New Issue

RATINGS*:

Moody's: Aa3

S&P: AA-

Due: July 1, as shown on the inside cover

In the opinion of Miller, Canfield, Paddock and Stone, P.L.C., Bond Counsel, under existing law, assuming compliance with certain covenants by the Lansing Board of Water and Light (the "Board" or the "BWL"), (i) the interest on the BWL's Utility System Revenue Refunding Bonds, Series 2017A (the "Bonds") is excludable from gross income for federal income tax purposes and (ii) the Bonds and interest thereon are exempt from all taxation by the State of Michigan (the "State") or by any taxing authority within the State except inheritance and estate taxes and taxes on gains realized from the sale, payment or other disposition thereof. See "TAX MATTERS" herein and Appendix F "FORM OF APPROVING OPINION" for a description of certain provisions of the Internal Revenue Code of 1986, as amended (the "Code") which may affect the tax treatment of interest on the Bonds for certain Bondholders.



\$30,365,000 LANSING BOARD OF WATER AND LIGHT CITY OF LANSING, MICHIGAN

UTILITY SYSTEM REVENUE REFUNDING BONDS, SERIES 2017A

Dated: Date of Delivery

The Bonds will be issued to provide funds for the purposes of (i) refunding a portion of the BWL's Water Supply, Steam, Chilled Water and Electric Utility System Revenue Bonds, Series 2008A (the "Bonds To Be Refunded") and (ii) paying costs of issuance of the Bonds and costs related to the refunding of the Bonds To Be Refunded. The Bonds are authorized to be issued pursuant to the Revenue Bond Act of 1933, Act No. 94, Public Acts of Michigan, 1933, as amended ("Act 94"), and an Amended and Restated Bond Resolution, as described herein.

The Bonds are secured by a statutory lien on, and payable solely from, Net Revenues, as defined herein, derived from the electric, water supply, steam and chilled water utilities of the BWL. The Bonds are not a general obligation of the City of Lansing, Michigan (the "City") and neither the full faith and credit nor the taxing power of the City is pledged to the payment of the principal of and interest on the Bonds. The Bonds do not constitute an indebtedness of the City within any constitutional, statutory or charter limitation.

The Bonds will be issued as fully registered bonds and, when issued, will be registered in the name of Cede & Co., as registered owner and nominee for The Depository Trust Company, New York, New York ("DTC"). So long as Cede & Co. is the registered owner of the Bonds, principal of and interest on the Bonds are payable by U.S. Bank National Association, as Transfer Agent, to Cede & Co., as nominee for DTC, and payment thereof will be made to purchasers by DTC direct participants or indirect participants, as described herein. Purchasers will acquire beneficial ownership interests in the Bonds in denominations of \$5,000 or integral multiples thereof.

The Bonds will bear interest at the rates set forth on the inside cover of this Official Statement, payable semiannually on January 1 and July 1 of each year, commencing July 1, 2017. Certain of the Bonds are subject to optional redemption prior to maturity as described herein. (See "The Bonds - Optional Redemption Prior to Maturity.")

The Bonds are offered when, and as if issued and received by the Underwriters, subject to the approving opinion of Bond Counsel, Miller, Canfield, Paddock and Stone, P.L.C., Lansing and Detroit, Michigan. Public Financial Management, Inc. is serving as the financial advisor to the BWL in connection with the sale and issuance of the Bonds. Certain matters will be passed on for the Underwriters by their counsel, Dykema Gossett PLLC. It is expected that the Bonds will be available for delivery through the facilities of DTC in New York, New York on or about February 15, 2017.

This cover page contains certain information for quick reference only. It is not a summary of the Bonds. Investors must read the entire Official Statement to obtain information essential to the making of an informed investment decision.

Citigroup BofA Merrill Lynch

Dated: January 12, 2017

* See "Ratings" herein.

\$30,365,000 UTILITY SYSTEM REVENUE REFUNDING BONDS, SERIES 2017A

Due	Principal	Interest		CUSIP^\dagger	Due	Principal	Interest		CUSIP^\dagger
<u>July 1</u>	<u>Amount</u>	<u>Rate</u>	<u>Yield</u>	<u>Base No. 516391</u>	<u>July 1</u>	<u>Amount</u>	<u>Rate</u>	<u>Yield</u>	<u>Base No. 516391</u>
2019	\$1,605,000	5.00%	1.380%	BT5	2026	\$2,175,000	5.00%	2.520%	CA5
2020	1,675,000	5.00	1.580	BU2	2027	2,275,000	5.00	2.630	CB3
2021	1,740,000	5.00	1.790	BV0	2028	2,385,000	5.00	2.740^{*}	CC1
2022	1,820,000	5.00	1.970	BW8	2029	2,495,000	5.00	2.810^{*}	CD9
2023	1,900,000	5.00	2.110	BX6	2030	2,615,000	5.00	2.850^{*}	CE7
2024	1,990,000	5.00	2.240	BY4	2031	2,740,000	5.00	2.900^{*}	CF4
2025	2,080,000	5.00	2.370	BZ1	2032	2,870,000	5.00	2.950^{*}	CG2

^{*} Yield to first call date of July 1, 2027

Registered trademark of American Bankers Association. CUSIP numbers are provided by S&P Global Ratings, a Standard & Poor's Financial Services LLC business. The CUSIP numbers listed above are being provided solely for the convenience of Bondholders only at the time of issuance of the Bonds and the BWL does not make any representation with respect to such number or undertake any responsibility for its accuracy now or at any time in the future. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of such maturity.

Certain information contained in this Official Statement has been obtained by the BWL, the City and from DTC and other sources that are deemed to be reliable. No representation or warranty is made, however, as to the accuracy or completeness of such information by the Underwriters. Nothing contained in this Official Statement is or shall be relied on as a promise or representation by the Underwriters. This Official Statement is being used in connection with the sale of securities as referred to herein and may not be used, in whole or in part, for any other purpose. The delivery of this Official Statement at any time does not imply that information in it is correct as of any time subsequent to its date.

No dealer, broker, salesman, or other person has been authorized by the BWL, the City or by the Underwriters, to give any information or to make any representations other than those contained herein, and if given or made, such other information or representations must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of any offer to buy, nor shall there be any sale of the Bonds, by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale.

U.S. Bank National Association, Lansing, Michigan (the "Transfer Agent"), by acceptance of its duties as Transfer Agent, has not reviewed this Official Statement and has made no representations as to the information contained herein.

The Underwriters have provided the following sentence for inclusion in this Official Statement: The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any other sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the BWL.

In connection with the offering of the Bonds, the Underwriters may overallot or effect transactions that stabilize or maintain the market price of the Bonds at a level above the level that might otherwise prevail in the open market. Such stabilizing, if commenced, may be discontinued at any time without notice. The prices and other terms respecting the offering and sale of the Bonds may be changed from time to time by the Underwriters after the Bonds are released for sale, and the Bonds may be offered and sold at prices other than the initial offering prices, including sales to dealers who may sell the Bonds into investment accounts.

The Bonds have not been registered with the Securities and Exchange Commission under the Securities Act of 1933, as amended, in reliance upon exemptions contained in such Act. The registration or qualification of the Bonds in accordance with the applicable provisions of securities laws of the states in which the Bonds have been registered or qualified and the exemption from registration or qualification in other state cannot be regarded as a recommendation thereof. In making an investment decision, investors must rely on their own examination of the BWL's financial records and the terms of the offering, including the merits and risk involved. These securities have not been recommended by any federal or state securities commission or regulatory authority. Furthermore, the foregoing authorities have not confirmed the accuracy or determined the adequacy of this document. Any representation to the contrary is a criminal offense.

The Official Statement contains disclosures which contain "forward-looking statements." Forward-looking statements include all statements that do not relate solely to historical or current fact, and can be identified by use of words like "may," "believe," "will," "expect," "project," "estimate," "anticipate," "plan" or "continue." These forward-looking statements are based on the current plans and expectations of the BWL and are subject to a number of known and unknown uncertainties and risks, many of which are beyond the BWL's control that could significantly affect current plans and expectations and the BWL's future financial position and results of operations. These factors include, but are not limited to, (i) changes in economic and fiscal conditions, and (ii) the outcome of pending and any future litigation. As a consequence, current plans, anticipated actions and future financial position and results of operations may differ from those expressed in any forward-looking statements made by or on behalf of the BWL. All forward-looking statements are expressly qualified by the cautionary statements contain in this paragraph. Neither the BWL nor the City undertakes any duty to update any forward-looking statements.



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CITY OF LANSING OFFICIALS

Mayor

Virg Bernero

City Council

Kathie Dunbar Tina Houghton Judi Brown Clarke

Adam Hussain Patricia Spitzley Jody Washington

Carol Wood Jessica Yorko

LANSING BOARD OF WATER AND LIGHT OFFICIALS **Board of Commissioners**

Chair Vice Chair David J. Price Mark Alley

Dennis M. Louney Anthony W. McCloud Anthony H. Mullen

Ken Ross Tracy Thomas Sandra Zerkle

Non-Voting Commissioners

Stuart D. Goodrich Robert Nelson William Long

BWL Administration

General Manager Richard R. Peffley

Executive Director of Executive Director of Chief Financial Officer Strategic Planning **Public Affairs** Heather Shawa-DeCook George R. Stojic Stephen Serkaian

Executive Director of **Executive Director Human Resources and Training** General Counsel of Operations Brandie Ekren Michael Flowers David Bolan

> Director of **Emergency Management** Trent Atkins

Lansing Board of Water and Light 1201 S. Washington Ave. Lansing, Michigan 48910 Phone: (517) 702-6000 www.lbwl.com

PROFESSIONAL SERVICES

Auditor: Bond Counsel: Financial Advisor: Transfer/Paying/Escrow Agent: **Underwriters' Counsel:**

Baker Tilly Virchow Krause, LLP, Madison, Wisconsin Miller, Canfield, Paddock and Stone, P.L.C., Lansing, Michigan Public Financial Management, Inc., Philadelphia, Pennsylvania U.S. Bank National Association, Lansing, Michigan Dykema Gossett PLLC, Lansing, Michigan

OFFICIAL STATEMENT

\$30,365,000 LANSING BOARD OF WATER AND LIGHT CITY OF LANSING, MICHIGAN UTILITY SYSTEM REVENUE REFUNDING BONDS, SERIES 2017A

INTRODUCTION

The Lansing Board of Water and Light (the "Board" or the "BWL") is issuing its \$30,365,000 Utility System Revenue Refunding Bonds, Series 2017A (the "Bonds") for the purposes of (i) refunding a portion of the BWL's Water Supply, Steam, Chilled Water and Electric Utility System Revenue Bonds, Series 2008A (the "Bonds To Be Refunded") and (ii) paying costs of issuance of the Bonds and costs related to the refunding of the Bonds To Be Refunded.

The City of Lansing, Michigan (the "City") located in the Counties of Ingham and Eaton, is a municipal corporation of the State of Michigan, organized and existing under the laws of the State including the City's Charter, as amended (the "Charter"). Under the Charter, the BWL is an administrative board and permanent agency of the City and has full and exclusive management of the water supply, steam and electric utility services of the City.

The Bonds are authorized to be issued pursuant to the Revenue Bond Act of 1933, Act No. 94, Public Acts of Michigan, 1933, as amended ("Act 94"), and an Amended and Restated Bond Resolution adopted by the BWL on October 24, 1989, as supplemented by the First Supplemental Revenue Bond Resolution adopted October 26, 1993, the Second Supplemental Revenue Bond Resolution adopted January 11, 1994, the Third Supplemental Revenue Bond Resolution adopted October 26, 1999, and amended on August 12, 2008 and June 9, 2009, the Fifth Supplemental Bond Resolution adopted April 24, 2001, the Sixth Supplemental Revenue Bond Resolution adopted July 23, 2002, the Eighth Supplemental Revenue Bond Resolution adopted July 26, 2005, the Tenth Supplemental Revenue Bond Resolution adopted January 29, 2008, the Eleventh Supplemental Revenue Bond Resolution adopted January 29, 2008, the Eleventh Supplemental Revenue Bond Resolution adopted January 24, 2012, the Thirteenth Supplemental Revenue Bond Resolution adopted January 24, 2012, the Thirteenth Supplemental Revenue Bond Resolution adopted on January 22, 2013, and the Fourteenth Supplemental Revenue Bond Resolution adopted November 15, 2016 (collectively, the "Bond Resolution"). U.S. Bank National Association, Lansing, Michigan, currently is the Transfer Agent and bond registrar under the Bond Resolution.

Pursuant to the Bond Resolution, all bonds issued and outstanding thereunder, except for Junior Lien Bonds (as defined in the Bond Resolution), are of equal standing and parity of lien and equally secured by the pledges and covenants in the Bond Resolution. (See "THE BONDS - Security.") The outstanding bonds previously or hereafter issued on a parity basis with the Bonds are called the "Outstanding Bonds" herein. Under the Bond Resolution, the BWL can issue Junior Lien Bonds which are of junior standing and priority of lien with respect to the Net Revenues to the claim of the Bonds. The Board does not currently have Junior Lien Bonds outstanding.

THE BONDS

General

The Bonds will be issued in the original aggregate principal amount as shown on the cover of this Official Statement. The Bonds will be dated as of the date of delivery and will bear interest from that date. Interest on the Bonds shall be payable semiannually on July 1 and January 1 of each year commencing on July 1, 2017. Interest on the Bonds shall be computed using a 360-day year and twelve 30-day months. The Bonds will mature on the dates and in the principal amounts and will bear interest at the rates as set forth on the inside cover of this Official Statement.

The Bonds will be issued as fully registered Bonds without coupons, and when issued, will be registered in the name of Cede & Co., as nominee for The Depository Trust Company, New York, New York ("DTC"). DTC will act as securities depository for the Bonds. Purchases of beneficial interests in the Bonds will be made in book-entry only form, in the denominations of \$5,000 or any integral multiple thereof. Purchasers will not receive certificates representing their beneficial interests in Bonds purchased. So long as Cede & Co. is the Bondholder, as nominee for DTC, references herein to the Bondholders or registered owners shall mean Cede & Co., as aforesaid, and shall not mean the Beneficial Owners (as defined herein) of the Bonds. See "THE BONDS - Book-Entry Only System," herein.

The principal and interest shall be payable at the designated corporate trust office of the Transfer Agent or such other Transfer Agent as the BWL may hereafter designate by notice mailed to the Bondholders. So long as DTC or its nominee, Cede & Co., is the Bondholder, such payments will be made directly to DTC. Disbursement of such payments to the Beneficial Owners is the responsibility of DTC Direct Participants and Indirect Participants (both as defined herein), as more fully described below. Interest shall be paid when due by check or draft mailed to the registered owners of Bonds as shown on the registration books as of the fifteenth day of the calendar month preceding the payment date for each interest payment.

Optional Redemption Prior to Maturity

The Bonds maturing in the years 2019 through 2027, inclusive, shall not be subject to optional redemption prior to maturity. The Bonds, or portions of the Bonds in multiples of \$5,000 maturing or subject to mandatory redemption in the years 2028 and thereafter shall be subject to redemption at the option of the BWL in such order of maturity as the BWL shall determine, and within a single maturity by lot, on any date on or after July 1, 2027 at par plus accrued interest to the date fixed for redemption.

Security

The principal of, and interest and redemption premium, if any, on the Bonds are payable solely from and secured by the Net Revenues (as defined herein) of the System. The "System" is defined in the Bond Resolution as the complete facilities of the BWL for the supply and distribution of water and the generation and distribution of electricity, steam, chilled water, and heat, including all plants, works, instrumentalities and properties used or useful in connection with the supply and distribution of water and the generation and distribution of electricity, steam, chilled water, and heat, and all additions, extensions and improvements thereto existing or hereafter acquired by the BWL. Pursuant to Act 94 and the Bond Resolution, the Net Revenues are pledged to the Bonds and the Outstanding Bonds (as defined herein) on a parity basis, and there is created a statutory lien thereon which is a first lien on a parity basis. As of January 1, 2017 there were \$316,490,000 aggregate outstanding principal amount of Outstanding Bonds, including the Bonds To Be Refunded, but not including the Bonds described herein.

"Revenues" is defined in the Bond Resolution as the income derived from the rates charged for the services, facilities, and commodities furnished by the System, earnings on investment of funds and accounts of the System required to be deposited in the Receiving Fund pursuant to the Bond Resolution and other revenues derived from or pledged to the operation of the System. "Net Revenues" is defined in the Bond Resolution as the Revenues remaining after deducting the reasonable expenses of administration, operation, and maintenance of the System.

The statutory lien on the Net Revenues of the System securing the Bonds and the Outstanding Bonds is senior in priority to the statutory lien on Net Revenues of the System pledged to pay any outstanding Junior Lien Bonds. The BWL has, in the past, issued Junior Lien Bonds but as of the date of this Official Statement no such Junior Lien Bonds are outstanding.

The rights or remedies of bondholders may be affected by bankruptcy, insolvency, fraudulent conveyance or other laws affecting creditors' rights generally now existing or hereafter enacted and by the application of general principles of equity, including those relating to equitable subordination.

The Bonds are not a general obligation of the City, and neither the full faith and credit nor the taxing power of the City is pledged to the payment of the principal of and interest on the Bonds. The Bonds do not constitute an indebtedness of the City within any constitutional, statutory or charter limitation.

Rate Covenant

The BWL has covenanted and agreed that it will at all times fix, establish, maintain and collect rates, fees and charges for the sale of the output, capacity, use or service of the System which, together with other income, are reasonably expected to yield Net Revenues equal to at least 125% of the principal and interest due on the Bonds, the Outstanding Bonds and any Additional Bonds for the forthcoming 12-month period plus such amount as is necessary to comply with all covenants in the Bond Resolution and to pay all charges and liens whatsoever payable out of Net Revenues in such period.

Rate Setting Authority

The Charter provides that the BWL shall have full and exclusive management of the water supply, steam and electric utility services of the City and such other services as may be agreed upon by the BWL and the City. The Charter also provides that the BWL may, with proper notice and hearing, fix just and reasonable rates as it deems necessary for such services. The implementation of new rates takes approximately three months and does not require any local, state or federal regulatory approval. It is the policy of the BWL to review all rates annually and to set such rates so that each respective utility (electric, water supply, steam and chilled water) is self-supporting. Rates are set on a cost of service basis. See "THE ELECTRIC UTILITY – Rates and Charges" for a discussion of the BWL's Energy Cost Adjustment for customers of the Electric Utility.

Bond Reserve Account

The BWL has established a bond reserve account (the "Bond Reserve Account") as required by the Bond Resolution. The "Reserve Requirement" is defined in the Bond Resolution to mean the lesser of (i) the maximum annual debt service requirements on the Outstanding Bonds, (ii) 125% of the average annual debt service requirements on the Outstanding Bonds, or (iii) the total of 10% of the original aggregate face amount of each series of the Outstanding Bonds, reduced by the net original issue discount, if any; provided, however, that the Reserve Requirement shall not at any time exceed the amount allowed to be invested at an unrestricted yield pursuant to Treas. Reg. Section 1.148-2(f)(2) or any successor provision thereto as applicable to the Bonds. On the date of delivery of Additional Bonds (other than Additional Bonds issued solely to refund Outstanding Bonds) the BWL shall transfer to the Bond Reserve Account from the proceeds of the Additional Bonds or any other available source the lesser of (a) 10% of the proceeds of the Additional Bonds and (b) the maximum Aggregate Debt Service Requirement (as defined in the Bond Resolution) on the Additional Bonds for the then current and any subsequent operating year until the amount in the Bond Reserve Account equals the Reserve Requirement, and commencing on the 1st day of the month following delivery of the Additional Bonds and on the 1st day of each month thereafter until the amount in the Bond Reserve Requirement, 1/12 of the difference between the amount deposited on the delivery of the Additional Bonds and the Reserve Requirement.

Except as provided in the Bond Resolution, the monies credited to the Bond Reserve Account shall be used solely for the payment of the principal of, redemption premium, if any, and interest on the Bonds, the Outstanding Bonds and any Additional Bonds as to which there would otherwise be a default. If at any time it shall be necessary to use monies in the Bond Reserve Account for such payment, then the monies so used shall be replaced from the Net Revenues first received thereafter which are not required for expenses of administration, operation and maintenance of the System or for current principal and interest requirements.

The BWL may satisfy the Reserve Requirement by a letter of credit, a surety bond or an insurance policy if the provider or issuer complies with the rating requirements set forth in the Bond Resolution for a provider or issuer of such letter of credit, surety bond or insurance policy. If at any time the amount in the Bond Reserve Account exceeds the Reserve Requirement, the excess may be transferred to such fund or account as the BWL may direct.

After payment or defeasance in full of the Outstanding Series 2008-2013 Bonds (as defined in the Bond Resolution), the Bond Resolution is amended to provide that the Supplemental Resolution authorizing Additional Bonds may either (i) provide that the Additional Bonds are equally and ratably secured by the Bond Reserve Account funded according to the Reserve Requirement, or (ii) provide for the creation of a separate bond reserve account securing that series of Additional Bonds and a different reserve requirement, or state that no bond reserve account is required. See "Appendix E – AMENDED AND RESTATED BOND RESOLUTION CONSOLIDATED VERSION – Section 11. Funds and Accounts; Flow of Funds."

Flow of Funds

All Revenues of the System shall be set aside as collected and credited to the Receiving Fund. Periodically, out of the Revenues credited to the Receiving Fund there shall be first set aside in, or credited to, a fund designated Operation and Maintenance Fund, a sum sufficient to provide for the payment during the succeeding period of the next month's expenses of administration and operation of the System, including such current expenses for the maintenance thereof as may be necessary to preserve the same in good repair and working order.

After provision for the Operation and Maintenance Fund, there shall be set aside on or before the first day of each month, in the Bond and Interest Redemption Fund a sum equal to 1/6th of the interest on all Senior Lien Bonds next

coming due and 1/12th of the total amount of the principal of all Senior Lien Bonds due on the next July 1 and 1/12th of the maturing amount of any capital appreciation bonds due one year or less from the 1st day of such month. If there is any deficiency in the amount previously set aside, that deficiency shall be added to the requirements for the next succeeding month.

If at any time it shall be necessary to use moneys credited to the Bond Reserve Account for such payment, then the moneys so used shall be replaced from the Net Revenues first received thereafter which are not required for expenses of administration, operation and maintenance of the system or for current principal and interest requirements on any of the Bonds.

If the BWL issues Junior Lien Bonds, revenues remaining in the Receiving Fund, after provision has been made for the requirements of the Operation and Maintenance Fund and of the Bond and Interest Redemption Fund, shall be set aside, but not more often than monthly, in the Junior Lien Bond and Interest Redemption Fund for the purpose of paying the principal of, redemption premium, if any, and interest on such Junior Lien Bonds as they come due, in accordance with the resolution authorizing the issuance of the Junior Lien Bonds.

Any Revenues in the Receiving Fund after satisfying all requirements of the Operation and Maintenance Fund, the Bond and Interest Redemption Fund, the Rebate Fund and the Junior Lien Bond and Interest Redemption Fund shall be deemed to be surplus moneys and may be used for such purposes as the BWL deems to be for the best interests of the City.

If there should be any deficit in the Operation and Maintenance Fund, Bond and Interest Redemption Fund or the Rebate Fund on account of defaults in setting aside required amounts therein, then transfers shall be made from the moneys remaining in the Receiving Fund at the end of any operating year to those funds in the priority and order specified herein, to the extent of any deficit, before any other disposition is made of the monies in the Receiving Fund at the end of any operating year.

For a complete description of the funds and accounts and flow of funds, see "AMENDED AND RESTATED BOND RESOLUTION - CONSOLIDATED VERSION" attached hereto as Appendix E.

Outstanding Parity Bonds

The Bonds are being issued by the BWL on parity with its outstanding Water Supply, Steam, Chilled Water and Electric Utility System Revenue Bonds, Series 2008A (the "Outstanding 2008A Bonds"), Utility System Revenue Bonds, Series 2011A (the "Outstanding 2011A Bonds"), Utility System Revenue Refunding Bonds, Series 2012A (the "Outstanding 2012A Bonds"), and Utility System Revenue Refunding Bonds, Series 2013A (the "Outstanding 2013A Bonds" and together with the Outstanding 2008A Bonds, the Outstanding 2011A Bonds and the Outstanding 2012A Bonds, the "Outstanding Bonds") under the provisions of Act 94 and the Bond Resolution.

The BWL has, in the past, issued Junior Lien Bonds but as of the date of this Official Statement no such Junior Lien Bonds are outstanding.

Following the issuance of the Bonds, the BWL will have the following Outstanding Bonds in the aggregate principal amounts with final maturities set forth below:

	Par	Final
	Outstanding	<u>Maturity</u>
Water Supply, Steam, Chilled Water, and Electric Utility System		
Revenue Bonds, Series 2008A	\$ 3,420,000	July 1, 2018
Utility System Revenue Bonds, Series 2011A	249,990,000	July 1, 2041
Utility System Revenue Refunding Bonds, Series 2012A	10,375,000	July 1, 2018
Utility System Revenue Refunding Bonds, Series 2013A	18,025,000	July 1, 2026
Utility System Revenue Refunding Bonds, Series 2017A	30,365,000	July 1, 2032
Total	\$ <u>312,175,000</u>	

For a description of the debt service on the Outstanding Bonds upon the issuance and sale of the Bonds, See "DEBT SERVICE REQUIREMENTS."

Additional Bonds

In accordance with the provisions of Act 94 and the Bond Resolution, the BWL may issue additional bonds payable from the Net Revenues of the System, which shall be of equal standing and priority of lien on the Net Revenues of the System with the Bonds and the Outstanding Bonds, for repairs, extensions, enlargements and improvements to the System or for the purpose of refunding all or (subject to certain conditions) part of the Bonds and the Outstanding Bonds (the "Additional Bonds"). Except as described below, no such Additional Bonds shall be issued unless the actual or augmented Net Revenues of the System for the fiscal year ending not more than 15 months prior to the sale of the Additional Bonds shall be equal to at least one hundred twenty-five percent (125%) of the maximum amount of principal and interest due in any current or future fiscal year on the Bonds, the Outstanding Bonds and any Additional Bonds outstanding or then being issued. If Additional Bonds are to be issued in whole or in part for refunding Outstanding Bonds, the maximum Aggregate Debt Service shall be determined by deducting from the principal and interest requirements for each operating year the annual Aggregate Debt Service Requirement of any Bonds to be refunded from the proceeds of the Additional Bonds.

