equivalents	(511)	84	63	(2,791)
Cash and cash equivalents, beginning of year	4,267	5,446	1,330	10,810
Cash and cash equivalents, end of year	\$ 3,756	\$ 5,530	\$ 1,393	\$ 8,019

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 19. SEGMENT INFORMATION...continued

	2015			
	NUCLEAR	NUCLEAR	NUCLEAR	NUCLEAR
	PROJ. 3	PROJ. 4	PROJ. 5	PROJ. 6
	(In Thousands)			
<b>CONDENSED STATEMENT OF NET POSITION</b>				
<b>Assets:</b>				
Advances from projects	\$ (25)	\$ (107)	\$ (39)	\$ (167)
Other current assets	14,158	15,990	4,445	31,656
Noncurrent assets	42,803	47,910	12,452	94,129
Capital assets, net	63,657	155,867	41,634	274,295
<b>Total assets</b>	<b>120,593</b>	<b>219,660</b>	<b>58,492</b>	<b>399,913</b>
<b>Liabilities:</b>				
Current liabilities	28,940	36,929	10,111	65,568
Noncurrent liabilities	21,711	64,897	17,591	127,478
Deferred inflows of resources	69,942	117,834	30,790	206,867
<b>Total liabilities</b>	<b>120,593</b>	<b>219,660</b>	<b>58,492</b>	<b>399,913</b>
<b>Net position:</b>				
Net investment in capital assets	43,406	114,914	29,739	193,136
Restricted for general bond resolution	8,185	5,649	(485)	3,772
Decommissioning Trust	26,106	22,331	5,652	30,928
Pension	-	-	-	-
Unrestricted	(77,697)	(142,894)	(34,906)	(227,836)
<b>Total net position</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

# Massachusetts Municipal Wholesale Electric Company

Notes to Financial Statements

Years Ended December 31, 2016 and 2015

## 19. SEGMENT INFORMATION...continued

	2015			
	NUCLEAR	NUCLEAR	NUCLEAR	NUCLEAR
	PROJ. 3	PROJ. 4	PROJ. 5	PROJ. 6
	(In Thousands)			
<b>CONDENSED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION</b>				
Operating revenues	\$ 23,743	\$ 30,183	\$ 8,039	\$ 54,401
Depreciation	(1,850)	(4,105)	(1,101)	(7,342)
Other operating expenses	(9,852)	(15,534)	(3,972)	(21,599)
Operating income (loss)	12,041	10,544	2,966	25,460
Non-operating revenues (expenses):				
Investment income	435	243	79	380
Interest expense on long-term debt	(784)	(1,085)	(209)	(3,421)
Other nonoperating expenses	520	664	121	2,115
(Increase) decrease in amounts payable under terms of the power sales agreements	(12,212)	(10,366)	(2,957)	(24,534)
Total non-operating revenues (expenses)	(12,041)	(10,544)	(2,966)	(25,460)
Change in net position	-	-	-	-
Net position, beginning of year	-	-	-	-
Net position, end of year	\$ -	\$ -	\$ -	\$ -
<b>CONDENSED STATEMENT OF CASH FLOWS</b>				
Net cash provided by (used in):				
Operating activities	\$ 18,502	\$ 16,619	\$ 4,415	\$ 35,140
Investing activities	2,162	3,478	883	9,549
Capital and related financing activities	(17,983)	(18,479)	(4,964)	(39,800)
Net change in cash and cash equivalents	2,681	1,618	334	4,889
Cash and cash equivalents, beginning of year	1,586	3,828	996	5,921
Cash and cash equivalents, end of year	\$ 4,267	\$ 5,446	\$ 1,330	\$ 10,810

## 20. SUBSEQUENT EVENTS

In March 2017, MMWEC converted a portion of the short-term debt outstanding under the Pooled Loan Program to individual term loans for each of the three Members in the Program. The loans issued totaled \$20.2 million with fixed interest rates ranging between 3.05% and 3.15% and terms ranging between ten and fifteen years. Principal, interest and any fees associated with the loans are payable solely by each Member for which each loan was issued. The pooled loan line of credit facility was amended to \$8.0 million on March 22, 2017. At March 31, 2017, the outstanding balance under the pooled loan line of credit was \$410,000. MMWEC has evaluated subsequent events through March 31, 2017, the date which the financial statements were available to be issued, and did not note any additional subsequent events requiring recording or disclosure in the financial statements for the year ended December 31, 2016.

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REQUIRED SUPPLEMENTARY INFORMATION

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# Massachusetts Municipal Wholesale Electric Company

Required Supplementary Information (Unaudited)

Years Ended December 31, 2016 and 2015

The following schedules present Administration Plan multiyear trend information that demonstrates the components of change in the net pension (asset) liability from year-to-year, as well as trends in related statistical information. Information is present related to all periods for which the required data is available. Amounts presented are determined as of the measurement date of the net pension liability for the following years ended December 31:

	Administration Plan		
	2016	2015	2014
	(In Thousands)		
<u>Total pension liability</u>			
Service cost	\$ 139	\$ 191	\$ 210
Interest cost	1,401	1,353	1,156
Difference between expected and actual experience	(391)	748	26
Changes of assumptions	1,395	(200)	1,789
Benefit payments	(1,789)	(1,275)	(313)
Net change in total pension liability	755	817	2,868
Total pension liability, beginning of period	20,242	19,425	16,556
Total pension liability, end of period	20,997	20,242	19,424
<u>Plan fiduciary net position</u>			
Employer contributions	\$ 174	\$ 480	\$ 877
Net investment income	1,303	314	1,593
Benefit payments	(1,789)	(1,275)	(313)
Administrative expenses	(19)	(16)	(16)
Net change in fiduciary net position	(331)	(497)	2,141
Fiduciary net position, beginning of period	24,319	24,816	22,675
Fiduciary net position, end of period	23,988	24,319	24,816
Net pension (asset) liability, end of period	\$ (2,991)	\$ (4,077)	\$ (5,392)
Plan fiduciary net position as a percentage of the total pension liability	114.25%	120.14%	127.76%
Covered -employee payroll	\$ 2,371	\$ 2,785	\$ 3,104
Net pension (asset) liability as a percentage of covered- employee payroll	(126.19%)	(146.3%)	(173.6%)

# Massachusetts Municipal Wholesale Electric Company

Required Supplementary Information (Unaudited)

Years Ended December 31, 2016 and 2015

The following schedules present Union Plan multiyear trend information that demonstrates the components of change in the net pension (asset) liability from year-to-year, as well as trends in related statistical information. Information is present related to all periods for which the required data is available. Amounts presented are determined as of the measurement date of the net pension liability for the following years ended December 31:

	Union Plan		
	2016	2015	2014
	(In Thousands)		
<u>Total pension liability</u>			
Service cost	\$ 89	\$ 106	\$ 106
Interest cost	327	340	338
Difference between expected and actual experience	(764)	709	226
Changes of assumptions	1,238	(52)	191
Benefit payments	(1,302)	(1,281)	(856)
Net change in total pension liability	(412)	(178)	5
Total pension liability, beginning of period	4,663	4,841	4,836
Total pension liability, end of period	4,251	4,663	4,841
<u>Plan fiduciary net position</u>			
Employer contributions	\$ 197	\$ 118	\$ 255
Net investment income	194	104	416
Benefit payments	(1,302)	(1,281)	(856)
Administrative expenses	(10)	(10)	(10)
Net change in fiduciary net position	(921)	(1,069)	(195)
Fiduciary net position, beginning of period	4,333	5,402	5,597
Fiduciary net position, end of period	3,412	4,333	5,402
Net pension (asset) liability, end of period	\$ 839	\$ 330	\$ (561)
Plan fiduciary net position as a percentage of the total pension liability	80.27%	92.91%	111.59%
Covered -employee payroll	\$ 1,067	\$ 1,232	\$ 1,210
Net pension (asset) liability as a percentage of covered- employee payroll	78.59%	28.83%	(46.38%)

# Massachusetts Municipal Wholesale Electric Company

Required Supplementary Information (Unaudited)

Years Ended December 31, 2016 and 2015

The following schedules present multiyear trend information regarding employer contributions to the Plans. Information is presented related to all periods for which the required data is available. The amounts presented are determined as of the years ended December 31:

Administration Plan						
Year	Actuarial Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered-Employee Payroll	Contributions as a Percentage of Covered-Employee Payroll	
(In Thousands)						
2016	\$ 334	\$ 174	\$ 159	\$ 2,371	7.35%	
2015	1	480	(479)	2,785	17.24%	
2014	48	877	(829)	3,104	28.25%	

Union Plan						
Year	Actuarial Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered-Employee Payroll	Contributions as a Percentage of Covered-Employee Payroll	
2016	\$ 175	\$ 197	\$ (22)	\$ 1,067	18.48%	
2015	123	118	5	1,232	9.57%	
2014	65	255	(190)	1,210	12.10%	

# Massachusetts Municipal Wholesale Electric Company

Required Supplementary Information (Unaudited)

Years Ended December 31, 2016 and 2015

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest valuation follows:

	<u>Administration Plan</u>	<u>Union Plan</u>
Valuation date	1/1/2016	1/1/2016
Actuarial cost method	Entry Age Normal with Frozen Initial Liability	Entry Age Normal with Frozen Initial Liability
Amortization method	Level dollar open	Level dollar open
Remaining amortization period	30 years	30 years
Asset valuation method	Fair Market Value	Fair Market Value
Actuarial assumptions:		
Investment rate of return	7.0%	7.0%
Projected salary increases	3.0%	3.0%
Cost-of-living adjustments	N/A	N/A
Mortality	RP-2014 White Collar Employee Annuitant Table for Males or Females, as appropriate, projected using Scale MP-2016 generational improvements from 2006	RP-2014 Blue Collar Employee Annuitant Table for Males or Females, as appropriate, projected using Scale MP-2016 generational improvements from 2006

There were no changes in benefit terms, in the size or composition of the population covered by the benefit terms, in the use of different assumptions or other factors that significantly affected trends from year to year in the amounts reported in the required supplementary information above.

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SUPPLEMENTARY INFORMATION

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Massachusetts Municipal Wholesale Electric Company

Project Statement of Cash Flows  
 Year Ended December 31, 2016  
 (In Thousands)