In determining whether Additional Bonds can be issued in compliance with the Bond Resolution, (i) if System rates, fees or charges shall be increased at or prior to the time of authorizing Additional Bonds, the Net Revenues may be augmented by an amount which in the opinion of the BWL's financial advisor will reflect the effect of the increase had the System's billings during such time been at increased rates, and (ii) the actual Net Revenues may be augmented by the estimated increase in Net Revenues which in the opinion of the BWL's financial advisor will accrue as a result of new customers which have not been serviced during the fiscal year described above or which will be acquired in whole or in part from the repairs, extensions, enlargements and improvements to the System to be financed with the proceeds of Additional Bonds to be issued.

Additional Bonds also may be issued to refund a part of the Outstanding Bonds and to pay costs of issuing such Additional Bonds, if after giving effect to the refunding, the maximum amount of Aggregate Debt Service in each future fiscal year shall be less than the Aggregate Debt Service in each future fiscal year prior to giving effect to the refunding.

Additional Bonds also may be issued without meeting any of the conditions and tests set forth above to pay the cost of acquisition and construction of any repairs, replacements, betterments, improvements, major renewals or corrections of any damage or loss to the System necessary, in the opinion of the Consulting Engineer (as defined in the Bond Resolution), to keep the System in good operating condition or to prevent a loss of revenues therefrom or to pay the cost of decommissioning, disposal or termination of the System.

For a complete description of the terms upon which Additional Bonds may be issued, see "AMENDED AND RESTATED BOND RESOLUTION - CONSOLIDATED VERSION" attached hereto as Appendix E.

Book-Entry Only System and Transfer Outside Book-Entry Only System

DTC will act as securities depository for the Bonds. Additional information regarding DTC and the book-entry only system is attached hereto as Appendix H. In the event the book-entry only system is discontinued, the following provisions would apply to the Bonds. The Transfer Agent will act as transfer agent and bond registrar and shall keep the registration books for the Bonds (the "Bond Register") at its corporate trust office. Subject to the further conditions contained in the Bond Resolution, the Bonds may be transferred or exchanged for one or more Bonds in different authorized denominations upon surrender thereof at the corporate trust office of the Transfer Agent by the registered owners or their duly authorized attorneys; upon surrender of any Bonds to be transferred or exchanged, the Transfer Agent shall record the transfer or exchange in the Bond Register and shall authenticate replacement bonds in authorized denominations; during the 15 days immediately preceding the date of mailing of any notice of redemption or any time following the mailing of any notice of redemption, the Transfer Agent shall not be required to effect or register any transfer or exchange of any Bond which has been selected for such redemption, except the Bonds properly surrendered for partial redemption may be exchanged for new Bonds in authorized denominations equal in the aggregate to the unredeemed portion; the BWL and Transfer Agent shall be entitled to treat the registered owners of the Bonds, as their names appear in the Bond Register as of the appropriate dates, as the owner of such Bonds for all purposes under the Bond Resolution. No transfer or exchange made other than as described above and in the Bond Resolution shall be valid or effective for any purposes under the Bond Resolution.

THE PLAN OF REFUNDING

General

The 2008A Bonds To Be Refunded consist of the following outstanding bonds issued by the BWL:

Water Supply, Steam, Chilled Water and Electric Utility System Revenue Bonds, Series 2008A

Maturity (July 1)	Interest Rate	Principal Amount	CUSIP ¹ Base No. 51639L
2019	5.00%	\$ 1,825,000	EL5
2020	5.00%	1,905,000	EM3
2021	5.00%	1,985,000	EN1
2022	5.00%	2,075,000	EP6
2023	5.00%	2,170,000	EQ4
2024	5.00%	2,270,000	ER2
2025	5.00%	2,375,000	ES0
2026	5.00%	2,485,000	ET8
2027	5.00%	2,600,000	EU5
2028	5.00%	2,725,000	EV3
2032	5.00%	12,265,000	EZ4

The BWL's Water Supply, Steam, Chilled Water and Electric Utility System Revenue Bonds, Series 2008A maturity in the years 2017 through 2018, inclusive, are referred to as the "Unrefunded Series 2008A Bonds."

BWL regularly reviews the interest rates borne by its outstanding bonds and the redemption provision thereof in light of current market conditions and the restrictions of federal tax law with a view towards reducing aggregate debt service expenses by appropriately timed and sized refundings. BWL may consider additional bonds to be refunded as part of this transaction.

Advance Refunding

As of the date of this Official Statement, the principal amount of the Bonds To Be Refunded is \$34,680,000. A portion of the proceeds of the Bonds, and available cash, will be used to provide funds to refund the Bonds To Be Refunded and to pay the costs of issuance of the Bonds, including costs related to the refunding of the Bonds To Be Refunded. The Bonds To Be Refunded are being refunded to produce debt service savings.

Pursuant to the terms of the Escrow Agreement (the "Escrow Agreement") for the Bonds To Be Refunded to be entered into between the BWL and U.S. Bank, National Association (the "Escrow Agent"), the refunding of the Bonds To Be Refunded will be effected by the BWL depositing with the Escrow Agent a portion of the proceeds of the Bonds which will be used to purchase on the issuance date of the Bonds certain noncallable direct obligations of the United States or obligations the principal of and interest on which are fully and unconditionally guaranteed by the United States (the "Government Obligations"). Such Government Obligations will bear interest at such rates and will be scheduled to mature at such times and in such amounts so that, when paid in accordance with their respective terms, sufficient moneys will be available therefrom (together with any uninvested cash) to pay (i) the interest due on the Bonds To Be Refunded to and including July 1, 2018, which is the first optional redemption date for the Bonds To Be Refunded and (ii) the redemption price of the Bonds To Be Refunded on July 1, 2018.

Principal of and interest on the Government Obligations in the Escrow Agreement, together with any uninvested cash, will be held in trust and used solely for the payment of the redemption price of and interest on the Bonds To Be Refunded, subject only to the payment to the BWL in accordance with the Escrow Agreement of any amounts not required for such purpose.

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¹ Registered trademark of American Bankers Association. CUSIP numbers are provided by S&P Global Ratings, a Standard & Poor's Financial Services LLC business. The CUSIP numbers listed above are being provided solely for the convenience of Bondholders only at the time of issuance of the Bonds and the BWL does not make any representation with respect to such number or undertake any responsibility for its accuracy now or at any time in the future. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of such maturity.

The Bonds To Be Refunded will be legally defeased upon issuance of the Bonds, and accordingly the lien on the Net Revenues under the Bond Resolution with respect to the Bonds To Be Refunded will be released. The Unrefunded Series 2008A Bonds are not being refunded and will remain outstanding bonds secured as provided in the Bond Resolution.

Verification Report

On or prior to the date of delivery of the Bonds, Robert Thomas, CPA LLC, independent certified public accountants, will deliver a report attesting to the mathematical accuracy of the computations contained in the schedules prepared by the Underwriters on behalf of the BWL relating to the adequacy of the Government Obligations and cash being deposited in the Escrow Agreement.

ESTIMATED SOURCES AND USES OF FUNDS

Sources	
Principal Amount of the Bonds	\$30,365,000.00
Net Original Issue Premium	5,392,546.80
Transfer from Debt Service Fund for the Bonds To Be Refunded	289,000.00
Bond Reserve Account Release (1)	1,088,114.52
Total Sources	\$37,134,661.32
Uses	
Deposit to the Escrow Agreement	\$36,755,550.89
Costs of Issuance (2)	223,713.46
Underwriters' Discount	155,396.97
Total Uses	\$37,134,661.32

⁽¹⁾ Represents the excess amount above the Bond Reserve Account requirement.

⁽²⁾ Includes legal, ratings, financial advisory, printing and other costs of issuance.

DEBT SERVICE REQUIREMENTS

The following table sets forth the Outstanding Bonds of the BWL following the issuance of the Bonds and the refunding of the Bonds to be Refunded.

				201	7A Bonds			
Year								
Ending		Outstanding						Total
July 1	Bo	onds Debt Service*	Principal Principal		<u>Interest</u>	<u>D</u>	ebt Service	Debt Service
2017	\$	23,396,950	\$ -	\$	573,561	\$	573,561	\$ 23,970,511
2018		22,525,950	-		1,518,250		1,518,250	24,044,200
2019		18,759,500	1,605,000		1,518,250		3,123,250	21,882,750
2020		18,769,600	1,675,000		1,438,000		3,113,000	21,882,600
2021		18,783,325	1,740,000		1,354,250		3,094,250	21,877,575
2022		18,793,325	1,820,000		1,267,250		3,087,250	21,880,575
2023		18,803,575	1,900,000		1,176,250		3,076,250	21,879,825
2024		18,808,325	1,990,000		1,081,250		3,071,250	21,879,575
2025		18,817,475	2,080,000		981,750		3,061,750	21,879,225
2026		18,825,475	2,175,000		877,750		3,052,750	21,878,225
2027		19,345,725	2,275,000		769,000		3,044,000	22,389,725
2028		19,346,725	2,385,000		655,250		3,040,250	22,386,975
2029		19,357,225	2,495,000		536,000		3,031,000	22,388,225
2030		19,360,725	2,615,000		411,250		3,026,250	22,386,975
2031		19,366,475	2,740,000		280,500		3,020,500	22,386,975
2032		19,371,000	2,870,000		143,500		3,013,500	22,384,500
2033		22,823,000	-		-		-	22,823,000
2034		22,821,250	-		-		-	22,821,250
2035		22,823,500	-		-		-	22,823,500
2036		22,822,750	-		-		-	22,822,750
2037		22,822,250	-		-		-	22,822,250
2038		22,825,000	-		-		-	22,825,000
2039		22,821,625	-		-		-	22,821,625
2040		22,822,700	-		-		-	22,822,700
2041		<u>22,824,925</u>						22,824,925
Totals	\$	<u>517,838,375</u>	\$ <u>30,365,000</u>	\$	14,582,061	\$	<u>44,947,061</u>	\$ <u>562,785,436</u>

^{*} Excludes the debt service on the Bonds To Be Refunded.

THE LANSING BOARD OF WATER AND LIGHT

The City of Lansing

The City, the capital of the State of Michigan, encompasses an area of approximately 37 square miles and has a 2014 estimated population of 114,376 people. It is located approximately 85 miles northwest of Detroit and 65 miles southeast of Grand Rapids. It is estimated that the City is within 90 miles of 90% of the State's population. Residential, commercial and industrial valuations account for approximately 57%, 30% and 5%, respectively, of the City's 2016 Taxable Valuation, as defined in Appendix A. The balance of the City's 2016 Taxable Valuation is personal property that is primarily commercial and industrial in nature. General Motors, the State of Michigan and Michigan State University, in adjacent East Lansing, are significant factors in the local economy.

The Bonds are not a general obligation of the City, and neither the full faith and credit nor the taxing power of the City is pledged to the payment of the principal of and interest on the Bonds. The Bonds do not constitute an indebtedness of the City within any constitutional, statutory or charter limitation.

History and Organization

By a vote of the City's electorate, the BWL was founded in 1885 to provide safe drinking water and fire protection. In 1892, the BWL took control of a local power plant to provide street lighting. Steam service was added in 1919 when the Michigan Heat and Power Company was purchased by the BWL.

The BWL is a combined municipal utility system. It provides electric, water, chilled water and steam services to some or all of the City, the City of East Lansing and surrounding townships. The City's Charter provides that the BWL shall have full and exclusive management of the electric, water and steam utility services of the City and such other services as may be agreed upon by the BWL and the City. The Charter provides that the BWL may fix just and reasonable rates as it deems necessary for services provided by the BWL. It is the policy of the BWL to review all rates annually and to set such rates so that each respective utility within the System (water supply, steam, chilled water and electric) is self-supporting. The BWL is composed of eight commissioners, appointed by the Mayor and confirmed by the City Council. The BWL also has three non-voting commissioners representing townships served by the BWL outside of the City.

Integrated Resource Plan and Strategic Plan

The BWL formed a Citizens Advisory Committee in September of 2015 with the goal of receiving recommendations regarding an integrated resource plan for the BWL. The Committee was comprised of nine members representing a cross section of the communities and customers supported by the BWL. The Committee recommended an addition of 85 MW of wind generation in 2018 and 120 MW of additional solar generation between 2020 and 2030. The Committee further recommended the addition of 250 MW of natural gas generation between 2020 and 2030 and an additional 150 MW of natural gas generation in 2030. No specific retirement date has been determined for the Erickson plant. However, the IRP assumed a retirement date of 2030, and this date is the basis for the recommended timing of natural gas plant additions. Subsequent to the Committee's recommendation, there has been discussion of an earlier than expected retirement of the Erickson Station. Should the decision be made to retire the Erickson Station earlier, natural gas generation capacity additions may be adjusted from the recommendation made by the Citizens Advisory Committee.

The Board of Commissioners approved a strategic plan on September 27, 2016 providing guidance for fulfilling the mission and values of the organization. The strategic plan affirms the mission and values of the BWL, identifies future challenges and opportunities, recommends strategies for success, and adopts seven goals. Strategic goals were adopted in the following areas: customer experience, community involvement, effective acquisition and management of resources, implementation of new technology, workforce, financial stability, and BWL leadership. The strategic plan has been communicated to all BWL employees and will provide a framework for initiatives to be undertaken and work completed in the coming years.

Capital Improvement Plan

The BWL has a six-year capital improvement plan that is updated and adopted annually (the "Plan"). The Plan is designed to address current and future capital needs of the System in an effort to reliably meet existing and projected demand for the services provided by the BWL. The current Plan covering the next six years was adopted in July 2016 and consists of approximately \$372 million in capital expenditures. The six year plan is expected to be funded entirely by internally generated funds. Capital expenditures by utility are as follows: Electric: \$263 million, Water: \$52 million, Steam: \$24 million, Chilled Water: \$1 million, and Common: \$32 million. These capital expenditures can also be broken down by location as follows: Moores Park Dam: \$2.6 million, Eckert: \$1.3 million, Erickson: \$38.6 million, Reo Plant: \$5.7 million, Transmission and Distribution: \$278.2 million, Water Production: \$12.5 million, Chiller Plant: \$0.4 million, Other: \$32.4 million.

The strategic plan adopted the 30% clean energy goal proposed by the Citizens Advisory Committee as well as its recommendation for additional natural gas fired generation. The Board affirmed the BWL's long-term policy of maintaining local generation to help ensure local generation reliability. Capital costs for these projects are unknown at this time and are not included in the capital expenditures disclosed above. Capital costs related to replacement generation are expected to be funded with proceeds from bond issues. Additional renewable projects are likely to be secured through long-term purchase agreements with developers who can take advantage of tax incentives.

Board of Water and Light Administrators

Richard Peffley joined the Board of Water and Light in 1976 and has been the General Manager since 2015.

Mr. Peffley's experience at the BWL is extensive having held numerous positions within the company including Executive Director of Operations and Plant Manager of the Erickson and Eckert Power Stations. Mr. Peffley also served as project manager for the \$182 million REO Cogeneration Plant and Headquarters and the \$20 million Chilled Water Plant. He successfully brought both projects to completion on time and on budget.

Under Mr. Peffley's leadership, in July of 2013 the BWL distributed a record-breaking 1 billion gallons of water in one month.

Mr. Peffley's extensive experience and track record of success will help lead the BWL into the future of utility service.

Heather Shawa-DeCook has been the Chief Financial Officer of the Lansing Board of Water and Light since 2015.

Ms. Shawa-DeCook is responsible for the BWL's financial and administrative operations including finance and planning, budgeting, accounting, customer service, purchasing and warehousing, and information technology.

Prior to joining the BWL team, Ms. Shawa-DeCook served as Vice President of Operations and Chief Financial Officer at Demmer Corporation. Her responsibilities included administrative, financial, and manufacturing plant operations, including human resources, quality assurance, procurement and supply chain, as well as traditional CFO finance and accounting oversight. During her time she assisted in five successful acquisitions which formed the holding company Demmer Investments where she served as Treasurer.

Ms. Shawa-DeCook serves on the Board for Peckham, Inc. and also is on the Board of the Lansing Regional Chamber of Commerce.

Previously, Ms. Shawa-DeCook served on the Mayor of Lansing's City Financial Health Team.

Dave Bolan joined the Board of Water and Light in 1987 and has been the Executive Director of Operations since 2015.

Mr. Bolan is responsible for transmission and distribution, electric generation, and water production and distribution. Previously, Mr. Bolan served the BWL as Director of Transmission and Distribution and the Manager of Bulk Power.

Prior to joining the BWL team, Mr. Bolan was part of the Electric Systems Division at Houston Lighting and Power. Mr. Bolan served as an engineer and was assigned projects and studies in transmission design and planning, substation design, and system operations.

Brandie Ekren joined the BWL in 2004 as the utility's staff attorney and has served as General Counsel since 2008.

Ms. Ekren advises the Board of Commissioners and executive management on a number of business, employment, risk, and compliance matters at the BWL, which includes but is not limited to transactional and compliance matters ranging from coal supply and transportation agreements, construction, power sales and purchases to consulting, development transactions and labor matters. Additionally, Ms. Ekren manages both in-house and external legal counsel in a manner that is cost effective and efficient while accomplishing the business objective and strategic plans of the BWL. Ms. Ekren also serves as a liaison to the Lansing City Attorney's office.

Michael Flowers has been with the Board of Water and Light since 2008 and was named Executive Director of Human Resources in 2015.

Mr. Flowers has extensive experience and is responsible for human resources, labor relations, training and development, inclusion and equity, and safety at the BWL.

Previously Mr. Flowers worked in Human Resources for Accident Fund Insurance Company and Sparrow Health System. Mr. Flowers also teaches human resources at Lansing Community College.

Mr. Flowers is the President of the Board of Education for Ingham Intermediate School District. He is Past President and a current member of the Board for Peckham Industries. Mr. Flowers is also Past President and a current member of the advisory board for the Labor and Employment Relations Association and a Board member for the Capital Region Community Foundation and Lansing Community College Foundation.

Stephen Serkaian has been with the Board of Water and Light since 2012 and was named Executive Director of Public Affairs in 2015.

Mr. Serkaian is responsible for internal and external communications, media relations, and governmental and community relations for the BWL.

Previously, Mr. Serkaian worked for Detroit Mayor Dave Bing, the Lansing School District, Lansing Mayor David Hollister, the Michigan House of Representatives, and U.S. Senator Carl Levin.

George Stojic is the Executive Director of Planning and Development at the Board of Water and Light. He is responsible for long-term planning, wholesale market operations, NERC compliance program, environmental compliance, customer projects, renewable energy and energy efficiency programs, and project engineering.

Mr. Stojic joined the BWL in 2007. Prior to his current position, he was the Director of the Operations and Wholesale Market Division at the Michigan Public Service Commission, where he led the development of the State's 21st Century Energy Plan, which served as a blueprint for major utility restructuring in Michigan.

He also led in the review and development of electric and gas reliability operations at the Michigan Public Service Commission, and enforcement of the State's natural gas safety program, pipeline certification program, and natural gas storage operations.

Prior to his appointment to Director of Operations and Wholesale Markets, Mr. Stojic served as Manager of Financial Analysis at the Michigan Public Service Commission and participated in most aspects of the utility ratemaking process.

Trent Atkins joined the Board of Water and Light in 2014 and was named Director of Emergency Management in 2015.

Mr. Atkins is responsible for emergency management, risk management, and physical security. Mr. Atkins is also the NERC CIP manager and privacy officer for the BWL.

Previously, Mr. Atkins served the Lansing Fire Department for 24 years. Mr. Atkins served as the Assistant Fire Chief and the Chief of the City of Lansing's Emergency Management.

Mr. Atkins holds several professional certifications in emergency management, public safety, and homeland security.

Labor Relations and Personnel Matters

During the fiscal year ending June 30, 2016, the BWL employed 720 people, of whom, 308 people were considered general System employees. The balance was considered utility-specific employees with electric, steam and combined water operations employing 319, 7 and 86 people, respectively.

The International Brotherhood of Electric Workers, AFL-CIO, Local Union 352, represents approximately 453 BWL employees. The labor agreement covering these employees expires on October 31, 2020. Remaining BWL employees are non-union.

The BWL has three retirement plans. See "PENSION AND RETIREMENT SYSTEMS".

Collection and Enforcement

All customers of the System are billed monthly. Billings are based on actual readings and are due and payable within fifteen days of the mailing date. Accounts remaining unpaid are charged 5% per month on the amount owed. Service may be disconnected when the unpaid balance is 40 days past due. Further collection attempts on closed accounts are made by the BWL's internal staff for an additional 60 days, after which unpaid accounts are turned over to a collection agency. Uncollectible accounts approximate 0.4% of revenues.

Insurance

The BWL has purchased various property and casualty insurance policies to cover many of the risks of loss that it faces. However, the deductibles, scope and limits of the insurance coverages vary from time to time depending on such factors as pricing and availability. By way of illustration, the BWL currently has a total limit of \$750 million for property losses with the majority on a replacement cost basis. The amount of deductibles currently varies, with the largest deductible being \$1,000,000. There is also a combination of liability coverages that total \$31 million for certain bodily injury and property damage claims.

THE ELECTRIC UTILITY

General

The Electric Utility component of the System has been operated by the BWL for over 120 years. It is the largest municipally-owned electric utility in Michigan with more than 96,700 customers in the greater Lansing area. A map of the service area of the Electric Utility is attached in Appendix B.

The Electric Utility owns one operating hydroelectric generating unit, two coal-fired electric generating facilities, a natural gas-fired cogeneration plant, and a solar installation. Jointly, the hydroelectric unit and solar array have less than one MW of generating capacity. The coal-fired electric generating facilities consist of four units with a combined net generating capacity of 347 MW. The natural gas-fired cogeneration plant has net generating capacity of 104 MW. Through its participation in the Michigan Public Power Agency ("MPPA"), the Electric Utility has an additional capacity and energy entitlement of 150.8 MW from the Belle River generating facilities in St. Clair County, Michigan. The Electric Utility also has a power purchase contract with two landfill gas electric generation facilities in Lansing totaling 11.1 MW of capacity and a power purchase contract with a northern Michigan hydro-electric facility for 1.7 MW of capacity. The electric utility has a purchase power contract for 19.2 MW of wind generation with BEEBE 1B Renewable Energy. In addition to these projects which are operational, the BWL also has a contract for solar energy, 18.5 MW, which is expected to be operational in 2017. The BWL also has contracted for additional wind energy and capacity of 88 MW which is in the permitting process. If all permits are secured, the facility is expected to be operational in 2018.

In addition to its generating facilities, the Electric Utility maintains 48 miles of transmission lines, 13 substations, 1,200 miles of overhead distribution lines and 679 miles of underground distribution lines. The 138 kilovolt ("kV") transmission lines loop through the 70 square mile service area and connect with transmission facilities owned by the International Transmission Company (the "ITC") with four lines at two locations. The bulk of the BWL's distribution lines are operated at 13.2 kV, with the balance, operated at 4.16 kV and 8.320 kV, being in the process of conversion to 13.2 kV distribution lines.

Joint Agency Participation

The BWL and 16 other Michigan municipalities which own and operate electric systems are members of MPPA. MPPA was created in 1978 pursuant to Act No 448, Public Acts of Michigan, 1976, as amended (the "MPPA Act"), for the purpose of undertaking the planning, financing, development, acquisition, construction, reconstruction, improvement, enlargement, betterment, operation or maintenance of a project or projects to supply electric power and energy for the present and future needs of its member municipalities. Any Michigan municipality engaged in the generation, transmission or distribution of electricity may join MPPA if such municipality's governing body adopts an appropriate resolution and obtains unanimous approval of the MPPA's existing members. MPPA's membership currently includes the cities of Bay City, Charlevoix, Chelsea, Eaton Rapids, Grand Haven, Harbor Springs, Hart, Holland, Lansing, Lowell, Marquette, Petoskey, Portland, St. Louis, Traverse City, Wyandotte, and Zeeland.

Purchased Power

In 1983, MPPA issued \$590,370,000 of revenue bonds to purchase an interest in the Detroit Edison Company's ("Detroit Edison") Belle River coal-fired generating facilities in St. Clair County, Michigan ("Belle River"). The MPPA, through its purchase agreements with Detroit Edison, owns 18.61% of Belle River Units Nos. 1 and 2, which have a combined nameplate rating of 1,260 MW. Through its participation in the MPPA, the BWL has purchased a capacity and energy entitlement of 150.8 MW. The BWL has entered into a power sales contract and project support contract with MPPA pursuant to which the BWL is required to make payments to MPPA sufficient to pay the BWL's proportionate share of MPPA's operation and maintenance expenses and debt service requirements on bonds associated with Belle River. The BWL is entitled to its proportionate share of the capacity and energy from Belle River.

Under the power sales contract, the BWL must pay for power and related costs so long as power is available, which charges are an operating expense of the Electric Utility and, as such, have priority over the lien securing the Bonds. The obligations of the BWL under the power sales contracts are unconditional and payment must be made regardless of whether or not Belle River is in operation and notwithstanding the suspension or curtailment of the output of Belle River. The obligations of the BWL under the project support agreement are not an operating expense of the Electric Utility, and therefore, are made after payment of operating expenses of the Electric Utility and after payment of debt service on the Bonds and certain other bonds of the BWL issued pursuant to Act 94. Belle River was declared to be in commercial operation in July of 1985. The Electric Utility is utilizing the BWL's full capacity and energy entitlement from Belle River.

The contracts which the BWL has entered into with MPPA relating to the Belle River Project require the Electric Utility to assume the obligations of a defaulting participant and, in such event, entitle the BWL to the capacity and energy of the defaulting participant; provided, however, such additional entitlement and obligation is not required to exceed twenty-five percent (25%) of the initial Electric Utility entitlement and obligation. There has never been a default by any of the participants of the Belle River Project.

Excluding possible transmission losses, the following table projects the Belle River power cost per kilowatt hour ("kWh") at 80% availability from 2017 through 2021.

Lansing Board of Water and Light Electric Utility Projected Belle River Power Costs per kWh Fiscal Years Ended or Ending June 30, 2013 through 2017

	Cents
Year	Per kWh
2017	6.53 cents
2018	5.91 ⁽¹⁾ cents
2019	4.65 cents
2020	4.75 cents
2021	4.95 cents

⁽¹⁾ Debt Service payments for Belle River will fall off in the middle of FY 2018 lowering the cost per kWh. FY 2017 Belle River Debt Service is \$17.7 million. Following payoff of outstanding bonds, the members of the MPPA Belle River Project have the option to have the title to MPPA's ownership interest transferred to the individual project member. Otherwise MPPA's ownership interest remains unchanged as does the power purchase agreements with Belle River Project members.

Source: Lansing Board of Water and Light

In 2007, the Electric Utility entered into a long-term power purchase agreement with the Granger Company of Lansing. Granger owns and operates two landfill facilities in and near Lansing that capture landfill gas to fuel electric generating units. The contract currently provides electric energy from units totaling 11.1 MW of capacity, and this may expand up to 12 MW, depending on the future production of gas at the facilities. Payment to Granger is made on an energy delivered basis and the units have averaged an 85% or higher capacity factor since 2007. The BWL pays Granger 8.59 cents per kWh for energy delivered. The purchase power contract entitles the Electric Utility to the environmental attributes associated with the operation of the electric generating units. The power from both facilities qualifies to meet Michigan's renewable energy portfolio standard.

The BWL also has a power purchase contract with Tower Kleber hydro-electric, located in northern Michigan. The contract is for 1.7 MW, and automatically renews each year on January 1 unless notice to terminate is given by one of the parties. The required notice to terminate the contract is 6 months. The current contract provides the Electric Utility with the environmental attributes associated with the unit. The power from this facility qualifies to meet Michigan's renewable energy portfolio standard.

The BWL has a power purchase agreement with BEEBE 1B Renewable Energy LCC for 19.2 MW of wind power generated from site location in Gratiot County Michigan. The Contract is for 20 commercial years with a commercial operating date of December 12, 2014.

Transmission Arrangements

ITC, the principal transmission owner in Lower Michigan, is a member of the Midcontinent Independent System Operator ("MISO"). As a member of MISO, ITC has turned over operation of its transmission facilities to MISO and operates under MISO's Open Access Transmission, Energy, and Operating Reserve Tariff ("Midwest Market"). One impact of this membership has been an increase in transmission charges related to transmission investment and MISO overhead charges. The Electric Utility is not a network integration transmission customer of the MISO, but does have entitlement to 12.5 MW of network transmission service and 150 MW of firm point to point transmission service through its membership in various MPPA projects. The 150 MW of point to point entitlement is a grandfathered transmission agreement ("GFA"). The Electric Utility does purchase additional point to point transmission from MISO on occasions for economic purposes or to accommodate generation outages.

In September of 2004, the Federal Energy Regulatory Commission ("FERC") issued an order addressing the treatment of GFAs within the Midwest Market. The order included MPPA transmission agreements relating to Belle River Project, which were designated as GFAs and were "carved out" of the Midwest Market. The GFA designation exempts the BWL from various Midwest Market charges and market congestion costs for the energy delivered from the Belle River Plant to the Electric Utility. The BWL does not anticipate any changes from FERC that will impact this exemption.

In December, 2012, the BWL became a non-transmission owning member of MISO. Although the BWL owns transmission facilities and is eligible to become a transmission owning member of MISO, such membership would require the Electric Utility to reconfigure its assets within the Midwest Market. This asset reconfiguration would not appear to produce net benefits for the Electric Utility.

Electric Generation

The Electric Utility currently owns one operating hydroelectric generating unit, currently in a non-operational status, a solar installation, two coal-fired electric generating facilities and a natural gas-fired cogeneration facility. The hydroelectric generating unit has 0.525 MW of generating capacity, and the solar installation produces 0.054 MW.

The coal-fired electric generating facilities are known as the "Eckert Station" and the "Erickson Station." The Eckert station previously had six generating units. One unit was retired in 2014 and two additional units were placed in mothball status in 2015. The three operational coal-fired generating units at the Eckert Station have a combined dependable net capacity of 192 MW. These generating units were placed in service between 1964 and 1970. The Erickson Station has one coal-fired generating unit with a dependable net capacity of 155 MW. The Erickson Station was placed in service in 1973. Together, the Eckert and Erickson Stations have a combined dependable net capacity of 347 MW.

The Eckert and Erickson Stations burn low sulfur, less than 1% sulfur, coal. Both facilities meet Michigan's air and water quality standards. The Eckert and Erickson Stations are also in compliance with federal and state environmental requirements. Information on the Electric Utility's coal-fired electric generating facilities is shown in the table set forth below.

The BWL has announced plans to close the Eckert Station by 2020. This represents a proactive decision driven by environmental regulations, low-cost natural gas generation, and rising O&M costs associated with a generating plant nearing the end of its useful life. The plan to close the Eckert Station is in alignment with the BWL's strategic plan and integrated resource plan which reinforces a balanced approach and forward looking goals. In addition, this decision will allow further diversification of the BWL generation portfolio and proactively address market and regulatory issues.

In 2013 the Reo Town Plant was placed in service. Construction of this facility was completed on time and within budget. The Reo Town Plant replaced the aging, coal-fired Moores Park Steam Plant. The Reo Town plant is a combined-cycle cogeneration facility and uses natural gas to generate steam and electricity in a two-step process. First a gas turbine burns natural gas to directly power an electric generator. It then captures the hot exhaust through a once through steam generator to produce steam, which can be delivered to steam heating customers or used to turn a second electric generator. This facility is capable of meeting the projected maximum steam capacity of 300 thousand pounds per hour with any one steam production unit out of service and has a dependable net capacity of 104 megawatts of electricity under standard conditions. This state of the art facility is a cleaner, greener and energy-efficient facility, allowing the BWL to (i) slash greenhouse gas emissions by 50 percent, (ii) eliminate the need to burn 351,000 tons of coal, and (iii) lower mercury and SO2 emissions by over 99 percent, and NOX by over 85 percent.

Lansing Board of Water and Light Electric Utility Coal-Fired Generating Capacity by Station and Unit

		Year of Initial	Nameplate Rating	Dependable Net Capacity
	<u>Fuel</u>	<u>Operation</u>	(MW)	(MW)
Eckert Station				
No. 4	Coal	1964	80.0	67.0
No. 5	Coal	1968	80.0	58.0
No. 6	Coal	1970	<u>80.0</u>	<u>67.0</u>
			240.0	192.0
Erickson Station				
No. 1	Coal	1973	<u>160.7</u>	155.0
Total			<u>400.7</u>	347.0

Source: Lansing Board of Water and Light

Operating Statistics

The following tables show the gross generation, net generation, availability factor and net capacity factor for the Eckert and Erickson Stations and the Reo Town Plant for the fiscal years ended June 30, 2012 through 2016.

Lansing Board of Water and Light Electric Utility Eckert Station Operating Statistics Fiscal Years Ended June 30, 2012 through 2016

Fiscal				
Year Ended	Gross	Net	Availability	Net Capacity
<u>June 30</u>	Generation (MWh) (1)	Generation (MWh) (2)	Factor (%) (3)	Factor (%) (4)
2012	1,150,862	814,324	80.5%	39.8%
2013	869,610	786,171	74.2%	30.1%
2014	450,793	405,184	61.5%	15.6%
2015	661,680	600,812	72.2%	22.9%
2016	492,102	411,285	91.1%	26.8%

⁽¹⁾ Annual total of MWh produced at the Eckert Station.

⁽²⁾ Annual total of MWh available for sale. The difference between gross and net generation is the MWh used to operate the Eckert Station.

⁽³⁾ The annual percentage of time that the Eckert Station facility was capable of generating electricity after taking into consideration scheduled and non-scheduled outages.

⁽⁴⁾ Annual total of MWh generated as a percentage of annual net generation capacity.

Lansing Board of Water and Light Electric Utility Erickson Station Operating Statistics Fiscal Years Ended June 30, 2012 through 2016

Fiscal Year Ended June 30	Gross Generation (MWh) (1)	Net Generation (MWh) (2)	Availability Factor (%) (3)	Net Capacity Factor (%) (4)
2012	919.127	847,331	86.6%	63.6%
	, .	*		
2013	848,961	775,712	72.9%	58.7%
2014	1,131,501	1,036,082	90.7%	78.3%
2015	932,487	854,430	74.0%	64.5%
2016	954,742	871,913	90.3%	66.1%

⁽¹⁾ Annual total of MWh produced at the Erickson Station.

Source: Lansing Board of Water and Light

Lansing Board of Water and Light Electric Utility Reo Town Plant Operating Statistics Fiscal Years Ended June 30, 2012 through 2016

Fiscal Year Ended <u>June 30</u>	Gross Generation (MWh) (1)	Net Generation (MWh) (2)	Availability Factor (%) (3)	Net Capacity Factor (%) (4)
2012	n/a	n/a	n/a	n/a
2013 2014	8,737 441,509	8,064 416,519	n/a 95.5%	n/a 56.0%
2015	485,523	458,341	84.7%	58.2%
2016	554,776	525,295	92.5%	70.4%

⁽¹⁾ Annual total of MWh produced at the Reo Town Plant.

Source: Lansing Board of Water and Light

Fuel Supply and Delivery

The Eckert and Erickson Stations burn low, less than 1%, sulfur coal, that contains approximately 8,800 British Thermal Units ("BTUs") per pound. The Electric Utility is currently in contract with Arch Coal for the purchase of the Utility's coal requirements, approximately 750,000 tons annually. The current price is \$11.51 a ton for 2017. The contract with Arch Coal expires on December 31, 2018. Performance under the contract with Arch Coal is excused under force majeure.

Pursuant to a two party contract dated January 1, 2011, coal is delivered by the origin rail carrier, Burlington Northern, to the destination rail carrier, Canadian National at Chicago, IL. Canadian National then delivers the coal to Lansing at a combined 2017 cost to the Electric Utility of \$29.12 per ton plus a fuel surcharge. The contract with Burlington Northern/Canadian National is scheduled to expire on December 31, 2019. Performance under the combined Burlington Northern/Canadian National is excused under force majeure. The contract has a minimum of 400,000 tons per year over the three year contract.

The BWL also leases 582 railcars. The BWL has one lease with Progress Rail for 453 railcars at a current cost of \$560 per railcar per month and another with Wells Fargo Rail for 129 railcars at a current cost of \$600 per railcar per month. The BWL's obligation to pay the leases with Progress Rail and Wells Fargo Rail is absolute and unconditional.

⁽²⁾ Annual total of MWh available for sale. The difference between gross and net generation is the MWh used to operate the Erickson Station.

⁽³⁾ The annual percentage of time that the Erickson Station was capable of generating electricity after taking into consideration scheduled and non-scheduled outages.

⁽⁴⁾ Annual total of MWh generated as a percentage of annual net generation capacity.

⁽²⁾ Annual total of MWh available for sale. The difference between gross and net generation is the MWh used to operate the Reo Town Plant.

⁽³⁾ The annual percentage of time that the Reo Town Plant was capable of generating electricity after taking into consideration scheduled and non-scheduled outages.

⁽⁴⁾ Annual total of MWh generated as a percentage of annual net generation capacity.

The term of the Wells Fargo lease runs from April 1, 2007 through March 31, 2017, and the term of the Progress Rail lease runs from April 1, 2015 through March 31, 2020 with an option out clause for March 31, 2018.

The BWL signed an agreement with CECo to install a natural gas pipeline to the REO Town Plant. The gas line was completed in January, 2013. The BWL is a transportation customer on the CECo natural gas system and has firm delivery service from CECo. The BWL has contracted with Fellon-McCord to provide natural gas procurement services. Forward purchases of natural gas are made in accordance with the BWL's Energy Risk Management Program.

Environmental Regulations

Mercury and Air Toxics Standards Rule (MATS). After the grant of a one-year extension from the Michigan Department of Environmental Quality, the BWL's compliance date for the MATS was April 15, 2016, at both Erickson and Eckert Stations. Natural gas plants such as REO Town are not included in the MATS. Although the United States Supreme Court held in June 2015, that the EPA had failed to properly promulgate the MATS, the rule remained in effect because the Court did not issue a stay of the rule.

Both Erickson and Eckert Stations are in full compliance with the rule. The necessary emission control equipment was installed at Erickson Station well in advance of the April 15, 2016 compliance date and the plant began using the equipment in 2015. At Eckert Station, an activated carbon injection system was installed in 2016 for units 4, 5 and 6, and was fully operational by the compliance date. Upgrades to the existing electrostatic precipitators were also made in 2015 to help ensure compliance. Compliance with the limitations on mercury emissions is monitored by sorbent traps at both plants, and compliance with the air toxics and particulate matter limitations of the rule is demonstrated by quarterly stack testing.

Cross State Air Pollution Rule (CSAPR). The Cross State Air Pollution Rule took effect in 2015, and Michigan is one of the 23 states subject to the rule's limits on SO2 and NOx emissions from power plants. To help ensure compliance with the CSAPR, a Selective Non-Catalytic Reduction (SNCR) system was installed at Erickson in 2011 to reduce NOx emissions sufficiently to cover both Erickson and Eckert emissions. Beginning in 2017, the EPA will begin reducing each utility's number of NOx allowances allocated during the summer ozone season; hence operation of the SNCR during the summer months will likely become a standard practice. Because the BWL uses only low sulfur coal from the Powder River Basin, it anticipates it will have sufficient SO2 allowances to meet its obligations at both plants for several years without additional control equipment.

Carbon Pollution Emission Guidelines for Existing Stationary Sources (Clean Power Plan (CPP)): The EPA's final rule on greenhouse gas emissions from existing power plants became effective on October 23, 2015, but the United States Supreme Court stayed the implementation of the rule on February 9, 2016. The stay remains in effect. The overall objective of the rule is to reduce carbon emissions from the power sector by 32% below 2005 levels when the rule is fully in place in 2030. These reductions are achieved over time with emission limits set on a state-by-state basis using a state-selecting rate or mass based approach to reductions, and allowing for, at a state's discretion, intrastate or interstate trading of carbon credits. Despite the Court's stay of the rule and the litigation ahead, the BWL nonetheless anticipates compliance with the rule or future iterations of similar design. During 2015 and 2016, the BWL engaged in a community based Integrated Resource Planning (IRP) process to evaluate the options for Lansing's energy future. This IRP process culminated in a May 2016 recommendation from a Community Advisory Committee to the BWL's Board of Directors. The recommended energy portfolio would easily fulfill the BWL's obligations under the CPP. See: http://lansingenergytomorrow.com/wp-content/uploads/2016/05/CAC-Report_Final-Draft-Compiled-CAC-Edits-May-5 2016.pdf

Coal Combustion Residuals Rule (CCR). The Coal Combustion Residuals rule became effective October 14, 2015, and established new requirements for the disposal of Coal Combustion Residuals (CCRs) in landfills and surface impoundments. Prior to the effective date of the rule, the BWL minimized the impact of the CCR rule by excavating CCRs from two sites and modifying its bottom ash disposal practices at Erickson Station. These efforts may be summarized as follows:

• Erickson Station. Excavation of ash from the storage cell adjacent to the power plant was completed in 2013, and since then Erickson's bottom ash has been transported to a licensed municipal landfill for disposal. A small, lined temporary storage and decanting cell was installed in 2015 and the requirements of the rule are being met for this small cell. The BWL continues to evaluate its CCR compliance options at Erickson which may include a closed-loop bottom ash transport system that completely removes all

trace of coal ash from the temporary storage and decanting cell. As noted below, a closed loop system may be sufficient to move Erickson Station outside the requirement of both the CCR and the new Effluent Limitations Guidelines.

- Comfort Street. Between 2009 and 2013 approximately 900,000 cubic yards of ash were excavated from the former landfill and disposed of in a licensed landfill. The entire site backfilled with clean soil and groundwater monitoring is underway in anticipation of obtaining approval for final site closure from the Michigan Department of Environmental Quality.
- North Lansing Landfill. This former ash disposal site has been capped and contained, and the BWL is
 meeting its remediation obligations with 4 groundwater extraction wells that discharge for treatment to
 the sanitary sewer system.

Eckert Station has never had an ash impoundment or landfill onsite and is therefore not impacted by this rule.

Cooling Water Intake Rule. Commonly referred to as the Section 316(b) Rule (section 316(b) of the Clean Water Act, 33 USC §1326), this rule took effect on October 14, 2014, and established national requirements applicable to cooling water intake structures at facilities that use more 2 million gallons per day of surface water, which includes most coal-fired power plants. The Rule requires the installation of the Best Technology Available for minimizing adverse environmental impacts, i.e. limiting the mortality of all life states of fish caused by impingement or entrainment in facility cooling water systems. Because Erickson Station was designed and built with a closed-loop cooling system, any changes that may be necessary to comply with the rule would be relatively straightforward. The Eckert Station, because it is scheduled to be retired in 2020, and because retirement is a 316(b) compliance option, the Michigan Department of Environmental Quality has issued a discharge permit for Eckert through 2020 that does not require any plant upgrades for compliance.

Effluent Limitations Guidelines (ELG). The ELG became effective in 2016, and will, as it pertains to the BWL, phase in more stringent limits on the discharge of pollutants found in ash transport water from fossil fuel -fired power plants to surface waters. The ELG's limits are to be incorporated into the each coal-fired power plant's National Pollution Discharge Elimination System (NPDES) permits as they come up for renewal between 2018 and 2023. The ELG is not applicable to Eckert Station due to the scheduled retirement of that facility in 2020. Eckert Station's current NPDES permit will remain in effect until that retirement date. For Erickson Station, the ELG will apply upon the 2023 renewal of its NPDES permit. BWL is currently evaluating its compliance options which may include a closed-loop bottom ash transport system that completely segregates the transport water from contact with any surface water.

Lead & Copper Rule (LCR). To reduce the public exposure to lead in drinking water the Lead and Copper Rule was promulgated by the EPA and became effective in 1991. The BWL's water utility has maintained compliance with the rule by means of corrosion control and also significantly exceeded the rule's requirements by systematically removing lead services lines. First, the BWL has used a corrosion control additive to inhibit lead found in the water distribution system and household plumbing from leaching into drinking water. Secondly, even though this additive has been effective in achieving compliance with the rule, in 2004 the BWL began a project to remove all of the approximately 13,500 lead service lines from its distribution system. The BWL completed the removal of all active lead service lines in December of 2016.

New Source Review (NSR). The BWL is currently negotiating resolution of two allegations that past maintenance activities at Eckert and Erickson Stations were conducted without a New Source Review permit. The Clean Air Act requires that a permit be obtained from the regulatory authority, in this case the Michigan Department of Environmental Quality, when the work performed constitutes a major modification that results in a significant increase in air pollution emissions. A complex and sometimes conflicting body of law pertaining to NSR litigation has developed based on years of litigation brought by the U.S. EPA, the Sierra Club and others.

On June 16, 2014, the Sierra Club served a Notice of Intent to Sue the BWL based on alleged NSR violations at Eckert and Erickson Stations, and also alleged that opacity exceedances at both facilities were in violation of the CAA as well. The BWL has denied the allegations. A tolling agreement is in place and the Sierra Club has not filed suit. The parties have met to discuss resolution of the allegations on several occasions. The BWL anticipates those discussions will continue.

On March 13, 2015, the EPA filed a Notice of Violation asserting that two projects at Erickson Station were improperly conducted without an NSR permit. Again, the BWL has denied the allegations but has engaged in an ongoing dialogue with the EPA in anticipation of a resolution of the dispute.

General. The evolving nature of environmental regulations means that practices that once met regulations, may now no longer comply with new standards. Occasionally, this requires remediation programs. To separately identify and recover the cost of these programs and new environmental related costs, the BWL has adopted an environmental surcharge. The surcharge is levied on a kWh basis and is currently \$.0025 kWh.

Power Requirements

During the fiscal years ended June 30, 2012 through 2016, the Electric Utility produced between 60.97% and 65.87% of its total annual power requirements. Nearly all of the Electric Utility's remaining power requirements are met by way of the BWL's energy entitlement from Belle River. The following table sets forth the Electric Utility's total power requirements, sales and losses in MWh for the fiscal years ended June 30, 2012 through 2016.

Lansing Board of Water and Light Electric Utility Power Availability, Sales and Losses in MWh Fiscal Years Ended June 30, 2012 through 2016

	Fiscal Year Ended June 30						
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>		
MWh Generated (1)		1,572,660 <u>1,006,776</u> 2,579,436	1,858,581 1,057,310 2,915,891	1,910,930 <u>990,250</u> 2,901,180	1,837,456 <u>978,214</u> 2,815,670		
Less MWh Sold (3) Transmission and Distribution Losses		2,482,587 96,849	2,820,879 95,012	2,808,487 92,693	2,709,158 106,511		
Losses as a percentage of MWh Available	2.93%	3.75%	3.26%	3.20%	3.78%		

⁽¹⁾ See "Electric Generation" herein.

⁽²⁾ Primarily from Belle River. See "Purchased Power" herein.

⁽³⁾ Includes wholesale sales.

The following table sets forth the peak demand, total power requirements and load factor for the fiscal years ended June 30, 2012 through 2016. Peak demand is measured by MW and total power requirements are measured in MWh. Peak demand represents the highest sixty minute interval of continuous demand during the fiscal year. Load Factor is the percentage of total power requirements to annualized peak demand.

Lansing Board of Water and Light **Electric Utility** Peak Demand, Total Power Requirement and Load Factor Fiscal Years Ended June 30, 2012 through 2016

Fiscal Year			Total	l Power		
Ended	Peak Demand		Requ	Requirement		
<u>June 30</u>	\underline{MW}	% Change	MWh	% Change	Factor %	
2012	507.396	8.1%	2,277,447	0.2%	51.1%	
2013	485.551	-4.3%	2,273,254	-0.2%	53.4%	
2014	470.629	-3.1%	2,268,919	-0.2%	55.0%	
2015	419.726	-10.8%	2,177,914	-4.0%	59.2%	
2016	433.502	3.3%	2,213,852	1.7%	58.1%	

Power Costs

The following tables set forth the total cost of generated and purchased power and the average cost of generated and purchased power by kilowatt hour ("kWh") for the fiscal years ended June 30, 2012 through 2016.

Lansing Board of Water and Light Electric Utility Cost of Generated and Purchased Power (1) Fiscal Years Ended June 30, 2012 through 2016

Source	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Generated	\$ 91,535,285	\$ 88,210,189	\$ 81,259,881	\$ 98,079,875	\$ 90,008,060
Purchased:					
Wholesale	1,024,554	3,511,822	578,017	534,769	811,392
Green Power	6,383,923	6,428,764	6,774,291	8,706,318	9,867,671
Belle River	57,012,657	55,261,987	56,988,901	57,792,606	56,247,959
Total	<u>\$155,956,419</u>	<u>\$153,412,762</u>	<u>\$145,601,090</u>	<u>\$165,113,568</u>	<u>\$156,935,083</u>

⁽¹⁾ See "Electric Generation," "Purchased Power," and "Joint Agency Participation" herein. Source: Lansing Board of Water and Light

Lansing Board of Water and Light Electric Utility

Cost of Net Generated and Purchased Power per kWh (1) Fiscal Years Ended June 30, 2012 through 2016

Cost	Per 1	kWl	h
------	-------	-----	---

Source Generated	2012 \$0.048	2013 \$0.056	2014 \$0.044	2015 \$0.051	2016 \$0.049
Purchased:					
Wholesale	\$0.034	\$0.031	\$0.033	\$0.021	\$0.023
Green Power	0.075	0.076	0.077	0.071	0.067
Belle River	0.055	0.068	0.060	0.069	0.071
Average Cost Per kWh	\$0.051	\$0.059	\$0.050	\$0.057	\$0.056

⁽¹⁾ See "Electric Generation," "Purchased Power," and "Joint Agency Participation" herein.

Source: Lansing Board of Water and Light

Service Area

The Electric Utility provides electric service to the City and Lansing Township, most of the City of East Lansing and Delta Township and portions of Meridian, Watertown, Windsor, Delhi and DeWitt Townships. Michigan State University, which is located in the City of East Lansing, generates its own electricity and is not serviced by the Electric Utility. The Electric Utility's service area totals approximately 97 square miles. The estimated population in the service area is 303,910 persons. By comparison, the City encompasses an area of approximately 36.7 square miles and has a current estimated population of approximately 114,620 persons. Electric service outside of the Electric Utility's service area is provided by CECo.

Franchises

Article VII, Section 29 of the Michigan Constitution of 1963 provides that a utility must have a franchise to render service within a local governmental unit. A description of the Electric Utility's existing franchises is included in the table below.

Lansing Board of Water and Light Electric Utility Electric Franchises (1)

<u>Township</u>	Franchise Period	Effective Date	Expiration Date
Delhi	30 Years	08/01/88	08/01/18
Delta	30 Years	02/15/87	02/15/17 (2)
DeWitt	30 Years	11/10/86	11/10/16 (2)
Lansing	30 Years	03/13/12	03/13/42
Meridian	30 Years	02/04/88	02/04/18
Watertown	20 Years	05/03/89	05/15/09 (2)
Windsor	30 Years	07/18/86	07/18/16 (2)

⁽¹⁾ The Electric Utility serves electric customers in East Lansing pursuant to Act 264, Public Acts of Michigan, 1905, as amended (the "Foote Act").

⁽²⁾ The BWL is pursuing updates of the agreements with Delta Township, DeWitt Township, Watertown Township and Windsor Township, and the BWL continues to provide service under the terms of the prior agreements until they are terminated or renewed.

Source: Lansing Board of Water and Light

Customers

The Electric Utility currently serves over 96,700 customers within its service area. The following tables set forth the number and percent of customers by location and classification for the fiscal years ended June 30, 2012 through 2016.