	SERVICE	NUCLEAR MIX 1	NUCLEAR PROJ. 3	NUCLEAR PROJ. 4	NUCLEAR PROJ. 5	PROJ. 6	PEAKING	INTERMEDIATE	WYMAN	TOTAL
<b>Cash flows from operating activities:</b>										
Received from sales to members and participants	\$ 140,908	\$ 6,770	\$ 21,550	\$ 26,192	\$ 7,185	\$ 51,958	\$ 3,994	\$ 24,121	\$ 460	\$ 283,138
Paid to suppliers for goods and services	(138,108)	(6,456)	(12,353)	(7,295)	(1,873)	(10,575)	(2,394)	(8,954)	(613)	(188,621)
Paid to employees	(4,969)	-	-	-	-	-	(1,030)	(3,523)	-	(9,522)
Net cash provided by (used in) operating activities	(2,169)	314	9,197	18,897	5,312	41,383	570	11,644	(153)	84,995
<b>Cash flows from investing activities:</b>										
Purchases of investments	(39,750)	(9,227)	(23,056)	(29,154)	(8,444)	(93,252)	(10,950)	(42,812)	(4,850)	(261,495)
Proceeds from sales and maturities of investments	39,826	6,849	27,232	30,081	8,525	87,641	7,374	25,008	4,551	237,087
Interest received	(7)	63	185	238	61	288	76	3,376	12	4,292
Net cash provided by (used in) investing activities	69	(2,315)	4,361	1,165	142	(5,323)	(3,500)	(14,428)	(287)	(20,116)
<b>Cash flows from capital and related financing activities:</b>										
Construction expenditures and purchases of nuclear fuel	(116)	111	714	(6,510)	(1,649)	(9,011)	(429)	(66)	-	(16,956)
Principal payments on long-term debt	-	-	(13,770)	(12,495)	(3,565)	(26,885)	-	-	-	(56,715)
Decommissioning trust payments	-	(211)	(408)	(167)	(42)	(231)	-	-	-	(1,059)
Interest payments on long-term debt	-	-	(605)	(806)	(135)	(2,724)	-	-	-	(4,270)
Net cash provided by (used in) capital and related financing activities	(116)	(100)	(14,069)	(19,978)	(5,391)	(38,851)	(429)	(66)	-	(79,000)
<b>Cash flows from noncapital financing activities:</b>										
Proceeds from issuance of short-term debt	16,746	-	-	-	-	-	-	-	-	16,746
Principal payments on short-term debt	(13,106)	-	-	-	-	-	-	-	-	(13,106)
Interest payments on short-term debt	(460)	-	-	-	-	-	-	(38)	-	(498)
Net cash provided by (used in) noncapital financing activities	3,180	-	-	-	-	-	-	(38)	-	3,142
Net change in cash and cash equivalents	964	(2,101)	(511)	84	63	(2,791)	(3,359)	(2,888)	(440)	(10,979)
Cash and cash equivalents, beginning of year	20,023	3,917	4,267	5,446	1,330	10,810	4,169	12,173	1,520	63,655
Cash and cash equivalents, end of year	\$ 20,987	\$ 1,816	\$ 3,756	\$ 5,530	\$ 1,393	\$ 8,019	\$ 810	\$ 9,285	\$ 1,080	\$ 52,676
<b>Reconciliation of operating income (loss) to net cash provided by (used in) operating activities:</b>										
Operating income (loss)	\$ (57)	\$ (679)	7,570	\$ 6,334	\$ 2,016	\$ 22,635	\$ 766	\$ 1,639	\$ 532	\$ 40,756
<b>Noncash items included in operating income:</b>										
Depreciation	553	931	1,871	4,263	1,141	7,561	117	978	70	17,485
Amortization of nuclear fuel and accretion of ARO	-	648	838	6,014	1,522	8,331	-	-	22	17,375
Loss on market valuation of inventory	-	-	-	-	-	-	(875)	(12,209)	(640)	(13,724)
<b>Changes in assets, liabilities and deferred outflows and inflows:</b>										
<b>(Increase) decrease in:</b>										
Accounts receivable	(5,116)	39	741	1,489	378	481	45	707	6	(1,230)
Unbilled revenues	1,517	-	-	-	-	-	-	-	-	1,517
Inventories	-	(10)	-	(280)	(70)	(388)	947	4,605	394	5,198
Prepaid expenses	76	(9)	(4)	(190)	(48)	(264)	9	36	-	(394)
Derivative financial instruments	-	-	-	-	-	-	-	5,907	-	5,907
Net pension asset	1,086	-	-	-	-	-	-	509	-	1,595
Other deferred charges	(96)	(371)	(810)	940	238	1,303	(1)	341	(50)	1,494
<b>Increase (decrease) in:</b>										
Accounts payable	614	(169)	(344)	75	39	99	53	493	3	863
Member and participant advances	1,215	(39)	(613)	1,009	281	3,068	(557)	(1,402)	(470)	2,492
Accrued expenses	(874)	(27)	(52)	(757)	(185)	(1,443)	66	(523)	(20)	(3,815)
Other noncurrent liabilities	-	-	-	-	-	-	-	15,007	-	15,007
Pension regulatory liability	(1,062)	-	-	-	-	-	-	(286)	-	(1,348)
Amounts payable under terms of the power sales agreements	-	-	-	-	-	-	-	-	-	-
Changes in deferred outflows of resources	(25)	-	-	-	-	-	-	(1,026)	-	(1,051)
Changes in deferred inflows or resources	-	-	-	-	-	-	-	(3,132)	-	(3,132)
Net cash provided by (used in) operating activities	\$ (2,169)	\$ 314	\$ 9,197	\$ 18,897	\$ 5,312	\$ 41,383	\$ 570	\$ 11,644	\$ (153)	\$ 84,995
<b>Reconciliation of cash and cash equivalents to the balance sheet:</b>										
Cash and temporary investments	\$ 2,405	\$ 97	\$ -	\$ -	\$ -	\$ -	\$ 110	\$ 1,053	\$ -	\$ 3,665
Restricted and designated funds - noncurrent	45,183	9,855	20,822	29,088	8,182	78,338	12,922	43,856	2,875	251,121
Total cash and investments	47,588	9,952	20,822	29,088	8,182	78,338	13,032	44,909	2,875	254,786
Less - long-term investments	(26,601)	(8,136)	(17,066)	(23,558)	(6,789)	(70,319)	(12,222)	(35,624)	(1,795)	(202,110)
Total cash and cash equivalents	\$ 20,987	\$ 1,816	\$ 3,756	\$ 5,530	\$ 1,393	\$ 8,019	\$ 810	\$ 9,285	\$ 1,080	\$ 52,676