Lansing Board of Water and Light Electric Utility Average Number and Percent of Customers by Location Fiscal Years Ended June 30, 2012 through 2016

	Fiscal Year Ended June 30					
•	2012	2012	2014	2015	2016	
Location	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	
City	59,461	59,446	59,558	59,625	59,646	
Outside City	36,342	<u>36,449</u>	<u>36,762</u>	<u>37,036</u>	37,078	
Total	<u>95,803</u>	<u>95,895</u>	<u>96,320</u>	<u>96,661</u>	<u>96,724</u>	
City	62.0%	62.0%	61.8%	61.7%	61.7%	
Outside City	<u>37.9</u>	<u>38.0</u>	<u>38.2</u>	<u>38.3</u>	<u>38.3</u>	
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	

Source: Lansing Board of Water and Light

Lansing Board of Water and Light Electric Utility Average Number and Percent of Customers by Classification Fiscal Years Ended June 30, 2012 through 2016

	Fiscal Year Ended June 30					
<u>Classification</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	
Residential	82,823	82,945	83,341	83,694	83,783	
Commercial	12,708	12,685	12,723	12,720	12,706	
Industrial	<u>272</u>	<u> 265</u>	<u>256</u>	<u>247</u>	<u>235</u>	
Total	<u>95,803</u>	<u>95,895</u>	<u>96,320</u>	<u>96,661</u>	<u>96,724</u>	
Classification						
Residential	86.45%	86.50%	86.53%	86.59%	86.62%	
Commercial	13.26	13.23	13.21	13.16	13.14	
Industrial	0.28	0.28	0.27	0.26	0.24	
Total	100%	100%	100%	100%	100%	

Ten Largest Customers

The following table sets forth the ten largest customers of the Electric Utility by revenue and kWh used for the fiscal year ending June 30, 2016.

Lansing Board of Water and Light Electric Utility Ten Largest Customers Fiscal Year Ended June 30, 2016

			% of Total		% of Total
<u>Name</u>	Product/Service	Revenue (1)	Revenues (2)	<u>kWh</u>	<u>kWh</u>
General Motors	Automotive Manufacturing	\$25,858,756	8.53%	258,614,088	9.55%
State of Michigan	State Government	9,217,277	3.04	78,506,824	2.90
City of Lansing	Municipal Government	7,501,702	2.47	44,530,393	1.64
Sparrow Hospital	Hospital	7,191,789	2.37	66,545,670	2.46
Meijer, Inc.	Retailing, Warehousing	6,341,414	2.09	54,999,029	2.03
Jackson National	Insurance	4,293,238	1.42	36,515,337	1.35
Liquid Web Inc	Web Hosting Service	3,742,026	1.23	34,649,513	1.28
McLaren-Greater Lansing	Hospital	2,999,222	0.99	26,580,245	0.98
Auto Owners	Insurance	2,842,574	0.94	22,387,942	0.83
City of East Lansing	Municipal Government	<u>2,822,732</u>	<u>0.93</u>	<u>24,717,125</u>	<u>0.91</u>
		<u>\$72,810,731</u>	<u>24.01%</u>	648,046,166	23.92%

 ⁽¹⁾ City of Lansing and State of Michigan totals include Street Lighting and Traffic Signal billings, which include a capital recovery factor on Board investment in Street Lights and Traffic Signals. Based on total revenues of \$303,245,766 for the fiscal year ended June 30, 2016
 (2) Based on total sales of 2,709,158,450 KWH for the fiscal year ended June 30, 2016.
 Source: Lansing Board of Water and Light

Rates and Charges

The Charter provides that the BWL shall have full and exclusive management of the water supply, steam and electric utility services of the City and such other services as may be agreed upon by the BWL and the City. The Charter also provides that the BWL may, with proper notice and hearing, fix just and reasonable rates as it deems necessary for such services. The implementation of new rates takes approximately three months and does not require any local, state or federal regulatory approval. It is the policy of the BWL to review all rates annually and to set such rates so that each utility is self-supporting. Rates are set on a cost of service basis.

Customers of the Electric Utility pay basic service and capacity charges based on customer classification and an energy charge based on kWh used. All energy charges per kWh are subject to an energy cost adjustment ("Energy Cost Adjustment") on a monthly basis for the cost of fuel used in supplying electricity. In addition, customers are charged monthly Environmental, Renewable Energy, and Energy Optimization Surcharges. Customers are billed monthly.

Historic rate increases are set forth in the table below. These rate increases represent average system increases or increase in base rate revenue. As such, rate increases by rate class or rate component may deviate from these percentages.

Lansing Board of Water and Light Historic System Average Electric Rate Increases

Effective Date	3/1/2008	5/1/2009	3/1/2010	3/1/2011	10/1/2012(1)	10/1/2013(1)	11/1/2014
Rate Increase	7.00%	2.50%	2.50%	1.50%	3.75%	3.75%	7.00%

^{(1) 10/1/2012} and 10/1/2013 increases were both approved in January 2011 as part of an advanced rate approval strategy to support the additional debt service requirements associated with the construction of the Reo Town Cogeneration facility.

Source: Lansing Board of Water and Light

Historic and existing rates and charges by customer classification are set forth in the table on the following page.

Lansing Board of Water and Light Historic, Existing, and Future Rates by Customer Classification

Rate No. 1-Residential service Basic Service Charge/month	3/1/11 \$7.50	3/1/12 \$7.50	10/1/12 \$7.79	10/1/13 \$8.10	\$10.00
Commodity charge/kWh					
Summer Months (June-Oct.)					
1st 500 kWh	\$0.0812	\$0.0847	\$0.0879	\$0.0912	\$0.1197
over 500 kWh	\$0.0861	\$0.0896	\$0.0929	\$0.0964	\$0.1252
Winter Months (NovMay)					
1st 500 kWh	\$0.0812	\$0.0847	\$0.0879	\$0.0912	\$0.1197
over 500 kWh	\$0.0842	\$0.0877	\$0.0910	\$0.0945	\$0.1232
Environmental charge/kWh	\$0.0025	\$0.0025	\$0.0025	\$0.0025	\$0.0025
Energy Optimization Surcharge/kWh	\$0.001853	\$0.001853	\$0.001853	\$0.001853	\$0.001853
Renewable Energy Plan Surcharge/Month	\$2.50	\$2.50	\$2.50	\$2.50	\$0.75
Rate No. 3-General Secondary Voltage Service	3/1/11	3/1/12	10/1/12	10/1/13	11/1/14
Basic Service Charge/month	\$17.98	\$17.98	\$18.66	\$19.38	\$24.00
Commodity charge/kWh					
Summer Months (June-Oct.)	\$0.0939	\$0.0974	\$0.1010	\$0.1048	\$0.1342
Winter Months (NovMay)	\$0.0906	\$0.0941	\$0.0975	\$0.1011	\$0.1303
Environmental charge/kWh	\$0.0025	\$0.0025	\$0.0025	\$0.0025	\$0.0025
Energy Optimization Surcharge/month	\$6.58	\$6.58	\$6.58	\$6.58	\$6.58
Renewable Energy Plan Surcharge	pp 0022	po 0022	60.0022	pp 0022	en ooc :
per kWh Minimum charge/month	\$0.0030 \$3.50	\$0.0030 \$3.50	\$0.0030 \$3.50	\$0.0030 \$3.50	\$0.0024 \$2.80
Maximum charge/month	\$15.00	\$15.00	\$15.00	\$15.00	\$12.00
Rate No. 4-Large General Secondary Voltage Service	3/1/11	3/1/12	10/1/12	10/1/13	11/1/14
Secondary voltage with billing demand of 15 kw or more					
Basic Service Charge /month	\$38.35	\$38.35	\$39.80	\$41.33	\$50.00
Capacity Charge /kW of max Demand	\$10.19	\$10.19	\$10.58	\$10.99	\$11.76
Commodity charge/kWh					
Summer Months (June-Oct.)	\$0.0537	\$0.0572	\$0.0592	\$0.0613	\$0.0877
Winter Months (NovMay)	\$0.0497	\$0.0532	\$0.0551	\$0.0571	\$0.0832
Reactive power/kvar	\$0.0092	\$0.0092	\$0.0095	\$0.0099	\$0.0106
Environmental charge/kWh	\$0.0025	\$0.0025	\$0.0025	\$0.0025	\$0.0025
Energy Optimization Surcharge/month	\$65.78	\$65.78	\$65.78	\$65.78	\$65.78
Renewable Energy Plan Surcharge per kWh	\$0.003	\$0.003	\$0.003	\$0.003	\$0.0024
Minimum charge/month	\$3.50	\$3.50	\$3.50	\$3.50	\$2.80
Maximum charge/month	\$15.00	\$15.00	\$15.00	\$15.00	\$12.00
Rate No. 5 Primary Service	3/1/11	3/1/12	10/1/12	10/1/13	11/1/14
With billing demand of 100kW or more	00500	00500	#00 # 2	0402.25	040500
Basic Service Charge/month Capacity Charge	\$95.90	\$95.90	\$99.53	\$103.36	\$125.00
per kW On peak Billing Demand	\$8.27	\$8.27	\$8.58	\$8.91	\$9.53
per kW of maximum Demand	\$2.74	\$2.74	\$2.84	\$2.95	\$3.16
Commodity charge/kWh Summer Months (June-Oct.)					
On peak	\$0.0481	\$0.0516	\$0.0534	\$0.0553	\$0.0813
Off-Peak	\$0.0442	\$0.0477	\$0.0494	\$0.0533	\$0.0769
Winter Months (NovMay)					
On peak	\$0.0461 \$0.0442	\$0.0496 \$0.0477	\$0.0513 \$0.0404	\$0.0531 \$0.0512	\$0.0789
Off-Peak	\$0.0442	\$0.0477	\$0.0494	\$0.0512	\$0.0769
Reactivate Power/kvar	\$0.0092	\$0.0092	\$0.0095	\$0.0099	\$0.0106
Environmental charge/kWh	\$0.0025	\$0.0025	\$0.0025	\$0.0025	\$0.0025
Energy Optimization Surcharge/delivery Point	\$461.20	\$461.20	\$461.20	\$461.20	\$461.20
Renewable Energy Plan Surcharge/delivery point	\$160.00	\$160.00	\$160.00	\$160.00	\$160.00

^{*} The 3/1/12 commodity charge increases were offset by a reduction in the energy cost adjustment factor. The net system rate increase was zero.

In addition to the above rates and charges, the Electric Utility has separate rate schedules for large capacity service, traffic lights, street lighting, security lighting and municipal water pumping.

Based on rates and charges currently in effect, the following table provides an estimate of the total monthly payments a residential customer of the Electric Utility would make at various usage levels.

Lansing Board of Water and Light Electric Utility Total Estimated Monthly Billing

kWh Usage Per Month	Basic Service Charge	Energy Charge	Total Estimated Monthly Billing
250	\$10.00	\$31.96	\$41.96
500	\$10.00	\$63.18	\$73.18
750	\$10.00	\$95.78	\$105.78
1,000	\$10.00	\$128.36	\$138.36

Source: Lansing Board of Water and Light

Electric Sales

The following table sets forth the sales and percent of sales by customer classification for the fiscal years ended June 30, 2012 through 2016. Sales are shown in MWh.

Lansing Board of Water and Light
Electric Utility
Amount in MWh and Percent of Sales by Customer Classification
Fiscal Years Ended June 30, 2012 Through 2016

	Fiscal Year Ended June 30					
Classification	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	
Residential	580,963	592,457	571,413	554,360	552,593	
Commercial	1,165,864	1,160,052	1,151,058	1,140,878	1,131,488	
Industrial	395,225	386,572	395,960	366,790	388,541	
Wholesale (1)	767,342	304,520	664,545	710,848	601,474	
Other	<u>38,969</u>	<u>38,985</u>	<u>37,903</u>	<u>35,611</u>	<u>35,061</u>	
Total	<u>2,948,363</u>	<u>2,482,586</u>	<u>2,820,879</u>	<u>2,808,487</u>	<u>2,709,157</u>	
Classification						
Residential	19.70%	23.86%	20.26%	19.74%	20.40%	
Commercial	39.54	46.73	40.80	40.62	41.77	
Industrial	13.40	15.57	14.04	13.06	14.34	
Wholesale (1)	26.03	12.27	23.56	25.31	22.20	
Other	<u>1.32</u>	<u>1.57</u>	<u>1.34</u>	<u>1.27</u>	<u>1.29</u>	
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	

⁽¹⁾ Includes sales to Power Pool participants. Source: Lansing Board of Water and Light

Electric Revenues

Electric rates and charges have historically accounted for approximately 80% of gross System revenues. The following table sets forth amount and percent of electric revenues by customer classification for the fiscal years ended June 30, 2012 through 2016.

Lansing Board of Water and Light Electric Utility Amount and Percent of Revenues by Customer Classification Fiscal Years Ended June 30, 2012 through 2016

T. 1	T 7	T 1 1	T 20
Hiscol	Vear	Hinded	June 30
Fiscai	i Cai	Fillucu	June 30

<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
\$ 70,965,631	\$ 77,907,468	\$ 75,342,990	\$ 78,506,198	\$ 81,756,039
120,829,236	132,646,849	130,685,946	136,104,421	141,572,563
35,072,116	38,173,103	37,528,235	37,755,775	40,501,600
31,353,982	15,342,274	31,821,390	28,169,851	24,756,062
11,786,437	13,087,753	13,775,903	14,511,660	14,659,504
\$ 270,007,402	\$ 277,157,446	\$ 289,154,465	\$ 295,047,904	\$ 303,245,766
26.28%	28.11%	26.06%	26.61%	26.96%
44.75	47.86	45.20	46.13	46.69
12.99	13.77	12.98	12.80	13.36
11.61	5.54	11.00	9.55	8.16
4.37	4.72	<u>4.76</u>	<u>4.92</u>	4.83
<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
	\$ 70,965,631 120,829,236 35,072,116 31,353,982 11,786,437 \$ 270,007,402 26.28% 44.75 12.99 11.61 4.37	\$ 70,965,631 \$ 77,907,468 120,829,236 132,646,849 35,072,116 38,173,103 31,353,982 15,342,274 11,786,437 13,087,753 \$ 270,007,402 \$ 277,157,446 26.28% 28.11% 44.75 47.86 12.99 13.77 11.61 5.54 4.37 4.72	\$ 70,965,631 \$ 77,907,468 \$ 75,342,990 120,829,236 132,646,849 130,685,946 35,072,116 38,173,103 37,528,235 31,353,982 15,342,274 31,821,390 11,786,437 13,087,753 13,775,903 \$ 270,007,402 \$ 277,157,446 \$ 289,154,465 26.28% 28.11% 26.06% 44.75 47.86 45.20 12.99 13.77 12.98 11.61 5.54 11.00 4.37 4.72 4.76	\$\begin{array}{c ccccccccccccccccccccccccccccccccccc

Source: Lansing Board of Water and Light

THE WATER UTILITY

General

The Water Utility component of the System was established in 1885 and currently serves more than 55,700 customers. Water is obtained from 125 wells averaging 400 feet in depth with a total hydraulic capacity of approximately 68.3 million gallons per day ("MGD"). During the fiscal year ended June 30, 2016, the average and maximum daily flows were approximately 19.2 MGD and 36.9 MGD, respectively. The Water Utility has two water conditioning plants that soften water in a process that reduces hardness from about 450 parts per million to 85-100 parts per million. The two conditioning plants are interconnected and have a combined capacity of 50 MGD. Water is fluoridated and virtually all water is supplied through meters. The distribution system has 789 miles of mains, most of which are six inches or more in diameter. The Water Utility has four covered reservoirs with a combined capacity of 24 million gallons.

Lead Service Replacement

The BWL has completed the removal of all active lead water service lines. This project was not in response to regulatory requirements, but was undertaken as a proactive response to general public concerns regarding water borne lead.

Service Area and Customer Base

The Water Utility provides water supply services to over 55,700 retail customers and 3 wholesale customers, which include Delta and Lansing Townships and the East Lansing-Meridian Water and Sewer Authority. The Water Utility's retail service area includes the City, Delhi and Watertown Townships and portions of the City of DeWitt and the Townships of Lansing, Windsor, Bath, Alaiedon, and DeWitt. A map of the service area of the Water Utility is attached in Appendix B. Retail customers that are not located in the City receive water supply services pursuant to various water supply contracts. The Water Utility has retail and wholesale water supply contracts with the authority and townships set forth in the table below.

Lansing Board of Water and Light Water Utility Water Supply Contracts

<u>Municipality</u>	Expiration Date
Delhi Township	06/30/43
Watertown Township	11/25/26
Lansing Township (Retail)	06/28/35
Lansing Township (Wholesale)	06/28/35
Windsor Township	06/22/28
Alaiedon Township	07/26/29
DeWitt Township	07/14/25
Delta Township (Wholesale)	05/01/34
East Lansing-Meridian Authority (Wholesale).	12/31/14(1)
Bath Township	08/11/28
City of DeWitt	08/31/30

⁽¹⁾ The East Lansing – Meridian Authority contract is on extension through March 31, 2017 and the BWL is pursuing an update of the agreement.

Source: Lansing Board of Water and Light

The following tables set forth the average number and percent of water customers by customer classification, meter size and location for the fiscal years ended June 30, 2012 through 2016.

Lansing Board of Water and Light Water Utility Average Number and Percent of Water Customers by Classification Fiscal Years Ended June 30, 2012 through 2016

Fiscal Year Ended June 30

Classification	2012	2013	2014	2015	2016
Residential	48,218	48,381	48,574	48,696	49,044
Commercial	6,530	6,550	6,553	6,569	6,629
Industrial	<u>93</u>	<u>95</u>	<u>100</u>	<u>98</u>	<u>98</u>
Total	<u>54,841</u>	<u>55,026</u>	<u>55,227</u>	<u>55,363</u>	<u>55,771</u>
Classification					
Residential	87.92%	87.92%	87.95%	87.96%	87.94%
Commercial	11.91	11.90	11.87	11.87	11.89
Industrial	0.17	0.17	0.18	0.18	<u>0.18</u>
Total	<u>100</u> %				

Lansing Board of Water and Light Water Utility Average Number and Percent of Water Customers by Location

Fiscal Years Ended June 30, 2012 through 2016

	Fiscal Year Ended June 30					
Location	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	
Inside of City	40,127	40,150	40,219	40,183	40,359	
Outside of City	<u>14,715</u>	<u>14,876</u>	<u>15,008</u>	<u>15,180</u>	<u>15,412</u>	
Total	<u>54,842</u>	<u>55,026</u>	<u>55,227</u>	<u>55,363</u>	<u>55,771</u>	
<u>Location</u>						
Inside of City	73.17%	72.97%	72.82%	72.58%	72.36%	
Outside of City	26.83	27.03	27.18	<u>27.42</u>	<u>27.64</u>	
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	

Source: Lansing Board of Water and Light

Ten Largest Customers

The following sets forth the principal product or service as well as the water revenues and volume as billed for the ten largest customers of the Water Utility for the fiscal year ended June 30, 2016.

Lansing Board of Water and Light Water Utility Ten Largest Water Customers Fiscal Year Ended June 30, 2016

			% of Total		% of Total
<u>Name</u>	Principal Product or Service	Revenue	Revenue (1)	<u>100 CF</u>	100 CF (2)
State of Michigan	State Government	\$619,255	1.60%	88,997	1.06%
General Motors	Automotive Manufacturing	586,804	1.52	166,223	1.98
City of Lansing	Municipal Government	539,361	1.39	138,140	1.65
Sparrow Hospital	Hospital	530,252	1.37	130,350	1.56
DTN Management	Property Management	298,657	0.77	49,910	0.60
Emergent Bio Solutions	Pharmaceutical	245,292	0.63	74,272	0.89
Lansing School District	Education	234,965	0.61	25,342	0.30
McLaren-Greater Lansing	Hospital	233,756	0.60	54,047	0.65
Lansing Community College	Education	177,060	0.46	29,044	0.35
Sohn Linen Service	Textile Rental	<u>165,043</u>	<u>0.43</u>	<u>46,404</u>	<u>0.55</u>
		\$3,630,446	<u>9.37%</u>	<u>802,729</u>	9.58%

⁽¹⁾ Based on total water sales of \$38,730,602 for the fiscal year ended June 30, 2016.
(2) Based on total water volume in 100 CF totaling 8,377,221 the fiscal year ended June 30, 2016.

Rates and Charges

The Charter provides that the BWL shall have full and exclusive management of the water supply, steam and electric services of the City and such other services as may be agreed upon by the BWL and the City. The Charter also provides that the BWL may, with proper notice and hearing, fix just and reasonable rates as it deems necessary for such services. The implementation of new rates takes approximately three months and does not require any local, state or federal regulatory approval. It is the policy of the BWL to review all rates annually and to set such rates so that each utility is self-supporting. Rates are set on a cost of service basis.

Retail customers of the Water Utility pay basic service and water commodity charges. Basic service charges are based on water meter size. Water commodity charges are based on metered water usage. Water usage is measured in cubic feet ("cf") and 100 CF ("ccf"). All retail customers are subject to a power and chemical cost adjustment ("Power and Chemical Adjustment"). The Power and Chemical Adjustment permits the monthly increase or decrease in the water commodity charge based on the cost of power and chemicals required to deliver treated water to customers. Customers are billed monthly. The following tables set forth a history of the Water Utility's basic service and water commodity charges as well as an estimate of the monthly bill for a residential customer at various usage levels.

Lansing Board of Water and Light
Water Utility
Monthly Basic Service Charge by Water Meter Size

	Effective Date					
	March 1,	May 1,	March 1,	March 1,	March 1,	Nov. 1
Meter Size	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2014</u>
5/8"	\$7.52	\$7.71	\$8.90	\$10.27	\$11.19	\$12.20
3/4"	10.53	10.79	12.46	14.38	15.67	17.08
1"	19.57	20.06	23.16	26.73	29.14	31.76
1 1/2"	43.65	44.74	51.65	59.61	64.97	70.82
2"	76.75	78.67	90.81	104.81	114.24	124.52
3"	173.06	177.39	204.77	236.34	257.61	280.79
4"	308.50	316.21	365.02	421.30	459.22	500.55
6"	693.70	711.04	820.79	947.34	1032.6	1125.53
8"	1,232.50	1,263.31	1,458.30	1,683.14	1,834.62	1,999.74
10"	1,926.26	1,974.42	2,279.16	2,630.56	2,867.31	3,125.37

Lansing Board of Water and Light Water Utility Monthly Water Commodity Charge per ccf of Metered Usage

Effective Date	Charge Per ccf
March 1, 2011	2.35
March 1, 2012	2.56
November 1, 2014	2.79

Lansing Board of Water and Light Water Utility Estimated Monthly Residential Bill

	Basic	Water	Estimated
Usage in CF Per Month	Service Charge	Commodity Charge	Monthly Bill
500	\$12.20	\$13.95	\$26.15
750	12.20	20.93	33.13
1,000	12.20	27.90	40.10
1,250	12.20	34.88	47.08

Source: Lansing Board of Water and Light

Water Volume

Water volume is measured in ccf. There are 748 gallons of water in 1 ccf. The following tables set forth information regarding total, average and peak water volume as pumped and/or billed by customer classification and location for the fiscal years ended June 30, 2012 through 2016.

Lansing Board of Water and Light Water Utility Total Water Volume in ccf as Billed Fiscal Years Ended June 30, 2012 through 2016

Fiscal		
Year Ended	Water Sales	% Increase
<u>June 30</u>	<u>(ccf)</u>	(Decrease)
2012	9,148,940	(2.12)
2013	9,477,073	3.59
2014	9,102,071	(4.18)
2015	8,427,636	(7.41)
2016	8,377,211	(0.60)

Source: Lansing Board of Water and Light

Lansing Board of Water and Light Water Utility Total Water Volume in ccf as Pumped and Billed Fiscal Years Ended June 30, 2012 through 2016

		Fiscal Year Ended June 30					
Water Volume	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>		
Pumped Billed	10,342,608 9,148,940	10,230,908 9,477,073	10,035,841 9,102,071	9,298,557 8,427,636	9,380,554 8,377,211		
Unaccounted (1)	1,193,668	<u>753,835</u>	933,770	<u>870,921</u>	1,003,343		
Unaccounted as a Percent of Pumped	11.54%	7.37%	9.30%	9.36%	10.70%		

⁽¹⁾ Unaccounted water volume is due primarily to the flushing of lines, fire flows, pressure releases during routine maintenance, line loss and slow meters. As part of its quality control efforts, the Water Utility routinely flushes transmission lines.

Source: Lansing Board of Water and Light

Lansing Board of Water and Light Water Utility Average and Peak Daily Water Volume in MGD as Pumped Fiscal Years Ended June 30, 2012 through 2016

		Fiscal Year Ended June 30					
Water Volume	2012	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>		
Average Daily	21.9	21.0	20.6	19.0	19.2		
Peak Daily	37.8	38.5	30.0	27.1	36.9		
Peak as a Percent of Average	172.6%	183.3%	145.6%	142.6%	192.2%		

Source: Lansing Board of Water and Light

Lansing Board of Water and Light
Water Utility
Amount and Percent of Water Volume in ccf as Billed by Customer Classification
Fiscal Years Ended June 30, 2012 through 2016

	Fiscal Year Ended June 30					
Classification:	2012	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	
Residential	3,030,215	3,150,418	2,918,363	2,757,917	2,714,343	
Commercial	2,804,744	2,951,596	2,926,068	2,793,407	2,798,491	
Industrial	707,777	770,627	733,663	590,018	581,299	
Sales for Resale	2,493,560	2,491,788	2,411,333	2,173,650	2,170,434	
Other	112 644	112 644	112 644	112 644	112 644	
Other	112,644	<u>112,644</u>	<u>112,644</u>	<u>112,644</u>	<u>112,644</u>	
Total	<u>9,148,940</u>	<u>9,477,073</u>	<u>9,102,071</u>	<u>8,427,636</u>	<u>8,377,211</u>	
Classification:						
Residential	33.12%	33.24%	32.06%	32.72%	32.40%	
Commercial	30.66	31.14	32.15	33.15	33.41	
Industrial	7.74	8.13	8.06	7.00	6.94	
Sales for Resale	27.26	26.29	26.49	25.79	25.91	
Other	<u>1.23</u>	<u>1.19</u>	<u>1.24</u>	<u>1.34</u>	<u>1.34</u>	
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	

Source: Lansing Board of Water and Light

Lansing Board of Water and Light Water Utility Amount and Percent of Water Volume in ccf as Billed by Location Fiscal Years Ended June 30, 2012 through 2016

	Fiscal Year Ended June 30					
<u>Location</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	
Inside of City	4,825,145	5,014,790	4,916,492	4,567,326	4,504,079	
Outside of City (1)	4,323,795	4,462,283	4,185,579	3,860,310	3,873,132	
Total	<u>9,148,940</u>	<u>9,477,073</u>	<u>9,120,071</u>	<u>8,427,636</u>	<u>8,377,211</u>	
<u>Location</u>						
Inside of City	52.74%	52.91%	54.02%	54.19%	53.77%	
Outside of City (1)	<u>47.26</u>	47.09	<u>45.98</u>	45.80	46.23	
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	

⁽¹⁾ Includes the wholesale sales to Delta Township, Lansing Township and the East Lansing-Meridian Water and Sewer Authority. Source: Lansing Board of Water and Light

Water Revenues

Water sales have historically accounted for approximately 10% of gross System Revenues. The following tables set forth the amount and percent of water sales by customer classification and location for the fiscal years ended June 30, 2012 through 2016.

Lansing Board of Water and Light Water Utility Amount and Percent of Water Sales by Customer Classification Fiscal Years Ended June 30, 2012 through 2016

Fiscal Year Ended June 30

riscar rear Effect Jule 30					
<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	
\$13,932,164	\$14,871,133	\$14,586,522	\$15,224,539	\$15,114,364	
10,809,779	11,639,174	11,837,260	11,992,029	12,607,269	
1,951,933	2,263,333	2,269,551	1,886,307	1,964,514	
3,225,126	3,428,583	3,277,407	3,151,972	3,199,681	
4,818,715	5,241,883	5,276,200	5,655,258	5,844,775	
<u>\$34,737,716</u>	<u>\$37,444,107</u>	\$37,246,939	\$37,910,106	<u>\$38,730,602</u>	
40.11%	39.72%	39.16%	40.16%	39.02%	
31.12	31.08	31.78	31.63	32.55	
5.62	6.04	6.09	4.98	5.07	
9.28	9.16	8.80	8.31	8.26	
<u>13.87</u>	<u>14.00</u>	<u>14.17</u>	<u>14.92</u>	<u>15.09</u>	
<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	
	\$13,932,164 10,809,779 1,951,933 3,225,126 4,818,715 \$34,737,716 40.11% 31.12 5.62 9.28 13.87	2012 2013 \$13,932,164 \$14,871,133 10,809,779 11,639,174 1,951,933 2,263,333 3,225,126 3,428,583 4,818,715 5,241,883 \$34,737,716 \$37,444,107 40.11% 39.72% 31.12 31.08 5.62 6.04 9.28 9.16 13.87 14.00	2012 2013 2014 \$13,932,164 \$14,871,133 \$14,586,522 10,809,779 11,639,174 11,837,260 1,951,933 2,263,333 2,269,551 3,225,126 3,428,583 3,277,407 4,818,715 5,241,883 5,276,200 \$34,737,716 \$37,444,107 \$37,246,939 40.11% 39.72% 39.16% 31.12 31.08 31.78 5.62 6.04 6.09 9.28 9.16 8.80 13.87 14.00 14.17	2012 2013 2014 2015 \$13,932,164 \$14,871,133 \$14,586,522 \$15,224,539 \$10,809,779 \$11,639,174 \$11,837,260 \$11,992,029 \$1,951,933 \$2,263,333 \$2,269,551 \$1,886,307 \$3,225,126 \$3,428,583 \$3,277,407 \$3,151,972 \$4,818,715 \$5,241,883 \$5,276,200 \$5,655,258 \$34,737,716 \$37,444,107 \$37,246,939 \$37,910,106 40.11% \$39.72% \$39.16% \$40.16% \$31.12 \$31.08 \$31.78 \$31.63 \$5.62 \$6.04 \$6.09 \$4.98 \$9.28 \$9.16 \$8.80 \$8.31 \$13.87 \$14.00 \$14.17 \$14.92	

⁽¹⁾ Represents the wholesale sales to Delta Township, Lansing Township and the East Lansing-Meridian Water and Sewer Authority. Source: Lansing Board of Water and Light

Lansing Board of Water and Light Water Utility Amount and Percent of Water Revenues by Location Fiscal Years Ended June 30, 2012 through 2016

	Fiscal Year Ended June 30					
<u>Location</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	
Inside of City	\$22,514,327	\$24,126,057	\$24,482,568	\$19,678,782	\$25,237,980	
Outside of City (1)	12,223,389	13,318,050	12,764,371	11,907,230	13,492,622	
Total	<u>\$34,737,716</u>	<u>\$37,444,107</u>	<u>\$37,246,939</u>	<u>\$31,586,012</u>	<u>\$38,730602</u>	
T						
<u>Location</u>						
Inside of City	64.81%	64.43%	65.73%	65.58%	65.16%	
Outside of City (1)	<u>35.19</u>	<u>35.57</u>	<u>34.27</u>	<u>34.42</u>	<u>34.84</u>	
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	

⁽¹⁾ Includes the wholesale sales to Delta Township, Lansing Township and the East Lansing-Meridian Water and Sewer Authority. Source: Lansing Board of Water and Light

THE STEAM UTILITY

General

The Steam Utility component of the System was established in the early 1900's when the Michigan Heat and Power Company was purchased by the BWL. Steam is currently supplied to approximately 80 square blocks in the City's downtown business district as well as a GM plant in Lansing. In addition to heat, some downtown buildings use steam in absorption units to provide air conditioning and GM utilizes steam for processing.

During the fiscal year ended June 30, 2016, the Steam Utility served approximately 175 customers. The following table sets forth average number and percent of steam customers by classification for the fiscal years ended June 30, 2012 through 2016.

Lansing Board of Water and Light Steam Utility Average Number and Percent of Customers by Classification Fiscal Years Ended June 30, 2012 through 2016

	Fiscal Year Ended June 30					
Classification	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	
Residential	6	5	5	5	5	
Commercial	184	179	172	170	169	
Industrial	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
Total	<u>191</u>	<u>185</u>	<u>178</u>	<u>176</u>	<u>175</u>	
Classification						
Residential	3.14%	2.70%	2.81%	2.84%	2.86%	
Commercial	96.34	96.76	96.63	96.59	96.57	
Industrial	<u>0.52</u>	<u>0.54</u>	<u>0.56</u>	<u>0.57</u>	<u>0.57</u>	
Total	<u>100%</u>	<u>100%</u>	100%	<u>100%</u>	<u>100%</u>	

Source: Lansing Board of Water and Light

Steam Generation

Steam supplied to BWL customers is produced at the natural gas-fired Reo Town Plant. The Reo Town plant has two once through heat recovery steam generators and an auxiliary boiler, each capable of 175 thousand pounds of steam per hour. This facility is capable of meeting the projected maximum steam capacity of 300 thousand pounds per hour with any one steam production unit out of service. (See "Electric Generation")

Rates and Charges

The Charter provides that the BWL shall have full and exclusive management of the water supply, steam and electric services of the City and such other services as may be agreed upon by the BWL and the City. The Charter also provides that the BWL may, with proper notice and hearing, fix just and reasonable rates as it deems necessary for such services. The implementation of new rates takes approximately three months and does not require any local, state or federal regulatory approval. It is the policy of the BWL to review all rates annually and to set such rates so that each utility is self-supporting. Rates are set on a cost of service basis.

Customers of the Steam Utility pay a steam commodity charge as well as a basic service charge or a demand charge. The steam commodity charge is based on metered steam usage that is measured in thousand pounds. The basic service charge is based on a maximum gauge pressure of 15 pounds per square inch ("psi"). The demand charge replaces the customer charge for large industrial users. The demand charge is based on contracted hours of use. All customers are subject to a Fuel Cost Adjustment. The Fuel Cost Adjustment permits the monthly increase or decrease in steam commodity charges for the cost of fuel used in supplying steam. In addition customers are subject to a monthly

environmental charge. Customers are billed monthly. The table on the following page sets forth a history of the Steam Utility's customer, demand and commodity charges.

Lansing Board of Water and Light Steam Utility Historic and Existing Rates by Customer Classification

Rate No. 1-General Steam Service					
Effective Date	5/1/10	3/1/11	3/1/12	10/1/12	11/1/14
Basic Service charge	\$10.27	\$11.19	\$12.20	\$12.44	\$13.56
Commodity Charge per Mlbs					
Summer Months (June-Nov.)					
First 200,000 lbs	\$11.71	\$13.06	\$13.91	\$14.19	\$15.47
Over 200,000 lbs	\$12.29	\$13.70	\$14.61	\$14.90	\$16.24
Winter Months (DecMay)					
First 200,000 lbs	\$11.85	\$13.22	\$14.08	\$14.36	\$15.65
Over 200,000 lbs	\$12.44	\$13.86	\$14.78	\$15.08	\$16.44
Environmental Charge (Per Mlb)	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30
Rate No. 2-Industrial Steam Service					
Effective Date	5/1/10	3/1/11	3/1/12	10/1/12	11/1/14
Monthly Rate:					
Demand Charge per lb per hour					
Lbs per hour of Contract Demand	\$1.17	\$1.28	\$1.40	\$1.43	\$1.56
Lbs per hour over Contract Demand	\$1.03	\$1.12	\$1.22	\$1.24	\$1.35
Commodity Charge per Mlbs	\$7.20	\$8.15	\$8.56	\$8.73	\$9.52
Environmental Charge (Per Mlb)	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30
Rate No. 5-Residential Steam Service					
Effective Date	5/1/10	3/1/11	3/1/12	10/1/12	11/1/14
Basic Service charge	\$7.61	\$8.29	\$9.04	\$9.22	\$10.05
Commodity Charge per Mlbs					
Summer Months (June-Nov.)					
First 200,000 lbs	\$9.06	\$10.18	\$10.77	\$10.99	\$11.98
Over 200,000 lbs	\$9.49	\$10.64	\$11.27	\$11.50	\$12.54
Winter Months (DecMay)					
First 200,000 lbs	\$9.17	\$10.30	\$10.90	\$11.12	\$12.12
Over 200,000 lbs	\$9.61	\$10.77	\$11.41	\$11.64	\$12.69
Environmental Charge (Per Mlb)	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30

Source: Lansing Board of Water and Light

Steam Volume

Steam volume is measured in Mlbs. The following table sets forth amount and percent of Steam as billed by customer classification for the fiscal years ended June 30, 2012 through 2016.

Lansing Board of Water and Light Steam Utility Amount and Percent of Steam as Billed in Mlbs by Customer Classification Fiscal Years Ended June 30, 2012 through 2016

	Fiscal Year Ended June 30					
Classification	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	
Residential	416	758	1,064	1,651	962	
Commercial	359,358	393,153	464,171	464,651	385,699	
Industrial	202,513	241,856	263,451	210,013	226,495	
Other	71,293	<u>74,687</u>	80,084	58,918	68,857	
Total	<u>633,580</u>	<u>710,454</u>	<u>808,770</u>	<u>735,233</u>	<u>682,013</u>	
Classification						
Residential	0.07%	0.11%	0.13%	0.22%	0.14%	
Commercial	56.72	55.34	57.39	63.20	56.55	
Industrial	31.96	34.04	32.57	28.56	33.21	
Other	<u>11.25</u>	10.51	9.90	<u>8.01</u>	<u>10.10</u>	
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	

Source: Lansing Board of Water and Light

Steam Revenues

The following table sets forth amount and percent of Steam revenue as billed by customer classification for the fiscal years ended June 30, 2012 through 2016.

Lansing Board of Water and Light Steam Utility Amount and Percent of Steam Revenues as Billed by Customer Classification Fiscal Years Ended June 30, 2012 through 2016

	Fiscal Year Ended June 30					
Classification	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	
Residential	\$ 4,936	\$ 9,685	\$ 19,376	\$ 27,304	\$13,136	
Commercial	5,166,204	6,256,338	9,071,313	8,851,858	6,843,529	
Industrial	3,742,269	4,421,931	5,488,362	4,744,825	4,433,915	
Other	1,124,628	1,341,387	1,745,077	1,335,225	1,392,882	
Total	<u>\$10,038,038</u>	<u>\$12,029,340</u>	<u>\$16,324,128</u>	<u>\$14,959,212</u>	<u>\$12,683,463</u>	
Classification						
Residential	0.05%	0.08%	0.12%	0.18%	0.10%	
Commercial	51.47	52.01	55.57	59.17	53.96	
Industrial	37.28	36.76	33.62	31.72	34.96	
Other	11.20	<u>11.15</u>	10.69	<u>8.93</u>	10.98	
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	

Source: Lansing Board of Water and Light

Ten Largest Customers

The following sets forth the principal product or service as well as the steam revenues and volume as billed for the ten largest customers of the Steam Utility for the fiscal year ended June 30, 2016.

Lansing Board of Water and Light Steam Utility Ten Largest Steam Customers Fiscal Year Ended June 30, 2016

			% of		% of
Name	Principal Product or Service	Revenue	Revenues (1)	Mlbs	Mlbs (2)
General Motors	Automotive Manufacturing	\$4,176,540	32.93%	226,495	
State of Michigan	State Government	3,698,230	29.16	194,090	
Lansing Comm. College	Education	773,645	6.10	40,918	33.21%
City of Lansing	Municipal Government	404,796	3.19	21,322	28.46
LEPFA	Entertainment	274,149	2.16	14,440	6.00
Blue Cross/Blue Shield	Insurance	212,931	1.68	10,680	3.13
Ingham County	Municipal Government	167,251	1.32	8,829	2.12
Boji Group	Real Estate Management	142,804	1.13	7,088	1.57
Bock 100 Limited Ptnr/Radisson	Property Management	117,930	0.93	5,880	1.29
Lake Trust Credit Union	Financial Institution		0.83	5,268	1.04
		105,392	<u>79.42</u> %	<u>535,010</u>	0.86
		\$10,073,66			0.77
		<u>8</u>			<u>78.45</u> %

⁽¹⁾ Based on total steam revenues of \$10,683,463 for the fiscal year ended June 30, 2016.

THE CHILLED WATER UTILITY

General

In June of 2001, the Chilled Water Utility component of the System commenced operations upon completion of its chilled water production and distribution facilities. Beginning with the fiscal year ended June 30, 2006, the Chilled Water Utility was separated from the Steam Utility.

A new 8,000 ton hour chilled water production facility was completed in September 2009. The facility was constructed at 625 West Allegan Street on land leased from the State of Michigan. The facility was completed on time and within budget resulting in no adverse financial impact on the BWL or its customers. The project was also completed without disruption of chilled water service. The decommissioning of the original chilled water facility was completed shortly thereafter and is no longer an asset of the BWL.

Service Area and Customer Base

During the fiscal year ended June 30, 2016, the Chilled Water Utility served 19 commercial accounts in the City's downtown business district. At this time the Utility does not serve any residential, industrial or other type of customer besides these 19 commercial accounts. The following table sets forth the number of service leads and chilled water volume for the fiscal years ended June 30, 2012 through 2016. Chilled water sales are measured in thousand ton hours ("Thrs").

⁽²⁾ Based on total steam sales of 612,013 thousand pounds ("Mlbs") for the fiscal year ended June 30, 2016. Source: Lansing Board of Water and Light

Lansing Board of Water and Light Chilled Water Utility Number of Service Leads and Volume in Thrs by Classification Fiscal Years Ended June 30, 2012 through 2016

	Fiscal Year Ended June 30						
_	<u>2012</u>	2013	2014	2015	<u>2016</u>		
Commercial Customers	16	16	16	18	19		
Sales	10,140	8,887	10,117	10,153	11,970		

Source: Lansing Board of Water and Light

Rates and Charges

The Charter provides that the BWL shall have full and exclusive management of the water supply, steam and electric services of the City and such other services as may be agreed upon by the BWL and the City, such as chilled water. The Charter also provides that the BWL may, with proper notice and hearing, fix just and reasonable rates as it deems necessary for such services. The implementation of new rates takes approximately three months and does not require any local, state or federal regulatory approval. It is the policy of the BWL to review all rates annually and to set such rates so that each utility is self-supporting. Rates are set on a cost of service basis.

Customers of the Chilled Water Utility pay capacity and commodity charges. Capacity charges are based on contracted hours of use. Chilled water commodity charges are based on metered usage measured in Thrs. Customers are billed monthly. The following table sets forth a history of the Chilled Water Utility's capacity and commodity charges.

Lansing Board of Water and Light Chilled Water Utility Historic and Existing Rates

Gen. Chilled Water Service	January 1 <u>2001</u>	May 1 2009	May 1 <u>2011</u>	November 1 <u>2014</u>
Capacity Charge per Thrs Up to 105% of Contract Demand	\$40.64	\$41.66	\$43.74	\$45.05
Over 105% of Contract Demand	\$56.90	\$58.32	\$61.24	\$63.08
Commodity Charge per Thrs	\$0.115	\$0.118	\$0.124	\$0.128

Source: Lansing Board of Water and Light

Chilled Water Revenues

The following table sets forth amount and percent of chilled water revenue as billed by customer classification for the fiscal years ended June 30, 2012 through 2016.

Lansing Board of Water and Light Chilled Water Utility Chilled Water Revenues by Classification (1) Fiscal Years Ended June 30, 2012 through 2016

		Fiscal Year Ended June 30						
Customer Classification	2012		2014					
		2013		<u>2015</u>	<u>2016</u>			
Residential	\$	\$ 0	\$ 0	\$ 0	\$ 0			
Commercial	0	5,139,836	5,397,411	5,568,287	6,275,583			
Industrial	5,271,400	0	0	0	0			
Other		0	0	0	0			
Total	0	\$5,139,836	\$5,397,411	\$5,568,287	\$6,275,583			
	<u>0</u>							
	\$5,271,400							

⁽¹⁾ Includes billed and accrued, unbilled revenues. Source: Lansing Board of Water and Light

Chilled Water Customers by Volume and Revenues

The following sets forth the principal product or service as well as the chilled water revenues and volume as billed for the customers of the Chilled Water Utility for the fiscal year ended June 30, 2016.

Lansing Board of Water and Light Chilled Water Utility Chilled Water Customers by Volume and Revenues Fiscal Year Ended June 30, 2016

<u>User</u>	Principal Product or Service	<u>Thrs</u>	% Thrs	Revenues	% Revenues
State of Michigan (1)	State Government	9,018,979	77.65%	\$4,990,599	82.00%
Grand Tower	State Government	771,740	6.65	432,557	7.11
Accident Fund	Insurance	665,085	5.73	299,331	4.92
River St. Triangle (State Police).	Property Management	654,380	5.63	210,373	3.46
Ingham County	Municipal Government	503,623	4.34	152,536	<u>2.51</u>
	-	11,613,807	100%	\$6,085,396	100%

⁽¹⁾ The State of Michigan has multiple service leads. Source: Lansing Board of Water and Light

SYSTEM FINANCIAL INFORMATION

Historic and Projected Operating Cash Flows and Debt Service Coverage

The following tables set forth the historic operating cash flow and debt service coverage for the fiscal years ended June 30, 2013 through 2016 as well as the projected operating cash flow and debt service coverage of the System, including the Bonds described herein, for the fiscal years ending June 30, 2017 through 2021. The projections and assumptions are subject in all respects to unforeseen forces and events beyond the control of the BWL. Such projections and assumptions,

while believed by the BWL to be reasonable, may not be actually realized. Investors should form their own judgment as to the reasonableness of the assumptions and accuracy of the projections.

FINANCIAL INFORMATION Lansing Board of water and Light Historic Operating Cash Flow and Debt Service Coverage

Fiscal Years Ended June 30, 2012 Through 2016 2015 (1) 2012 (1) 2013 (1) 2014 (1) 2016 (1) **Operating Revenues** Water 34,737,716 \$ 37,444,107 \$ 37,246,939 \$ 37,910,106 \$ 38,730,602 Electric 270,007,402 277,157,446 289,154,465 295,047,904 303,245,766 10,038,038 12,029,340 16,324,128 14,959,212 12,683,463 Steam Chilled Water 5,397,411 5,271,400 5,139,836 5,568,287 6,275,583 **Total Operating Revenues** 320,054,556 331,770,729 348,122,943 353,485,509 360,935,414 **Operating Expenses** 176,677,522 187,752,343 178,958,141 Production 179,175,851 182,244,198 Transmission and distribution 15,480,996 15,646,754 23,092,502 20,870,026 21,593,598 Administrative and general 61,061,810 65,095,731 66,583,248 61,297,460 64,007,040 Depreciation 30,854,100 38,297,875 38,997,186 39,104,343 41,541,561 309,024,172 286,572,757 295,717,883 310,917,134 306,100,340 **Total Operating Expenses** 33,481,799 37,205,809 44,461,337 54,835,074 Operating Income (Loss) 36,052,847 Non-Operating Revenues (Expenses) Investment income 2.405.773 1.094.077 1.866.462 1.351.006 1,913,873 Other (Expense) income 3,558,624 1,676,960 (5,974,385)1,534,922 (4,588,160)Impairment on Eckert Power Station (15,763,520)System capacity fee 9,220,495 9,221,651 9,222,989 9,223,075 3,351,392 Bonded debt interest expense (6,966,835)(5,998,530)(15,334,915)(14,995,574)(14,861,300)Amortization-Central Utilities Complex (6,872,715)(7,247,715)(7,642,715)(8,057,715)(2,902,715)Payment in lieu of taxes (12,169,097)(16,120,694)(20,608,093)(20,840,065)(21,033,531)Other interest expense (10,433)(20,908)(41,555)(49,691)(51,049)900,063 Net Income (Loss) 22,647,611 18,657,688 (1,306,403)12,627,295 Add: Depreciation and impairment (2) 30,854,100 38,297,875 38,997,186 39,104,343 57,305,081 Interest on long-term debt--revenue bonds 6,966,835 5,998,530 15,334,915 14,995,574 14,861,300 Interest on long-term debt--notes 10,433 20,908 41,555 49,691 51,049 Total Additions/ Deductions 37,831,368 44,317,313 54,373,656 54,149,608 72,217,430 NET INCOME AVAILABLE FOR DEBT SERVICE \$ 60,478,979 62,975,001 53,067,253 66,776,903 \$ 73,117,494 **Debt Service Requirements** 2002A Bonds 924,984 2002B Bonds 2,500,375 2,489,294 2003A Bonds 1,711,479 1,096,330 2005A Bonds 3,136,750 3,132,000 5,796,000 2008A Bonds 1,947,569 1,947,419 1,947,262 2,762,100 2,978,400 2009A Bonds 8,781,424 8,782,624 8,783,799 8,783,881 3,191,802 2011A Bonds 12,809,200 12,814,200 12.814.050 2012A Bonds 1,426,522 1,428,500 1,425,350 6,146,750 1,199,750 194,199 2,319,650 2013A Bonds 2,323,250

(1) Actuals

Total

(2) FY 2016 includes Eckert Power Station impariment

Source: Lansing Board of Water and Light

Total Existing Revenue Bond Debt Service

Total Debt Service Coverage

18,991,500

18,991,500

3.18x

19,079,469

19,079,469

3.30x

31,964,511

31,964,511

1.66x

28,105,181

28,105,181

2.38x

\$ 27,454,252

\$ 27,454,252

2.66x

Lansing Board of Water and Light Projected Operating Cash Flow and Debt Service Coverage Fiscal Years Ended June 30, 2017 Through 2021

	11504	Budgeted		Forecasted	,ugi	Forecasted		Forecasted		Forecasted
		2017		2018		2019		2020		2021
Operating Revenues (1)		2017		2010		2017		2020		2021
Water	\$	39,568,398	\$	41,401,599	\$	43,455,734	\$	45,476,725	S	47,607,233
Electric	-	308,720,642	*	312,972,075	•	300,873,114	-	301,499,146	*	302,634,482
Steam		12,418,574		13,593,592		14,163,325		14,755,919		15,435,920
Chilled Water		5,707,210		5,893,649		6,000,773		6,047,729		6,178,649
Total Operating Revenues	\$	366,414,824	\$	373,860,915	\$	364,492,946	\$	367,779,519	\$	371,856,284
Operating Expenses (1)		300,111,021	Ψ	373,000,212	Ψ	30.,.,2,,	Ψ	307,773,813	Ψ	371,030,201
Production	\$	187,816,479	\$	188,379,285	\$	173,312,040	\$	168,947,800	\$	169,422,980
Transmission and distribution	•	22,832,827		23,380,814	·	23,941,954	·	24,516,561	•	25,104,958
Administrative and general		67,681,132		69,305,479		70,968,811		72,672,062		74,416,192
Depreciation		43,152,773		40,466,105		43,563,266		44,836,356		43,750,391
Total Operating Expenses	\$	321,483,211	\$	321,531,683	\$	311,786,071	\$	310,972,779	\$	312,694,521
Operating Income (Loss)	-\$	44,931,613	\$	52,329,232	\$	52,706,875	\$	56,806,740	\$	59,161,763
Non-Operating Revenues (Expenses) (1)	-	,,,	-	,,	*	,,,,,,,,	•	,,	*	,,
Investment income	\$	835,670	\$	811,034	\$	814,264	\$	817,599	\$	820,934
Other income	-	37,021	-	37,021	*	37,021	•	37,021	*	37,021
System capacity fee		-		-		-		-		
Bonded debt interest expense		(13,671,260)		(13,278,912)		(13,209,411)		(12,379,352)		(12,533,770)
Amortization-Central Utilities Complex		-		-		-		-		
Return on equity		(22,007,344)		(22,455,113)		(21,883,654)		(22,115,562)		(22,892,124)
Other interest expense		(12,252)		(12,252)		(12,252)		(12,252)		(12,252)
Net Income (Loss)	\$	10,113,448	\$	17,431,010	\$	18,452,843	\$	23,154,194	\$	24,581,572
Add:		., .,		., . ,		-, - ,		-, - , -		, ,
Depreciation and impairment	\$	43,152,773	\$	40,466,105	\$	43,563,266	\$	44,836,356	\$	43,750,391
Interest on long-term debtrevenue bonds		13,671,260		13,278,912		13,209,411		12,379,352		12,533,770
Interest on long-term debtnotes		12,252		12,252		12,252		12,252		12,252
Amortization of deferred costs		-		-		-		_		
Total Additions/ Deductions	\$	56,836,285	\$	53,757,269	\$	56,784,929	\$	57,227,960	\$	56,296,413
NET INCOME AVAILABLE FOR DEBT SERVICE	\$	66,949,733	\$	71,188,279	\$	75,237,772	\$	80,382,154	\$	80,877,985
Debt Service Requirements										
2008A Bonds	\$	3,545,800	\$	3,548,800	\$	3,559,000	\$	3,547,750	\$	3,532,500
2011A Bonds		12,813,900		12,813,750		16,438,600		16,442,100		16,458,575
2012A Bonds		5,583,750		5,575,500		-		-		-
2013A Bonds		2,320,500		2,321,900		2,320,900		2,327,500		2,324,750
Total Existing Revenue Bond Debt Service	\$	24,263,950	\$	24,259,950	\$	22,318,500	\$	22,317,350	\$	22,315,825
Total Debt Service Requirements	\$	24,263,950	\$	24,259,950	\$	22,318,500	\$	22,317,350	\$	22,315,825
Debt Coverage Ratio		2.76x		2.93x		3.37x		3.60x		3.62x
Annual Excess with 1.5x Coverage. (2)		\$30,553,808		\$34,798,354		\$41,760,022		\$46,906,129		\$47,404,248
Cumulative Excess with 1.5x Coverage. (2)		\$30,553,808		\$65,352,162		\$107,112,184		\$154,018,313		\$201,422,560

 $^{(1) \} Revenues, operating \ expenses, and \ non-operating \ revenues/(expenses) \ are \ based \ upon \ LBWL \ FY2017-2021 \ budget$

Source: Lansing Board of Water and Light

Durce. Lansing Board of Water and I

PENSION AND RETIREMENT SYSTEMS

The BWL has three retirement plans. The BWL administers a tax-qualified, single-employer, noncontributory, defined benefit public employee retirement pension plan (the "Defined Benefit Plan"), and the BWL has a tax-qualified, single-employer, noncontributory, defined contribution public employee retirement pension plan (the "Defined Contribution Plan"). The BWL also has a tax-qualified, single-employer, defined benefit plan to administer and fund retiree healthcare benefits ("Retiree Benefit Plan and Trust").