# Massachusetts Municipal Wholesale Electric Company

Combining Fiduciary Financial Statements

December 31, 2016 and 2015

(In Thousands)

## STATEMENTS OF FIDUCIARY NET POSITION

	Administrative Plan		Union Plan		Total Fiduciary Funds	
	2016	2015	2016	2015	2016	2015
<b>ASSETS</b>						
Investments at fair value:						
Mutual funds	\$ 19,365	\$ 19,700	\$ 3,186	\$ 3,827	\$ 22,551	\$ 23,527
Guaranteed income funds	4,483	4,619	226	507	4,709	5,126
Total investments	<u>23,848</u>	<u>24,319</u>	<u>3,412</u>	<u>4,334</u>	<u>27,260</u>	<u>28,653</u>
Net position available for pension benefits	<u>\$ 23,848</u>	<u>\$ 24,319</u>	<u>\$ 3,412</u>	<u>\$ 4,334</u>	<u>\$ 27,260</u>	<u>\$ 28,653</u>

## STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

	Administrative Plan		Union Plan		Total Fiduciary Funds	
	2016	2015	2016	2015	2016	2015
<b>ADDITIONS</b>						
Employer contributions	\$ 34	\$ 480	\$ 197	\$ 118	\$ 231	\$ 598
Investment activity:						
Net appreciation in fair value of investments	1,165	147	170	80	1,335	227
Interest and dividends	138	167	24	25	162	192
Total investment activity	<u>1,303</u>	<u>314</u>	<u>194</u>	<u>105</u>	<u>1,497</u>	<u>419</u>
Total additions	<u>1,337</u>	<u>794</u>	<u>391</u>	<u>223</u>	<u>1,728</u>	<u>1,017</u>
<b>DEDUCTIONS</b>						
Benefits paid directly to participants	1,792	1,275	1,302	1,281	3,094	2,556
Administrative expenses	16	16	10	10	26	26
Total deductions	<u>1,808</u>	<u>1,291</u>	<u>1,312</u>	<u>1,291</u>	<u>3,120</u>	<u>2,582</u>
Net increase (decrease) in net position	(471)	(497)	(921)	(1,068)	(1,392)	(1,565)
Net position available for pension benefits, beginning of year	<u>24,319</u>	<u>24,816</u>	<u>4,334</u>	<u>5,402</u>	<u>28,653</u>	<u>30,218</u>
Net position available for pension benefits, end of year	<u>\$ 23,848</u>	<u>\$ 24,319</u>	<u>\$ 3,413</u>	<u>\$ 4,334</u>	<u>\$ 27,261</u>	<u>\$ 28,653</u>

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OTHER INFORMATION

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# Massachusetts Municipal Wholesale Electric Company

Pension Schedules of Employer Contributions (Unaudited)

December 31, 2016

(In Thousands)

## NET REVENUE AVAILABLE FOR DEBT SERVICE

In accordance with the provisions of MMWEC's GBR, MMWEC covenants that it shall fix, revise and collect rates, tolls, rents and other fees and charges sufficient to produce revenues to pay all Project operating and maintenance expenses, and principal, premium, if any, and interest on the Bonds. Revenues for each Project, which include applicable interest earnings from investments, are required to equal 1.10 times the annual debt service for each contract year ending June 30, after deduction of certain operating and maintenance expenses and exclusive of depreciation. As such, amounts included in the table below do not reflect December 31 balances. For the contract years ended June 30, 2015 and 2014, MMWEC met the GBR debt service coverage requirements for all of MMWEC's Projects.

	Contract Year Ended June 30,	
	2016	2015
	<u>                    </u>	<u>                    </u>
Revenues	\$ 104,979	\$ 102,546
Other billings	-	-
Reserve and contingency fund billings	6,091	6,112
Total	<u>111,070</u>	<u>108,658</u>
Less – operating and maintenance expenses	<u>44,073</u>	<u>41,427</u>
Available revenues net of expenses	<u>\$ 66,997</u>	<u>\$ 67,231</u>
Debt service requirement	<u>\$ 60,906</u>	<u>\$ 61,119</u>
Coverage (110% required)	110%	110%