⁽²⁾ Rate Covenant is 1.25x. See "THE BONDS - Rate Covenant" herein.

Defined Benefit Plan

The Defined Benefit Plan was established by the BWL in 1939 under Section 5-203 of the City Charter and has been revised several times. The latest revision took effect on July 1, 2010.

The Defined Benefit Plan was closed to employees hired after December 31, 1996. At this time participants were required to make an irrevocable choice to either remain in this plan or move to the newly established defined contribution plan. 602 of the 760 employees required to make this choice elected to convert their retirement benefits and received a lump-sum distribution that was rolled into the newly established defined contribution plan. As a result of this action, effective December 1, 1997, the Board of Commissioners transferred \$75,116,470 to the newly established defined contribution plan.

The Defined Benefit Plan provides retirement, early retirement, disability, termination, and death benefits. The Plan provides for an annual benefit upon normal retirement age equal to the product of the total number of years of credited service multiplied by a percentage equal to 1.80 percent of the highest annual pay during the last 10 years of service, paid in equal monthly installments.

Payments will be non-increasing or increasing only as follows: (i) By an annual percentage increase that does not exceed the annual percentage increase in a cost-of-living index that is based on prices of all items and issued by the Bureau of Labor Statistics; (ii) To the extent of the reduction in the amount of the employee's payments to provide for a survivor benefit upon death, but only if the beneficiary dies or is no longer the employee's beneficiary; (iii) To provide cash refunds of employee contributions upon the employee's death; or (iv) To pay increased benefits that result from a plan amendment.

Article 9, Section 24 of the State of Michigan constitution requires that financial benefits arising on account of employee service rendered in each year be funded during that year. Accordingly, the BWL Pension Board retains an independent actuary to determine the annual contribution. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability. There was no contribution required for the years ended June 30, 2015 and 2016.

Net Pension Asset – The components of the net pension asset of the BWL at June 30, 2016 and June 30, 2015 were as follows (in thousands):

	<u>2016</u>	<u>2015</u>
Total pension liability	\$61,178	\$65,395
Plan fiduciary net position	65,442	73,679
Plan's net pension asset	<u>\$ (4,264)</u>	\$ (8,284)
Plan fiduciary net position, as a % of the total pension liability	106.97%	112.67%

Actuarial Assumptions – The total pension liability in the June 30, 2016 and June 30, 2015 actuarial valuation was determined using the following actuarial assumptions applied to all periods included in the measurement: inflation, 3%; salary increases, salary increases 2016 – 3.5%; investment rate of return 7.5%; discount rate 7.5%. Mortality rates were based on the Healthy and Disabled, RP-2014 Mortality Table with MP-2015 Improvement Scale.

Defined Contribution Plan

The Defined Contribution Plan was established by the BWL in 1997 under Section 5-203 of the City Charter. The Defined Contribution Plan covers substantially all full-time employees hired after December 31, 1996. In addition, 602 employees hired before January 1, 1997 elected to convert their retirement benefits from the Defined Benefit Plan effective December 1, 1997.

The Defined Contribution Plan operates as a money purchase pension plan and meets the requirements of Section 401(a) and 501 (a) of the IRC of 1986, as amended from time to time.

For employees hired before January 1, 1997, the BWL is required to contribute 15.0 percent of the employees' compensation. For employees hired after January 1, 1997, the BWL is required to contribute 8.1 percent or 9.5 percent (depending on classification as bargaining or nonbargaining) of the employees' compensation. In addition, the BWL is required to contribute 3.0 percent of the employees' compensation for all employees who are not eligible to receive overtime pay and 0.5 percent of the employees' compensation for all nonbargaining employees.

During the years ended June 30, 2016 and 2015, the BWL contributed \$5,661,884 and \$5,548,360 respectively.

Retiree Benefit Plan and Trust

The Retiree Benefit Plan and Trust (the "Plan") is a single-employer defined benefit healthcare plan. The Plan provides medical, dental, and life insurance benefits in accordance with Section 5-203 of the City Charter. Substantially all of the BWL's employees may become eligible for healthcare benefits and life insurance benefits if they reach normal retirement age while working for the BWL. There were 715 participants eligible to receive benefits at June 30, 2016.

In October 1999, the BWL formed a Voluntary Employee Benefit Administration (VEBA) trust for the purpose of accumulating assets sufficient to fund retiree healthcare insurance costs in future years. During the years ended June 30, 2016 and 2015, the cost to the BWL of maintaining the Retiree Benefit Plan was \$9,423,081 and \$9,670,794, of which respectively, was incurred as direct costs of benefits.

The required VEBA contribution is based on a projected pay-as-you-go financing requirement with an additional amount to prefund benefits. The pay-as-you-go retiree benefits paid was more than the annual required contribution (ARC in 2016 and therefore, expensed on the statement of changes in trust net position.

Funding status and funding progress trend information is as follows (in thousands):

Valuation Date	Actu	ıarial Asset Value		rial Accrued	Actua	nfunded rial Accrued .iability	Funded Ratio	Cover	ed Payroll	UAAL as a % of Covered Payroll
	Ф.		Φ.		Ф.					
2/28/2015 2/29/2016	\$	157,565 145,274	\$	200,196 205,215	\$	42,631 59.941	78.71% 70.79%	\$	50,613 53,540	84.2% 112.0%

Actuarial Assumptions – The accrued actuarial liability in the June 30, 2016 and June 30, 2015 actuarial valuation was determined using the following actuarial assumptions applied to all periods included in the measurement: projected healthcare trend rates ranging from 5-9%; amortization method level dollar over a 30-year period; investment rate of return 7.5%; discount rate 7.5%. Mortality rates were based on the Healthy and Disabled, RP-2014 Mortality Table fully generational using scale MP – 2014 Mortality Table fully generational using scale MP – 2014, respectively.

RETURN ON CITY EQUITY

Effective July 1, 2013 the BWL began a five-year agreement with the City to provide annual payments to the City as a return on the City's equity in accordance with a formula based on 6.1% of wholesale and retail sales from its water supply, steam, chilled water and electric utilities. This payment is subordinate to debt service. During the past ten fiscal years, the BWL has made payments to the City as noted in the table below. This payment is treated by each utility as a payment in lieu of taxes.

Fiscal Year Ended June 30,	Payment to City
2007	10,747,503
2008	10,293,071
2009	10,485,037
2010	11,771,013
2011	11,732,538
2012	12,169,097
2013	16,120,694
2014	20,608,093
2015	20,840,065
2016	21,033,531

CERTAIN RISK FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY

The Electric Utility Industry Generally

The electric utility industry has been, and in the future may be, affected by a number of factors which could affect the financial condition of electric utilities, such as the Electric Utility. Such factors include, among others, (i) effects of compliance with rapidly changing environmental, safety, licensing, regulatory and legislative requirements, (ii) changes resulting from energy efficiency and demand-side management programs on the timing and use of electric energy, (iii) other federal and state legislative changes particularly with respect to renewable energy requirements, (iv) "self-generation" and distributed generation by customers, (v) issues relating to the ability to issue tax-exempt obligations, (vi) restrictions on the ability to sell electricity from generation projects financed with outstanding tax-exempt obligations to non-governmental entities, (vii) changes from projected future load requirements, (viii) increases in costs, (ix) shifts in the availability and relative costs of different fuels, and (x) restructuring of the electric industry. Some of these factors are discussed in greater detail below.

Regional Transmission Organization, Midwest Market, and Wholesale Competition

General. The electric utility industry in the United States has undergone fundamental change prompted by (i) the Energy Policy Act of 2005 (the "Energy Policy Act"), (ii) policies of the FERC regarding transmission access and pricing, (iii) increased consolidation and mergers of electric utilities, (iv) the rise of RTOs as market entities, (v) the proliferation of merchant or self-generators, (vi) substantial changes in pricing and structures for electric services by RTOs, and (vii) many regulatory commissions and legislative bodies promoting increased competition in the electric utility industry.

To promote wholesale competition, four regional transmission organizations (RTO's), ISO New England, PJM Interconnection, the MISO, and the southwest Power Pool span the Northeast, Mid-Atlantic, Great Lakes and mid-continent states. These RTOs together with Independent System Operators ("ISOs") in New York, Texas and California assure non-discriminatory open access transmission and transparent, liquid energy and ancillary services markets. These organizations have changed the way many electric generating and transmission systems have been operated in the past. RTOs and ISOs have been created by FERC or the states to promote and assure vibrant wholesale electricity competition. However large sections of the country, predominately in the Southeast and West, are not served by an RTO or ISO, but, instead, maintain traditional wholesale and retail markets.

Exposure to Dealings with Third Parties. The BWL manages all trading with 3rd parties in accordance with its Risk Management Program. All forward trading is limited to hedging exposure of physical assets. Forward trading involves fuel purchasing for power plant use, power purchases as necessary for retail load requirements and power sales when excess generation is available and economic. The BWL does have several long-term power purchase agreements for its renewable portfolio. The BWL believes that its exposure to these agreements is negligible.

FERC Initiatives. On July 20, 2006, FERC issued Order No. 679, which adopted incentive based rate treatment for transmission of electricity in interstate commerce by public utilities. This final rule is intended to encourage transmission infrastructure investment. The ITC has approval to automatically adjust transmission rates based on a forward looking test year, which will make it more likely transmission rates will increase. It has also received approval to collect incentive rates for transmission service. This could increase transmission costs for the Electric Utility.

The FERC has approved a MISO tariff request to create a new category of transmission projects referred to as Multi Value Projects ("MVP"). MISO's rate request results in the cost of these projects being charged to all transmission customers regardless of where the project occurs in the MISO footprint or to whom the benefits may accrue. In the future, MVP transmission related rate increases could be significant to most transmission customers. Because of its GFA carveout and generation connected to its system, the BWL does not anticipate that the MVP rate treatment will have a significant impact on its electric transmission costs or its financial condition.

The Midcontinent Independent System Operator. MISO, which was originally created under FERC's jurisdiction to assure open and non-discriminatory access to the bulk transmission system, has substantially expanded its activities. MISO has effectively implemented a version of FERC's Standard Market Design which is known as the "Midwest Market Initiative" (Midwest Market) and "MISO Day 2". Under the Midwest Market arrangements, MISO has significantly changed wholesale electric purchases, sales, and operations within its footprint. The Electric Utility is a market participant of and is affected by the Midwest Market.

MISO performs the following services for the Midwest Market:

- 1. MISO performs scheduling and dispatching of most of the electric generating units in the MISO footprint. The goal of this is to achieve lower cost energy through a more efficient dispatch of resources than can be obtained by utilities making separate generation scheduling and dispatching decisions.
- 2. MISO has replaced traditional transmission congestion management where transmission transactions were interrupted to relieve congestion with an arrangement that uses generation re-dispatch and energy pricing signals to encourage transmission users to avoid transactions that cause transmission congestion. Under this arrangement, MISO will use generation re-dispatch as much as possible to relieve transmission congestion, and only interrupt transactions as a last resort
- 3. MISO operates day-ahead and real time energy and ancillary services markets based on the Locational Marginal Price ("LMP") at the various injection and withdrawal points on the transmission grid. LMP is calculated by MISO as the cost to supply the next increment of load using the bids that have been made by market participants to either supply additional energy or reduce energy usage.
- 4. MISO implemented its ancillary services and operating reserves market in January, 2009. Ancillary services include regulation and operating reserves that market participants can self-supply or purchase from the MISO. Suppliers can sell these services to other market participants.

Beginning in January 2011, the BWL became a market participant with a load and a generation asset in the Midwest Market. The BWL has placed the remaining three operational Eckert units, Erickson plant, and REO Town plant "behind the meter" and uses its GFA from Belle River to serve retail customers. This configuration allows the Electric Utility to minimize transmission costs, participate in the Midwest Market, and maintain reliability.

In the future, the BWL may consider placing part or all of its generation "in front of the meter" should that configuration produce economic benefits or improved reliability.

Participation in the Midwest Market has had a net positive impact on the BWL's electric operations. The BWL sells excess generation into wholesales markets on an hourly basis at LMP prices and to brokers for durations ranging from one day up to a year. In addition, the BWL sells excess capacity used by third parties for compliance with MISO's Planning Reserve Margin requirements on an annual basis consistent with MISO's planning year.

The BWL's wholesale portfolio consists of seasonal and opportunity sales. Aside from day-ahead sales into the Midwest Market, all of the Electric Utility's sales are system firm, and the Electric Utility is not obligated to provide electric energy in the event units are unavailable. The Electric Utility has used the system firm sale structure for the past twelve years.

Retail Wheeling. The State of Michigan enacted the "Customer Choice and Electric Reliability Act" ("PA 141") in 2000 as a means to promote electric competition in Michigan. The Electric Utility was subject to PA 141 until October of 2008. Between 2000 and 2008, the Electric Utility did not lose any customers to alternate electric suppliers. In October, 2008, the Michigan Legislature adopted major changes to the electric utility industry in Michigan through PA 295 of 2008 and PA 141 as amended by PA 286 of 2008. Most of the changes affected utilities under the jurisdiction of the Michigan Public Service Committee ("MPSC"), which are investor owned utilities and certain electric cooperative utilities. Since municipal utilities are not under the jurisdiction of the MPSC, many of the changes did not affect the Electric Utility. However two provisions in the legislation were applicable to the Electric Utility. The first required all electric utilities to meet certain renewable energy and energy efficiency standards. The second changed the scope of Michigan's retail customer choice program, relieving municipal utilities of any obligation of offer retail customer choice in their service territories. With this change, the Electric Utility is no longer subject to retail electric competition within its service territory. It remains subject to competition with neighboring utilities for new customers that locate in areas served by both the neighboring utilities and the Electric Utility, except within the Lansing city boundaries within which only the Electric Utility can serve.

Renewable Energy and Energy Efficiency Standards

In October, 2008, the Michigan Legislature adopted PA 295 of 2008 ("Act 295"), which required all Michigan electric utilities to meet certain renewable energy and energy efficiency targets. Starting in 2012, the renewable energy standards were phased-in over 4 years and required each utility to purchase or generate a growing percentage of the power used to serve its retail customers from a qualifying renewable energy facility. The percentage renewable energy required starting in 2015 and thereafter is 10%.

Each MW produced by a qualifying renewable energy facility creates one renewable energy credit ("REC") that can be used to meet the renewable energy standard. Bonus credits are provided for Michigan made sources that meet certain characteristics. Utilities comply with the requirements by either generating electric energy from qualifying facilities, or by purchasing RECs.

The legislation also adopted rate impact limits on compliance costs, which legislation defines as the incremental costs incurred in procuring the energy and RECs necessary to meet the renewable energy standards. The rate limits are \$3.00 per residential customer per month, \$16.58 per commercial secondary customer meter per month, and \$187.50 per commercial primary customer per meter month.

The Electric Utility has already secured multiple sources of qualifying energy, consisting of two landfill gas generation facilities, two hydro units, a solar installation and a wind project. Collectively, these sources provide approximately 7% of the Electric Utility's retail load. The legislation permits the Electric Utility to carry forward unused renewable energy credits for three years. Based on current generation levels and contracted projects, the Electric Utility is projected to exceed the State standard in 2018 and each year thereafter.

The Board approved a Strategic Plan update on September 27, 2016 that adopts a goal of 30% clean energy by 2020. The BWL projects that its renewable energy will constitute approximately 20% of its retail sales by 2020. The balance of the 30% goal is expected to be met with energy savings from the Board's energy efficiency program.

PA 295 also required each Michigan electric utility to meet energy efficiency targets, for the reduction of energy consumption by retail customers, limits on rate impacts of energy efficiency programs, and cost-benefit tests. Like the renewable energy program, the energy efficiency goals are increased each year for four years. Load management programs that only shift energy use from peak periods to off-peak periods generally cannot be used to comply with the energy efficiency targets. The goal of the energy efficiency standard is to reduce electric energy consumption through deployment of energy efficient appliances and devices. The goals have been structured as energy savings as a percentage of total retail sales, and are incremental each year. Each year after 2012, PA 295 requires electric utilities to save 1% of retail energy sales through energy efficiency programs.

A second requirement of the energy efficiency legislation constrains each electric utility to spend no more than 2.0% of the retail revenue from the second year proceeding the program year.

The Electric Utility has successfully complied with the savings and spending standards required by PA 295 in each year from 2009 to 2015 and fully expects to continue complying in future years.

Collectively, the renewable energy and energy efficiency programs have provided environmental compliance and generation planning benefits to the Electric Utility and have been popular with BWL customers. These programs will remain important components of the Electric Utility's resource portfolio in future years.

In December 2016, the Michigan Legislature passed, and the Governor signed into law, two energy reform bills. Among other things, the bills modify PA 295's renewable energy and energy efficiency standards. The bills adopt a renewable energy standard of 15% by 2022 and no longer mandate energy efficiency goals for municipal utilities after 2020. The BWL's resource plans call for 20% renewable energy by 2020 and a continuation and growth in the energy efficiency program after 2020. As a result, the BWL does not anticipate any changes to its plans based on the new laws.

LITIGATION

There is no litigation pending or, to the knowledge of the BWL, threatened in any court (either state or federal) restraining or enjoining the issuance or delivery of the Bonds, or questioning (i) the proceedings under which the Bonds are to be issued, (ii) the validity of the Bonds, (iii) the pledge by the BWL of the moneys and other property pledged under the Bond Resolution, or (iv) the legal existence of the BWL or the City or the title to office of the present officials of the BWL or the City.

BOND RATINGS

Moody's Investors Service and S&P Global Ratings, a Standard & Poor's Financial Services LLC business, have assigned their ratings of "Aa3" and "AA-," respectively, to the Bonds. No application was made to any other rating agency for the purpose of obtaining an additional rating on the Bonds. The BWL has furnished to the rating agencies certain information to be considered in evaluating the Bonds. The above ratings reflect the independent judgments of the rating agencies and there is no assurance that such ratings will prevail for any given period of time or that they will not be revised or withdrawn entirely by such rating agency, if, in the judgment of such rating agency, circumstances so warrant. Any such revision or withdrawal of such ratings may have an effect on the market price of the Bonds. A securities rating is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at any time.

MUNICIPAL FINANCE QUALIFYING STATEMENT

The BWL has filed a Qualifying Statement for the fiscal year ended June 30, 2016. The Michigan Department of Treasury has determined that the BWL is in material compliance with the criteria identified in Act 34 of the Public Acts of Michigan 2001, as amended.

TAX MATTERS

In the opinion of Miller, Canfield, Paddock and Stone, P.L.C., ("Bond Counsel"), under existing law, the interest on the Bonds is excludable from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations. It should be noted, however, that with respect to corporations (as defined for federal income tax purposes) such interest is taken into account in determining adjusted current earnings for the purpose of computing the alternative minimum tax imposed on such corporations. Bond Counsel is also of the opinion that, under existing law, the Bonds and the interest thereon are exempt from all taxation by the State of Michigan or by any taxing authority within the State of Michigan, except inheritance and estate taxes and taxes on gains realized from the sale, payment or other disposition thereof. Bond Counsel will express no opinion regarding any other federal or state tax consequences arising with respect to the Bonds and the interest thereon.

The opinion on federal tax matters is based on the accuracy of certain representations and certifications, and continuing compliance with certain covenants, of the BWL contained in the transcript of proceedings and which are intended to evidence and assure the foregoing, including that the Bonds are and will remain obligations the interest on which is excludable from gross income for federal income tax purposes. The BWL has covenanted to take the actions required of it for the interest on the Bonds to be and to remain excludable from gross income for federal income tax purposes, and not to take any actions that would adversely affect that exclusion. Bond Counsel's opinion assumes the accuracy of the BWL's certifications and representations and the continuing compliance with the BWL's covenants. Noncompliance with these covenants by the BWL may cause the interest on the Bonds to be included in gross income for federal income tax purposes retroactively to the date of issuance of the Bonds. After the date of issuance of the Bonds, Bond Counsel will not undertake to determine (or to so inform any person) whether any actions taken or not taken, or any

events occurring or not occurring, or any other matters coming to Bond Counsel's attention, may adversely affect the exclusion from gross income for federal income tax purposes of interest on the Bonds or the market prices of the Bonds.

The opinion of Bond Counsel is based on current legal authority and covers certain matters not directly addressed by such authority. It represents Bond Counsel's legal judgment as to the excludability of interest on the Bonds from gross income for federal income tax purposes but is not a guarantee of that conclusion. The federal income tax opinion is not binding on the Internal Revenue Service ("IRS") or any court. Bond Counsel cannot give and has not given any opinion or assurance about the effect of future changes in the Internal Revenue Code of 1986, as amended (the "Code"), the applicable regulations, the interpretations thereof or the enforcement thereof by the IRS.

Ownership of the Bonds may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, corporations subject to the branch profits tax, financial institutions, certain insurance companies, certain S corporations, individual recipients of Social Security or Railroad Retirement benefits and taxpayers who may be deemed to have incurred (or continued) indebtedness to purchase or carry the Bonds. Bond Counsel will express no opinion regarding any such consequences.

Amortizable Bond Premium

For federal income tax purposes, the excess of the initial offering price to the public (excluding bond houses and brokers) at which a Bond is sold over the amount payable at maturity thereof constitutes for the original purchasers of such Bonds (collectively, the "Original Premium Bonds") an amortizable bond premium. Bonds other than Original Premium Bonds may also be subject to an amortizable bond premium determined generally with regard to the taxpayer's basis (for purposes of determining loss on a sale or exchange) and the amount payable on maturity or, in certain cases, on an earlier call date (such bonds being referred to herein collectively with the Original Premium Bonds as the "Premium Bonds"). Such amortizable bond premium is not deductible from gross income. The amount of amortizable bond premium allocable to each taxable year is generally determined on the basis of the taxpayer's yield to maturity determined by using the taxpayer's basis (for purposes of determining loss on sale or exchange) of such Premium Bonds and compounding at the close of each six-month accrual period. The amount of amortizable bond premium allocable to each taxable year is deducted from the taxpayer's adjusted basis of such Premium Bonds to determine taxable gain upon disposition (including sale, redemption or payment at maturity) of such Premium Bonds.

All holders of the Premium Bonds should consult with their own tax advisors as to the amount and effect of the amortizable bond premium.

Market Discount

The "market discount rules" of the Code apply to the Bonds. Accordingly, holders acquiring their Bonds subsequent to the initial issuance of the Bonds will generally be required to treat market discount recognized under the provisions of the Code as ordinary taxable income (as opposed to capital gain income). Holders should consult their own tax advisors regarding the application of the market discount provisions of the Code and the advisability of making any of the elections relating to market discount allowed by the Code.

Information Reporting and Backup Withholding

Information reporting requirements apply to interest paid after March 31, 2007 on tax-exempt obligations, including the Bonds. In general, such requirements are satisfied if the interest recipient completes, and provides the payor with, a Form W-9, "Request for Taxpayer Identification Number and Certification," or unless the recipient is one of a limited class of exempt recipients, including corporations. A recipient not otherwise exempt from information reporting who fails to satisfy the information reporting requirements will be subject to "backup withholding," which means that the payor is required to deduct and withhold a tax from the interest payment, calculated in the manner set forth in the Code. For the foregoing purpose, a "payor" generally refers to the person or entity from whom a recipient receives its payments of interest or who collects such payments on behalf of the recipient.

If an owner purchasing the Bonds through a brokerage account has executed a Form W-9 in connection with the establishment of such account no backup withholding should occur. In any event, backup withholding does not affect the excludability of the interest on the Bonds from gross income for federal income tax purposes. Any amounts withheld pursuant to backup withholding would be allowed as a refund or a credit against the owner's federal income tax once the required information is furnished to the IRS.

Future Developments

Bond Counsel's engagement with respect to the Bonds ends with the issuance of the Bonds and, unless separately engaged, bond counsel is not obligated to defend the BWL in the event of an audit examination by the IRS. The IRS has a program to audit tax-exempt obligations to determine whether the interest thereon is includible in gross income for federal income tax purposes. If the IRS does audit the Bonds, under current IRS procedures, the IRS will treat the BWL as the taxpayer and the beneficial owners of the Bonds will have only limited rights, if any, to obtain and participate in judicial review of such audit.

NO ASSURANCE CAN BE GIVEN THAT ANY FUTURE LEGISLATION OR CLARIFICATIONS OR AMENDMENTS TO THE CODE, IF ENACTED INTO LAW, WILL NOT CONTAIN PROPOSALS WHICH COULD CAUSE THE INTEREST ON THE BONDS TO BE SUBJECT DIRECTLY OR INDIRECTLY TO FEDERAL OR STATE OF MICHIGAN INCOME TAXATION, ADVERSELY AFFECT THE MARKET PRICE OR MARKETABILITY OF THE BONDS, OR OTHERWISE PREVENT THE HOLDERS FROM REALIZING THE FULL CURRENT BENEFIT OF THE STATUS OF THE INTEREST THEREON. BOND COUNSEL EXPRESSES NO OPINION REGARDING ANY PENDING OR PROPOSED FEDERAL OR STATE OF MICHIGAN TAX LEGISLATION.

FURTHER, NO ASSURANCE CAN BE GIVEN THAT ANY ACTIONS OF THE INTERNAL REVENUE SERVICE, INCLUDING, BUT NOT LIMITED TO, SELECTION OF THE BONDS FOR AUDIT EXAMINATION, OR THE COURSE OR RESULT OF ANY EXAMINATION OF THE BONDS, OR OTHER BONDS WHICH PRESENT SIMILAR TAX ISSUES, WILL NOT AFFECT THE MARKET PRICE OF THE BONDS.

INVESTORS SHOULD CONSULT WITH THEIR TAX ADVISORS AS TO THE TAX CONSEQUENCES OF THEIR ACQUISITION, HOLDING OR DISPOSITION OF THE BONDS, INCLUDING THE IMPACT OF ANY PENDING OR PROPOSED FEDERAL OR STATE OF MICHIGAN TAX LEGISLATION.

LEGAL MATTERS

Legal matters incident to the authorization, issuance and sale of the Bonds are subject to the approval of Miller, Canfield, Paddock and Stone, P.L.C., Lansing and Detroit, Michigan, Bond Counsel. A copy of the opinion of Bond Counsel will be delivered with the Bonds, which opinion will be substantially in the form as set forth in Appendix F. The fees of Miller, Canfield, Paddock and Stone, P.L.C. for services rendered in connection with their approving opinion are expected to be paid from the proceeds of the Bonds. Certain matters will be passed on for the Underwriters by their counsel, Dykema Gossett PLLC, Lansing, Michigan.

Miller, Canfield, Paddock and Stone, P.L.C. is presently representing Citigroup Global Markets Inc., the managing Underwriter, in connection with matters unrelated to the issuance of the Bonds. Miller, Canfield, Paddock and Stone, P.L.C. has not, and will not, represent the Underwriters with respect to any matters relating to the issuance or sale of the Bonds.

UNDERWRITING

The Bonds are being purchased from the BWL, subject to certain conditions, by Citigroup Global Markets Inc., on behalf of itself and the other Underwriter for the Bonds listed on the cover page of this Official Statement comprising a syndicate for the purchase of the Bonds (collectively, the "Underwriters"). The Bond Purchase Agreement provides for the Underwriters to purchase all of the Bonds, if any are purchased, at a purchase price of \$35,602,149.83 (representing the \$30,365,000.00 principal amount of the Bonds, plus original issue premium of \$5,392,546.80 and less the Underwriters' discount of \$155,396.97.)

The Bond Purchase Agreement provides that the obligations of the Underwriters are subject to certain conditions, including, among other things, that the market price of the Bonds or their marketability shall not have been materially adversely affected by the occurrence of certain events.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. The Underwriters and their respective affiliates have,

from time to time, performed, and may in the future perform, various investment banking services for the BWL for which they received and will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the BWL.

Citigroup Global Markets Inc. ("Citigroup"), one of the Underwriters of the Bonds, has entered into a retail distribution agreement with UBS Financial Services Inc. ("UBSFS"). Under the distribution agreement, Citigroup may distribute municipal securities to retail investors through the financial advisor network of UBSFS. As part of this arrangement, Citigroup may compensate UBSFS for its selling efforts with respect to the Bonds.

FINANCIAL ADVISOR TO THE BWL

Public Financial Management, Inc., has served as financial advisor (the "Financial Advisor") to the BWL with respect to the issuance of the Bonds. BWL has retained Public Financial Management, Inc. as Financial Advisor in connection with various matters relating to the delivery of the Bonds. The Financial Advisor assumes no responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement. The Financial Advisor is an independent advisory firm and is not engaged in the underwriting or distribution of securities.

CONTINUING DISCLOSURE UNDERTAKING

Prior to delivery of the Bonds, the BWL will execute a Continuing Disclosure Undertaking (the "Undertaking") for the benefit of Beneficial Owners (as defined in the Undertaking) of the Bonds to cause certain annually updated information and notice of certain events to be filed with the Municipal Securities Rulemaking Board ("MSRB") by electronic transmission through the Electronic Municipal Market Access Dataport of the MSRB, pursuant to the requirements of Section (b)(5) of Rule 15c2-12 (the "Rule") adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended. The information to be provided on an annual basis, the events which will be noticed on an occurrence basis and the other terms of the Undertaking are as set forth in "Appendix G – FORM OF CONTINUING DISCLOSURE UNDERTAKING" to this Official Statement.

A failure by the BWL to comply with the Undertaking will not constitute an event of default under the Bond Resolution and Beneficial Owners of the Bonds are limited to the remedies described in the Undertaking.

The BWL has not failed to comply with the requirements as described in Section(b)(5) of the Rule of any undertaking made by the BWL for the previous five years.

A failure by the BWL to comply with the undertaking must be reported by the BWL in accordance with the Rule and must be considered by any broker, dealer or municipal securities dealer before recommending the purchase or sale of the Bonds in the secondary market. Consequently, such failure may adversely affect the transferability and liquidity of the Bonds and their market price.

MISCELLANEOUS

All information contained in this Official Statement is subject, in all respects, to the complete body of information contained in the original source thereof and no guaranty, warranty or other representation is made concerning the accuracy or completeness of such information. In particular, no opinion or representation is rendered as to whether any projection will approximate actual results, and all opinions, estimates and assumptions, whether or not expressly identified as such, should not be considered statements of fact.

The execution and delivery of this Official Statement by the BWL's Chief Financial Officer have been duly authorized by the BWL.

Lansing Board of Water and Light

By: <u>/s/ Heather Shawa-DeCook</u> Its: Chief Financial Officer



Appendix A

GENERAL INFORMATION REGARDING THE CITY OF LANSING

The following information on the City of Lansing is provided for informational purposes only. The Bonds are payable solely from the Net Revenues of the System. See "THE BONDS." The Bonds are not a general obligation of the City, and neither the full faith and credit nor the taxing power of the City is pledged to the payment of the principal of and interest on the Bonds. The Bonds do not constitute an indebtedness of the City within any constitutional, statutory or charter limitation.



CITY OF LANSING

GENERAL FINANCIAL, ECONOMIC & STATISTICAL INFORMATION

Location and Description

The City of Lansing (the "City"), the Capital of the State of Michigan (the "State"), encompasses an area of approximately 37 square miles in the northwestern corner of Ingham County and the northeastern corner of Eaton County. The City is situated within 90 miles of 90 percent of the State's population.

The City is the following distances from these commercial and industrial areas:

- 63 miles northwest of Ann Arbor
- 65 miles southeast of Grand Rapids
- 73 miles northeast of Kalamazoo
- 85 miles northwest of Detroit

Population

The U.S. Census Bureau estimated and reported population for the City of Lansing is as follows:

	City of	%
	Lansing	Change
2014 Estimate	114,376	0.07%
2010 U.S. Census	114,297	-4.06
2000 U.S. Census	119,128	-6.43
1990 U.S. Census	127,321	-2.37
1980 U.S. Census	130,414	

Property Valuations

Article IX, Section 3, of the Michigan Constitution provides that the proportion of true cash value at which property shall be assessed shall not exceed 50% of true cash value. The Michigan Legislature by statute has provided that property shall be assessed at 50% of its true cash value, except as described below. The Michigan Legislature or the electorate may at some future time reduce the percentage below 50% of true cash value.

On March 15, 1994, the electors of the State approved an amendment to the Michigan Constitution permitting the Legislature to authorize ad valorem taxes on a non-uniform basis. The legislation implementing this constitutional amendment added a new measure of property value known as "Taxable Value." Since 1995, taxable property has had two valuations—state equalized valuation ("SEV") and Taxable Value. Property taxes are levied on Taxable Value. Generally, the Taxable Value of property is the lesser of: (a) the property's Taxable Value in the immediately preceding year minus any losses, multiplied by the lesser of 1.05 or the inflation rate, plus all additions, or (b) the property's current SEV. Under certain circumstances, therefore, the Taxable Value of property may be different from the same property's SEV.

When property is sold or transferred, Taxable Value is adjusted to the SEV, which under existing law is 50% of the current true cash value. The Taxable Value of new construction is equal to current SEV. The Taxable Value and SEV of existing property are also adjusted annually for additions and losses.

Responsibility for assessing taxable property rests with the local assessing officer of each township and city. Any property owner may appeal the assessment to the local assessor, to the local board of review and ultimately to the Michigan Tax Tribunal.

In addition to limiting the annual increase in Taxable Value, the Michigan Constitution mandates a system of equalization of assessments. Although the assessor for each local unit of government within a county is responsible for actually assessing at 50% of true cash value, adjusted for Taxable Value purposes, the final SEV and Taxable Value are arrived at through several steps. Assessments are established initially by the municipal assessor.

Municipal assessments are then equalized to the 50% levels as determined by the County Department of Equalization. Thereafter, the State equalizes the various counties in relation to each other. SEV is important, aside from its use in determining Taxable Value for the purpose of levying ad valorem property taxes, because of its role in the spreading of taxes between overlapping jurisdictions, the distribution of various State aid programs, State revenue sharing and in the calculation of debt limits.

Property that is exempt from property taxes (e.g., churches, government property, public schools) is not included in the SEV or Taxable Value data in this Appendix A. Property granted tax abatements under Act 198, Public Acts of Michigan, 1974, as amended, is recorded on a separate tax roll while subject to tax abatement. The valuation of tax abated property is based upon SEV but is not included in either the SEV or Taxable Value data in this Appendix A except as noted.

History of Valuations

A history of the property valuations in the City is shown below:

	Fiscal Year				
Tax	Ending	Real Property	Personal Property	Total Assessed	Taxable
Year	June 30	(SEV) Valuation	(SEV) Valuation	(SEV) Valuation	Valuation
2016	2017	\$1,990,349,485	\$149,660,200	\$2,140,009,685	\$1,970,349,034
2015	2016	1,893,973,800	189,669,791	2,083,643,591	1,986,340,364
2014	2015	1,845,868,300	189,239,700	2,035,108,000	1,975,403,547
2013	2014	1,819,384,500	182,024,000	2,001,408,500	1,964,177,740
2012	2013	1,892,945,928	180,680,300	2,073,626,228	2,038,389,010

A summary of the 2016 valuation subject to taxation is as follows:

2016 Taxable Value	\$1,893,973,800
Plus: 2016 Equivalent IFT Taxable Value ¹	31,590,230
Total 2016 Equivalent Taxable Value	\$1,925,564,030

⁽¹⁾ See "INDUSTRIAL FACILITY TAX ABATEMENTS" herein. Source: Ingham and Eaton Counties Equalization Departments

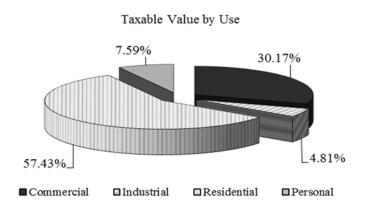
Per Capita Valuation

Per Capita 2016 Taxable Value	\$17,238.85
Per Capita 2016 State Equalized Value	\$18,723.24
Per Capita 2016 True Cash Value	\$37,446.47

Valuation Composition

A breakdown of the City's 2016 Taxable Value by class, use is as follows:

By Class:	2016 Taxable Value	Percent of Total
Real Property	\$1,820,710,734	92.41%
Personal Property	149,638,300	7.59
TOTAL	\$1,970,349,034	100.00%
By Use:		
Commercial	\$594,529,773	30.17%
Industrial	94,818,632	4.81
Residential	1,131,362,329	57.43
Personal	149,638,300	7.59
TOTAL	\$1,970,349,034	100.00%



Source: Ingham and Eaton Counties Equalization Departments

Industrial Facility Tax Abatements

Under the provisions of Act 198 of the Public Acts of Michigan, 1974, as amended ("Act 198"), plant rehabilitation districts and/or industrial development districts may be established. Businesses in these districts are offered certain property tax incentives to encourage restoration or replacement of obsolete facilities and to attract new facilities in the area. The industrial facilities tax ("IFT") is paid, at a lesser effective rate and in lieu of ad valorem property taxes, in such facilities for a period of up to 12 years. Qualifying facilities are issued abatement certificates for this period.

After expiration of the abatement certificate, the then-current SEV of the facility is returned to the ad valorem tax roll. The owner of such facility may obtain a new certificate, provided it has complied with the provisions of Act 198.

The City has several IFT abatements outstanding with a total 2016 Taxable Value of \$63,180,459, all of which is taxed at half rate. For purposes of computing "Equivalent" Taxable Value, it has been shown in the "History of Valuations" table above as 50% of the Taxable Value.

Source: Ingham and Eaton Counties Equalization Departments

Michigan Property Tax Reform

On March 28 and April 1, 2014, Governor Snyder signed into law a package of bills amending and replacing legislation enacted in 2012 to reform personal property tax in Michigan. Commercial and industrial personal property of each owner with a combined true cash value in a local taxing unit of less than \$80,000 is exempt from ad valorem taxes beginning in 2014. All eligible manufacturing personal property purchased or put into service beginning in 2013 and used more than 50% of the time in industrial processing or direct integrated support becomes exempt beginning in 2016. The legislation extends certain personal property tax exemptions and tax abatements for technology parks, industrial facilities and enterprise zones that were to expire after 2012, until the newly enacted personal property tax exemptions take effect. Pursuant to voter approval in August 2014, the 2014 legislation also includes a formula to reimburse local governments for lost personal property tax revenue. To provide the reimbursement, the legislation reduces the state use tax and creates a Local Community Stabilization Authority which will levy a local use tax component and distribute that revenue to qualifying local units. The final impact of this legislation cannot be determined at this time.

The ultimate nature, extent and impact of any other future amendments to Michigan's property tax laws on a local unit's finances cannot be predicted. Purchasers of the Bonds should consult with their legal counsel and financial advisors as to the consequences of any such legislation on the market price or marketability of the Bonds, the security therefor and the operations of the City.

Major Taxpayers

The City's top ten taxpayers and their 2016 Taxable Value and Industrial Facilities Tax Values are as follows:

		Taxable	"Equivalent"	Total
<u>Taxpayer</u>	Product/Service	<u>Value</u>	IFT Value ¹	<u>Valuation</u>
General Motors Corp.	Automotive	\$32,378,418	\$20,772,500	\$53,150,918
Jackson National Life Insurance	Insurance	46,079,244	0	46,079,244
Consumers Energy	Utility	27,966,373	0	27,966,373
Phoenix Development Partners I LLC	Developer	17,227,667	0	17,227,667
Lansing Retail Center LLC	Developer	11,423,364	0	11,423,364
Emergent Biodefense Operations	Biodefense	7,237,439	3,081,623	10,319,062
Demmer Corporation	Stamping Plant	8,031,795	1,264,950	9,296,745
Phoenix Development Partners II LLC	Developer	8,230,856	0	8,230,856
Eyde Knapp Development LLC	Real Estate	8,035,645	0	8,035,645
Heart of the City Associate	Real Estate	6,886,425	0	6,886,425
TOTALS		\$ <u>173,497,226</u>	\$ <u>25,119,073</u>	\$ <u>198,616,299</u>
Total 2016 Taxable Value		\$1,970,349,034	\$31,590,230	\$2,001,939,264
Total 10 Taxpayers as a % of 2016 Total Ta	axable Value	8.81%	79.52%	9.92%

⁽¹⁾ Represents 50% of the actual Taxable Value.

Source: City of Lansing

Larger Employers

Listed below are the largest employers that are located within the Lansing region:

Employer	Product or Service	Approx. No. of Employees
Within the Lansing Region (850 + emp		
State of Michigan	Government	13,700
Michigan State University	Education	10,725
Sparrow Health System	Health Care	5,735
General Motors Corporation	Automotive	5,222
Lansing Community College	Education	2,990
McLaren Greater Lansing	Health Care	2,400
Lansing School District	Education	1,605
Meijer, Inc.	Department Store	1,500
Southern-Owners Insurance	Insurance	1,500
Auto Owners Insurance	Insurance	1,400
Jackson National Life Insurance	Insurance	1,400
Leona Group LLC	Consulting Services	1,200
U.S. Post Office	Postal Service	1,200
Ingham County	Government	1,164
Dart Container Corp.	Containers Mfg.	1,144
Wal-Mart	Department Store	1,100
Peckham Vocational Services	Rehabilitation Services	950
Lansing Mall	Retail Shopping Center	900
Peckham Industries	Textiles, Auto Parts	900
City of Lansing	Government	854

Source: 2016 Michigan Manufacturers Directory, Lansing Regional Chamber www.lansingchamber.org, Manta via www.manta.com and individual employers.

Employment Breakdown

The U.S. Census Bureau, 2010-2014 American Community Survey reports the occupational breakdown of persons 16 years and over for the City of Lansing is as follows:

	City of Lansing	
	Number	Percent
PERSONS BY OCCUPATION	51,076	100.00%
Management, Professional & Related	15,643	30.62
Service	11,840	23.18
Sales & Office	12,915	25.29
Construction, Extraction & Maintenance	2,690	5.27
Production, Transportation & Material Moving	7,988	15.64

The U.S. Census Bureau, 2010-2014 American Community Survey reports the breakdown by industry for persons 16 years and over in the City of Lansing is as follows:

	City of Lansing	
	Number	Percent
PERSONS BY INDUSTRY	51,076	100.00%
Agriculture, Forestry, Fishing, Hunting & Mining	181	0.35
Construction	1,427	2.79
Manufacturing	5,698	11.16
Wholesale Trade	855	1.67
Retail Trade	6,600	12.92
Transportation	2,245	4.40
Information	867	1.70
Finance, Insurance & Real Estate	3,169	6.20
Professional & Management Services	4,735	9.27
Educational, Health & Social Services	12,803	25.07
Arts, Entertainment, Recreation & Food Services	5,897	11.55
Other Professional & Related Services	2,936	5.75
Public Administration	3,663	7.17

Unemployment Rates

The U.S. Department of Labor, Bureau of Labor Statistics, reports unemployment averages for the City of Lansing as compared to the State of Michigan are as follows:

Annual	City of	State of
Average	Lansing	Michigan
October, 2016	5.4%	4.6%
2015	6.3	5.4
2014	8.7	7.3
2013	10.7	8.8
2012	10.9	9.1

Population by Age

The 2010 U.S. Census estimate of population by age for the City of Lansing is as follows:

	City of	City of Lansing		
	Number	Percent		
Total Population	114,297	100.00%		
0 through 19 years	30,906	27.04		
20 through 64 years	72,346	63.30		
65 years and over	11,045	9.66		
Median Age	32.3	32.3 years*		

^{*}Represents the median age within the portion of the City of Lansing located in the County of Ingham.

Income

The U.S. Census Bureau, 2010-2014 American Community Survey estimates of household income for the City of Lansing is as follows:

	City of Lansing	
	Number	Percent
HOUSEHOLDS BY INCOME	48,288	100.00%
Less than \$ 10,000	6,218	12.88
\$ 10,000 to \$ 14,999	3,738	7.74
\$ 15,000 to \$ 24,999	7,145	14.80
\$ 25,000 to \$ 34,999	6,605	13.68
\$ 35,000 to \$ 49,999	8,041	16.65
\$ 50,000 to \$ 74,999	8,753	18.13
\$ 75,000 to \$ 99,999	4,200	8.70
\$100,000 to \$149,999	2,860	5.92
\$150,000 to \$199,999	417	0.86
\$200,000 or MORE	311	0.64

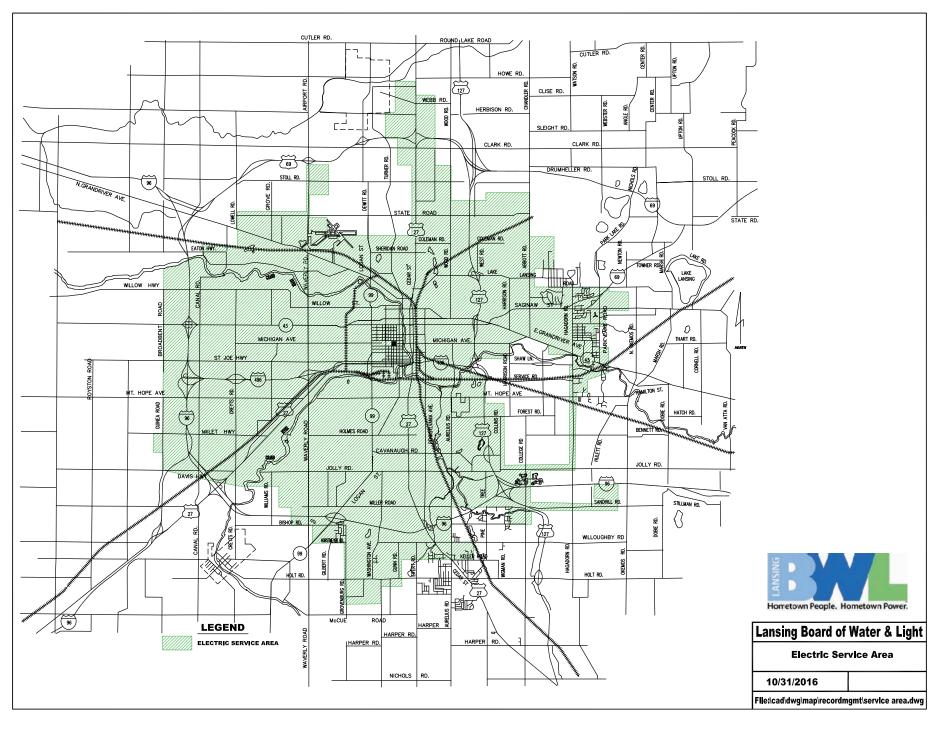
Median Income \$36,045*

^{*}Represents the median income within the portion of the City of Lansing located in the County of Ingham.

Appendix B

SERVICE AREA MAPS FOR THE ELECTRIC UTILITY AND THE WATER UTILITY





Appendix C

FINANCIAL STATEMENTS AND RELATED NOTES

This Appendix contains the financial statements of the BWL for the fiscal year ended June 30, 2016.





Financial Report
with Additional Information
As of and for the Years Ended June 30, 2016
and 2015

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INDEPENDENT AUDITORS' REPORT

To the Honorable Mayor, Members of the City Council, and Commissioners Lansing Board of Water and Light City of Lansing, Michigan

Report on the Financial Statements

We have audited the accompanying financial statements of the Lansing Board of Water and Light and its fiduciary funds, as of and for the year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise the Lansing Board of Water and Light'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 audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the 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 Lansing Board of Water and Light'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 Lansing Board of Water and Light'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.



To the Honorable Mayor, Members of the City Council, and Commissioners Lansing Board of Water and Light

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Lansing Board of Water and Light and its fiduciary funds as of June 30, 2016, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Prior Period Financial Statements

The financial statements of the Lansing Board of Water and Light and its fiduciary funds, as of and for the year ended June 30, 2015, were audited by other auditors whose report dated August 31, 2015, expressed an unmodified opinion on those statements.

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 and other auditors 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.

Additional Information

Our audit was conducted for the purpose of forming opinions on the financial statements as a whole. The additional 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 fiscal 2016 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 additional information as of and for the year ended June 30, 2016, is fairly stated in all material respects in relation to the basic financial statements as a whole. The fiscal 2015 information was subjected to the auditing procedures applied in the audit of those basic financial statements by other auditors, whose report on such information stated that it was fairly stated in all material respects in relation to the 2015 basic financial statements as a whole.

Tilly Vinchow Krause, LLP

Madison, Wisconsin September 6, 2016

Management's Discussion and Analysis

This section explains the general financial condition and results of operations for the Lansing Board of Water and Light (the "BWL"). The BWL includes the consolidated operations of the electric, water, steam, and chilled water utilities. The notes to financial statements following this section are essential reading for a complete understanding of the financial and operational results for the years ended June 30, 2016 and 2015.

Overview of Business

The BWL owns and operates an electric system which generates, purchases, and distributes electric power and energy and provides electric service to over 96,000 residential, commercial, and industrial customers in the greater Lansing area. The BWL generated 65 percent of its retail and wholesale sales from existing generation assets and purchased additional electric generation through its participation in the MISO markets, membership in the Michigan Public Power Agency, which includes the BWL's partial ownership of Detroit Edison's Belle River Plant, and through its landfill gas renewable energy purchase agreement with Granger Electric of Lansing.

The BWL owns and operates water wells, a raw water transmission system, water conditioning facilities, and an extensive water distribution system serving potable water to over 56,000 residential, commercial, and industrial customers in the greater Lansing area.

The BWL owns and operates steam generation boilers, a steam transmission and distribution system serving over 165 customers, and a chilled water facility and distribution piping system serving 19 customers in the City of Lansing.

Capital Expenditures

Capital expenditures are driven by the need to replace, expand, or maintain the generation, transmission, and distribution systems of the BWL to meet customer utility needs and to maintain a satisfactory level of service reliability. The BWL invests essentially all revenues not paid out for operations and maintenance expense, nonoperating expenses, or debt service back into capital improvements for the water, electric, steam, and chilled water systems. Gross capital expenditures were \$51.3 and \$65.9 million in fiscal years 2016 and 2015, respectively.

The BWL generally pays the major portion of the cost of its capital improvements from internally generated funds and a lesser portion from the proceeds of revenue bonds that are issued from time to time.

Detailed financial information for the separate utilities of water, electric, steam, and chilled water can be found in the Additional Information section of this financial report.

Management's Discussion and Analysis (Continued)

Condensed Financial Information (dollars in millions)

	As of June 30						% Change	
		2016		2015		2014	2015 to 2016	
Assets								
Utility plant	\$	690.7	\$	715.0	\$	699.3	(3.4)	
Other assets		342.1		345.1		365.1	(0.9)	
Total assets		1,032.8		1,060.1		1,064.4	(2.6)	
Deferred Outflows of Resources		3.8		1.0		1.2	280.0	
Liabilities								
Long-term liabilities		357.4		368.6		383.2	(3.0)	
Other liabilities		57.1		65.2		69.5	(12.4)	
Total liabilities		414.5		433.8		452.7	(4.4)	
Deferred Inflows of Resources		26.0		32.1		30.4	(19.0)	
Net Position								
Net investment in capital assets		367.1		380.7		345.4	(3.6)	
Restricted for debt service		38.3		43.5		65.0	(12.0)	
Unrestricted		190.7		171.0		172.2	11.5	
Net position	\$	596.1	\$	595.2	\$	582.6	0.2	

In 2016 the Board approved the closure of the Eckert Power Station by 2020 due to increasing operational costs, pending environmental regulations, and an uncertain future for coal-fired plants. As a result, the BWL recorded an impairment of \$15.8 million.

Depreciation and impairment exceeded the amount of capital expenditures in fiscal year 2016, thereby decreasing utility plant by \$24.3 million.

Management's Discussion and Analysis (Continued)

Condensed Financial Information (dollars in millions) (Continued)

	For the Year Ended June 30						% Change	
		2016		2015		2014	2015 to 2016	
Results of Operations Operating revenues Operating expenses	\$	360.9 306.1	\$	353.5 309.0	\$	348.0 310.9	2.1 (0.9)	
Nonoperating expense - Net Changes in Net Resition	•	(53.9)		(31.9)	<u> </u>	(38.4)	(69.0)	
Changes in Net Position	<u> </u>	0.9	Ð	12.6	Þ	(1.3)	(92.9)	

Operating revenues for 2016 increased by \$7.4 million primarily as a result of the November 2014 rate increase.

Nonoperating expense (net) increased by \$22 million from fiscal year 2015. This was due primarily to the Eckert Power Station impairment and the write-off of the Customer Care Initiative (CARE) project.

Budget – The BWL commissioners approved a \$294.6 million operating expense budget (excluding depreciation and impairment) for fiscal year 2016. Actual expenses (excluding depreciation and impairment) were \$264.6 million or 10.2 percent less than budget. The net capital improvement budget was \$65.1 million for fiscal year 2016 and actual net capital expenditures were approximately \$48.7 million.

Financing Activities - For the years ended June 30, 2016 and 2015, there were no significant financing activities.

Statements of Net Position

	As of June 30			
	2016	2015		
Assets				
Current Assets				
Restricted cash and cash equivalents (Notes 2 and 3) Cash and cash equivalents (Notes 1 and 2) Investments (Notes 1 and 2) Accounts receivable - Net (Note 1) Estimated unbilled accounts receivable (Note 1) Inventories (Note 1) Other Total current assets	\$ 46,586,326 53,637,717 107,921,202 23,168,659 19,526,475 25,067,737 3,997,490 279,905,606	55,925,376 91,585,641 22,014,605 18,280,777 25,860,743 3,344,122		
Other Assets	279,903,000	209,704,203		
Recoverable energy asset (Note 6) Recoverable environmental remediation (Note 6) Special deposit (Note 1) Net pension asset (Note 8) Other (Note 1)	2,302,845 11,483,569 8,535,000 4,263,990 10,265,098	18,616,005 11,380,000 8,284,230 8,123,949		
Total other assets	36,850,502	51,056,252		
Noncurrent Restricted Assets (Investments) (Notes 2 and 3)	25,319,385	24,263,950		
Water Electric Steam Chilled water Common facilities Central Utilities Complex	302,165,777 774,429,214 68,557,331 33,998,140 88,752,432 76,079,000	804,947,799 67,510,134 33,622,140 87,132,519		
Total	1,343,981,894	1,366,094,544		
Less accumulated depreciation	668,868,675	665,849,130		
Net	675,113,219	700,245,414		
Construction in progress (Note 9)	15,583,201	14,781,967		
Total utility plant	690,696,420	715,027,381		
Total assets	1,032,771,913	1,060,111,788		
Deferred Outflows of Resources -				
Bond refunding loss being amortized Net pension deferred outflows (Note 8)	835,838 2,930,218			
Total deferred outflows of resources	3,766,056	1,032,273		

Statements of Net Position (Continued)

		As of June 30				
		2016		2015		
Liabilities and Net Pos	sition					
Current Liabilities						
Accounts payable Current portion of long-term debt (Note 5) Accrued payroll and related taxes Customer deposits Unearned revenue Accrued compensated absences (Note 1) Accrued interest (payable from restricted assets)	\$	28,679,951 11,642,389 1,873,549 2,304,426 - 4,310,921 8,284,626	\$	32,695,192 13,299,345 2,756,033 2,678,145 1,127,500 4,092,441 8,547,591		
Total current liabilities		57,095,862		65,196,247		
Compensated Absences - Less current portion (Note 1)		7,112,200		6,916,286		
Other Long-term Liabilities Workers' compensation Environmental remediation liability (Note 9) Other		2,200,000 7,853,780 2,116,412		2,200,000 10,172,203 2,314,711		
Total other long-term liabilities		12,170,192		14,686,914		
Long-term Debt - Less current portion (Note 5)		338,105,373		347,044,294		
Total liabilities		414,483,627		433,843,741		
Deferred Inflows of Resources Recoverable revenue of Central Utilities Complex (Note 6)		5,071,934		7,241,153		
Revenue intended to cover future costs (Note 6)		20,891,938		22,667,354		
Net pension deferred inflows (Note 8)		20,031,330		2,201,407		
Total deferred inflows of resources		25,963,872		32,109,914		
Net Position Net investment in capital assets Restricted for debt service (Note 3) Unrestricted		367,103,881 38,301,700 190,684,889		380,667,622 43,517,692 171,005,092		
Total net position	<u>\$</u>	596,090,470	\$	595,190,406		

Statements of Revenues, Expenses, and Changes in Net Position

	For the Year Ended June 30					
	2016			2015		
Operating Revenues (Note 1)						
Water	\$	38,730,602	\$	37,910,106		
Electric	Ψ	303,245,766	Ψ	295,047,904		
Steam		12,683,463		14,959,212		
Chilled water		6,275,583		5,568,287		
Chines water	-	0,270,000		0,000,201		
Total operating revenues		360,935,414		353,485,509		
Operating Expenses						
Production:						
Fuel, purchased power, and other operating expenses		159,118,150		163,336,653		
Maintenance		19,839,991		24,415,690		
Transmission and distribution:						
Operating expenses		7,404,258		7,006,002		
Maintenance		14,189,340		13,864,024		
Administrative and general		64,007,040		61,297,460		
Depreciation (Note 1)		41,541,561		39,104,343		
Total operating expenses		306,100,340		309,024,172		
Operating Income		54,835,074		44,461,337		
Nonoperating Income (Expenses)						
Investment income		1,913,873		1,351,006		
Other (expense) income		(4,588,160)		1,534,922		
Impairment on Eckert Power Station (Note 4)		(15,763,520)		-		
System capacity fee		3,351,392		9,223,075		
Bonded debt interest expense		(14,861,300)		(14,995,574)		
Amortization - Central Utilities Complex		(2,902,715)		(8,057,715)		
Return on equity (Note 7)		(21,033,531)		(20,840,065)		
Other interest expense		(51,049)		(49,691)		
Total nonoperating expenses - Net	_	(53,935,010)		(31,834,042)		
Net Income (Changes in Net Position)		900,064		12,627,295		
Net Position - Beginning of year		595,190,406		582,563,111		
Net Position - End of year	\$	596,090,470	\$	595,190,406		

Statements of Cash Flows

	For the Year Ended June 30				
		2016		2015	
Cash Flows from Operating Activities		_			
Cash from customers:	_		_		
Water	\$	38,465,045	\$	38,932,520	
Electric		302,838,331		293,138,111	
Steam		12,824,305		15,711,107	
Chilled water		6,757,204	_	5,425,898	
Total cash from customers		360,884,885		353,207,636	
Cash paid to suppliers:					
Suppliers of coal, freight, and purchased power		(131,855,507)		(140,537,274)	
Other suppliers		(75,423,113)		(69,814,422)	
Total cash paid to suppliers		(207,278,620)		(210,351,696)	
Cash paid to employees		(57,655,263)		(63,947,564)	
Return on equity (Note 7)		(21,033,531)		(20,840,065)	
Cash from customer deposits		(373,719)		3,287	
Interest on customer deposits		(51,049)		(49,691)	
Net cash provided by operating activities		74,492,703		58,021,907	
Cash Flows from Capital and Related Financing Activities					
Proceeds from new borrowings		3,789,161		_	
Planned, bonded, and annual construction		(44,161,432)		(59,916,047)	
Principal payments on debt		(13,418,460)		(18,594,394)	
System capacity fees		3,351,392		9,223,075	
Interest on debt	_	(16,979,468)		(15,709,200)	
Net cash used in capital and					
related financing activities		(67,418,807)		(84,996,566)	
Cash Flows from Noncapital Financing Activities					
Proceeds from the sale of emissions allowances		-		36	
Proceeds from the Belle River Project and other				8,972,944	
Net cash provided by noncapital financing activities		-		8,972,980	
Cash Flows from Investing Activities					
Proceeds from the sale and maturity of investments		76,742,427		160,938,876	
Interest received		1,862,826		2,003,345	
Purchase of investments	_	(94,133,423)		(139,581,937)	
Net cash provided by investing activities		(15,528,170)		23,360,284	
Net Increase in Cash and Cash Equivalents		(8,454,274)		5,358,605	
Cash and Cash Equivalents - Beginning of year		108,678,317		103,319,712	
Cash and Cash Equivalents - End of year	\$	100,224,043	\$	108,678,317	

Statements of Cash Flows (Continued)

	For the Year Ended June 30			
		2016		2015
Balance Sheet Classifications				
Restricted cash and cash equivalents	\$	46,586,326	\$	52,752,941
Cash and cash equivalents	Ψ	53,637,717	Ψ	55,925,376
Casif and Casif equivalents		55,657,717		55,925,576
Cash and Cash Equivalents - End of year	\$	100,224,043	<u>\$</u>	108,678,317
Reconciliation of Operating Income to Net Cash		For the Year E	nde	nd June 20
			nue	_
from Operating Activities		2016		2015
Operating income	\$	54,835,074	\$	44,461,337
Adjustments to reconcile operating income to net cash from	Ψ	34,033,074	Ψ	44,401,001
operating activities:				
Other reimbursements		1,535,783		-
Return on equity (Note 7)		(21,033,531)		(20,840,065)
Depreciation		41,541,561		39,104,343
Sewerage collection fees		929,243		1,088,442
Interest on customer deposits		(51,049)		(49,691)
Decrease (increase) in assets:				
Accounts receivable (Note 1)		(1,154,054)		1,611,029
Unbilled accounts receivable (Note 1)		(1,245,698)		(1,122,971)
Inventories		793,007		(2,386,479)
Customer deposits		(373,719)		3,287
Special deposit		2,845,000		2,845,000
Net pension asset		4,020,240		2,904,472
Other		6,687,142		(5,484,222)
(Decrease) increase in liabilities and deferred inflows of resources:				
Accounts payable and other accrued expenses		(5,927,797)		(218,674)
Net pension asset deferrals		(5,131,625)		(4,941,799)
Other		(3,776,874)		1,047,898
Total adjustments	_	19,657,629		13,560,570
Net cash provided by operating activities	\$	74,492,703	\$	58,021,907
Non-cash capital and financing activities				
	•	0.070.004	Φ.	
Decrease in environmental liability and related regulatory asset	\$	2,078,264	\$	-
Impairment on Eckert Power Station		15,763,520		-
Write off of discontinued project		5,773,139		-

Pension Trust Funds - Statements of Net Position

		As of June 30					
		2016		2015			
Assets							
Receivable - Investment interest receivable	\$	530,155	\$	305,573			
Investments at fair value:							
Cash and money market trust fund		14,244,958		8,564,513			
U.S. government obligations		29,023,448		22,121,544			
Fixed income securities		39,216,076		32,582,122			
Mutual funds		154,854,298		138,830,601			
Stable value		34,193,741		31,844,948			
Partnership		1,101,086		1,098,790			
Common stock		114,508,909		162,370,016			
Self-directed brokerage account		1,551,450		1,376,730			
Participant notes receivable		3,749,371		3,888,351			
Total investments		392,443,337		402,677,615			
Net Position - Held in trust for pension							
and other employee benefits	<u>\$</u>	392,973,492	\$	402,983,188			

Pension Trust Funds - Statements of Changes in Net Position

	For the Year Ended June 30					
	2016	2015				
Increases						
Investment income (loss):						
Net appreciation (depreciation)						
in fair value of investments	\$ (11,813	8,954) \$ 886,489				
Interest and dividend income	11,303	3,751 11,816,649				
Net investment income (loss)	(510	0,203) 12,703,138				
Employer contributions	15,084	15,219,154				
Participant rollover contributions	2,026	5,588 1,345,481				
Interest from participant notes receivable	150),624 155,010				
Other						
Total increases	16,75	,974 29,574,911				
Decreases						
Retiree benefits paid	25,264	,964 28,168,455				
Loan defaults	186	5,801 125,254				
Participants' note and administrative fees	1,309	1,829,184				
Total decreases	26,761	,670 30,122,893				
Change in Net Position Held in Trust	(10,009	0,696) (547,982)				
Net Position Held in Trust for Pension						
and Other Employee Benefits	400.000	100 504 470				
Beginning of year	402,983	3,188 403,531,170				
End of year	\$ 392,973	<u>8,492</u> <u>\$ 402,983,188</u>				

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 1 - Significant Accounting Policies

The following is a summary of the significant accounting policies used by the Board of Water and Light (the "BWL"):

Reporting Entity – The BWL, a related organization of the City of Lansing, Michigan (the "City"), is an administrative board established by the City Charter. The City Charter grants the BWL full and exclusive management of the electric, water, steam, and chilled water services of the City. The commissioners of the governing board are appointed by the mayor with approval of the City Council. The BWL provides water, steam, chilled water, and electric services to the City and surrounding townships. The governing board (Board of Commissioners) has the exclusive authority to set rates for the services provided. The financial statements include the financial activities of the electric, water, steam, and chilled water operations of the BWL. The financial statements also include the financial activities of the BWL Pension Trust Funds. The BWL is exempt from taxes on income because it is a municipal entity.

Fund Accounting – The BWL accounts for its activities in two different fund types. In order to demonstrate accountability for how it has spent certain resources, separate funds allow the BWL to show the particular expenditures that specific revenues were used for. The funds are aggregated into two fund types:

Proprietary fund includes the enterprise fund (which provides goods or services to users in exchange for charges or fees).

Fiduciary funds

- 1. The Defined Contribution Plan and Defined Benefit Plan, which accumulate resources for benefit payments to retirees
- 2. The VEBA, which accumulates resources for future retiree health care payments to retirees

Basis of Accounting – Proprietary funds and fiduciary funds use the economic resources measurement focus and the full accrual basis of accounting. Revenue is recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. In addition, the utilities meet the criteria and, accordingly, on July 1, 2012, the BWL adopted the accounting and reporting requirements of GASB 62, paragraphs 476–500.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 1 - Significant Accounting Policies (Continued)

The BWL follows the accounting and reporting requirements of GASB 62, paragraphs 476–500, which require that the effects of the ratemaking process be recorded in the financial statements. Such effects primarily concern the time at which various items enter into the determination of net income in order to follow the principle of matching costs and revenues. Accordingly, the BWL records various regulatory assets and liabilities to reflect the regulator's actions (see Note 6). Management believes that the BWL meets the criteria for continued application of GASB 62 paragraphs 476–500, but will continue to evaluate its applicability based on changes in the regulatory and competitive environment.

In February 2015, the GASB issued statement No. 72 – Fair Value Measurement and Application. The objective of this statement is to provide guidance for determining a fair value measurement for financial reporting purposes as well as to provide guidance for applying fair value to certain investments and disclosures related to all fair value measurements. This standard was implemented effective July 1, 2015.

System of Accounts – The BWL's accounts are maintained substantially in accordance with the Uniform Systems of Accounts of the Federal Energy Regulatory Commission for its electric and steam systems and in accordance with the Uniform Systems of Accounts of the National Association of Regulatory Utility Commissioners for the water and chilled water systems. The chart of accounts dictates how the BWL classifies revenue and expense items in the statement of revenues, expenses, and changes in net position as operating and nonoperating.

Rate Matters – Rates charged to customers are established solely by the governing board. The BWL has agreed to set rates sufficient to meet certain requirements of the bond resolutions for the outstanding revenue bonds.

Operating Classification – Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the principal ongoing operations. The principal operating revenues are charges to customers for sales and services. Operating expenses include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

Report Presentation – This report includes the fund-based statements of the BWL. In accordance with government accounting principles, a government-wide presentation with program and general revenues is not applicable to special purpose governments engaged only in business-type activities.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 1 – Significant Accounting Policies (Continued)

Specific Balances and Transactions

Cash and Cash Equivalents – The BWL considers demand deposits and current restricted funds, which consist of cash and highly liquid investments with an original maturity of 90 days or less, as cash and cash equivalents for financial statement purposes.

Investments are stated at fair value, which is the amount at which an investment could be exchanged in a current transaction between two willing parties. Fair values are based on quoted market prices. No investments are reported at amortized cost. Adjustments necessary to record investments at fair value are recorded in the operating statement as increases or decreases in investment income. Market values may have changed significantly after year end.

Investments – The BWL has established special purpose funds designated to meet anticipated operating requirements. In addition, BWL management has established a future construction fund designated to meet future construction requirements. These funds consist principally of commercial paper and United States government securities and are segregated as follows:

	Carrying Value				
		2016		2015	
Designated purpose:					
Coal inventory fluctuation	\$	4,702,092	\$	4,598,714	
Litigation, environmental, and uninsured losses		19,009,147		18,589,552	
Future water facilities		3,831,125		3,745,990	
Subtotal		27,542,364		26,934,256	
Special purpose - Future construction		80,378,838		64,651,385	
Total	\$	107,921,202	\$	91,585,641	

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 1 - Significant Accounting Policies (Continued)

Accounts Receivable – Accounts receivable are stated at net invoice amounts. A general valuation allowance is established based on an analysis of the aged receivables and historical loss experience. All amounts deemed to be uncollectible are charged to expense in the period that determination is made. Accounts receivable are not deemed uncollectible until they are approximately 270 days past due and have remained completely unpaid throughout the BWL's collection policy. The components of accounts receivable for 2016 and 2015 are as follows:

	 2016	 2015
Customer receivables	\$ 19,209,535	\$ 18,491,745
Sewerage collections	2,295,881	2,159,867
Miscellaneous	3,163,243	3,362,993
Less allowance for doubtful accounts	 (1,500,000)	 (2,000,000)
Net	\$ 23,168,659	\$ 22,014,605

Special Deposit – The BWL contracted with Consumer's Energy to install a new gas pipeline in 2011 and at that time funded construction of this pipeline and incurred \$15,900,000. The BWL will subsequently be reimbursed for all but \$1,675,000 of those costs provided minimum consumption requirements are met over the subsequent five-year period beginning in 2015. Based on current projections, the actual consumption is expected to exceed the minimum requirements. The long-term other asset recorded was \$8,535,000 and \$11,380,000 in 2016 and 2015, respectively.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 1 – Significant Accounting Policies (Continued)

Inventories – Inventories are stated at weighted average cost and consist of the following at June 30:

	 2016	2015		
Coal	\$ 10,979,780	\$	11,275,408	
Gas	706,758		936,671	
Materials and supplies	 13,381,199		13,648,664	
Total	\$ 25,067,737	\$	25,860,743	

Utility Plant – The utility plant is stated on the basis of cost, which includes expenditures for new facilities and those which extend the useful lives of existing facilities and equipment. Expenditures for normal repairs and maintenance are charged to maintenance expense as incurred. Interest incurred during the construction phase is reflected in the capitalized value of the capital assets constructed. Capital assets are generally defined as assets with an initial, individual cost of more than \$2,000 and an estimated life in excess of one year.

Depreciation – Depreciation of the utility plant is computed using the straight-line method based on estimated useful lives, except for depreciation related to the Central Utilities Complex, which is computed in accordance with GASB 62 paragraphs 476–500. The resulting provisions for depreciation in 2016 and 2015, expressed as a percentage of the average depreciable cost of the related assets, are as follows:

	_	Average Rate (Percent			
	Life				
	(Years)	2016	2015		
Classification of utility plant:					
Water	4-100	1.8	1.8		
Electric	4-50	3.6	3.4		
Steam	5-50	3.5	3.5		
Chilled water	5-50	3.6	3.4		
Common facilities	4-50	4.8	4.1		
Central Utilities Complex	15	3.8	6.7		

When units of property are retired, their costs are removed from the utility plant and charged to accumulated depreciation.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 1 – Significant Accounting Policies (Continued)

Accrued Compensated Absences – The BWL records a liability for estimated compensated absences that are attributable to services already rendered and that are not contingent on a specific event that is outside the control of the BWL and its employees. This liability is accrued as employees earn the rights to such benefits. The BWL estimates the total current and noncurrent portions of the liability to be \$11,423,121 and \$11,008,727 as of June 30, 2016 and 2015, respectively.

Capital Contributions – Capital contributions represent nonrefundable amounts received for the purpose of construction for the utility plant. These contributions are from third parties, including amounts from customers, grant programs, and insurance proceeds from damage. Electric, water, and steam contributions are credited against the related assets or recorded as a separate regulatory liability and will offset the depreciation of the related assets over the estimated useful lives. This treatment is consistent with the BWL's ratemaking policy and is thus permitted under GASB 62 paragraphs 476–500.

Deferred Outflows/Inflows of Resources – In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period and so will not be recognized as an outflow of resources (expense/expenditure) until then. The BWL has two items that qualify for reporting in this category. The deferred outflows of resources relate to deferred losses on refunding and pension relation deferrals under GASB 68.

In addition to liabilities, the statement of net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period and so will not be recognized as an inflow of resources (revenue) until that time. The BWL has the following items that qualify for reporting in this category: the deferred inflows of resources related to costs that have been incurred and will be billed to customers in the future related to the renewable energy plan and energy optimization, chiller plant, and Wise Road items described in Note 6, and pension related deferrals under GASB 68.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 1 - Significant Accounting Policies (Continued)

Net Position – Equity is classified as net position and displayed in three components:

- **Net Investment in Capital Assets** Consists of capital assets, net of accumulated depreciation, and reduced by the outstanding balances of any bonds that are attributable to the acquisition, construction, or improvement of those assets.
- **Restricted for Debt Service** Consists of net position with constraints placed on their use by revenue bond resolution.
- **Unrestricted** All other net position that does not meet the definition of "restricted" or "net investment in capital assets."

Net Position Flow Assumption – Sometimes the BWL will fund outlays for a particular purpose from both restricted (e.g., restricted bond) and unrestricted resources. In order to calculate the amounts to report as restricted net position and unrestricted net position in the proprietary fund financial statements, a flow assumption must be made about the order in which the resources are considered to be applied. It is the BWL's policy to consider restricted net position to have been depleted before unrestricted net position is applied.

Net Pension Asset – A net pension asset is recorded in accordance with GASB Statement No. 68. The asset is the difference between the actuarial total pension asset and the Plan's fiduciary net position as of the measurement date. See Note 8 for additional information.

Other Assets – Other assets consists of the net OPEB asset described in Note 8 and a deposit held with the Michigan Public Power Agency (MPPA) related to the Belle River project.

Long-Term Obligations – Long-term debt and other obligations are reported as liabilities. Bond premiums and discounts are amortized over the life of the bonds using the straight-line method. Gains or losses on prior refundings are amortized over the remaining life of the old debt or the life of the new debt, whichever is shorter. The balance at year end for premiums and discounts is shown as an increase or decrease in the liability section of the statement of net position. The balance at year end for the loss on refunding is shown as a deferred outflow in the balance sheet.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 1 - Significant Accounting Policies (Continued)

Unbilled Accounts Receivable and Revenue – Unbilled accounts receivable at June 30, 2016 and 2015 represents the estimated amount of accounts receivable for services that have not been billed as of the balance sheet date. The amounts are a result of a timing difference between the end of the financial statement cycle (month end) and the billing cycle (various dates within the month for each billing period). Accordingly, the current year revenue from customers whose billing period ends after June 30 for services rendered prior to June 30 will be recognized in the current period.

Interutility Transactions – The water, electric, steam, and chilled water operations of the BWL bill each other for services provided and these services are reported as revenue to the generating operation and expense to the consuming operation. Such internal billings aggregated \$8,496,848 and \$7,956,814 in 2016 and 2015, respectively, and are not eliminated in the statement of revenues, expenses, and changes in net assets.

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

Reclassifications – Certain amounts presented in the prior year data may have been reclassified in order to be consistent with the current year's presentation.

Note 2 - Cash, Investments, and Fair Value Disclosure

Michigan Compiled Laws Section 129.91 (Public Act 20 of 1943, as amended) authorizes local governmental units to make deposits and invest in the accounts of federally insured banks, credit unions, and savings and loan associations that have offices in Michigan. A local unit is allowed to invest in bonds, securities, and other direct obligations of the United States or any agency or instrumentality of the United States; certificates of deposit, savings accounts, deposit accounts, or depository receipts of an eligible financial institution; repurchase agreements; bankers' acceptances of United States banks; commercial paper rated within the two highest classifications, which matures not more than 270 days after the date of purchase; obligations of the State of Michigan or its political subdivisions, which are rated as investment grade; and mutual funds composed of investment vehicles that are legal for direct investment by local units of government in Michigan.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 2 - Cash, Investments, and Fair Value Disclosure (Continued)

The operating cash investment policy adopted by the BWL in accordance with Public Act 20, as amended, and the Lansing City Charter has authorized investment in bonds and securities of the United States government, certificates of deposit, time deposits, and bankers' acceptances of qualified financial institutions, commercial paper rated A1 by Standard & Poor's and P1 by Moody's, repurchase agreements using bonds, securities, and other obligations of the United States or an agency or instrumentality of the United States, and liquid asset accounts managed by a qualified financial institution using any of these securities. The BWL's deposits and investment policies are in accordance with statutory authority.

The BWL's cash and investments are subject to several types of risk, which are examined in more detail below:

BWL's Cash and Investments (exclusive of fiduciary funds)

Custodial Credit Risk of Bank Deposits – Custodial credit risk is the risk that in the event of a bank failure, the BWL's deposits may not be returned to it. The BWL requires that financial institutions must meet minimum criteria to offer adequate safety to the BWL. At June 30, 2016 and 2015, the BWL had \$1,605,366 and \$1,666,654, respectively, of bank deposits that were uninsured and uncollateralized. The BWL evaluates each financial institution with which it deposits funds and only those institutions meeting minimum established criteria are used as depositories.

Custodial Credit Risk of Investments – Custodial credit risk is the risk that, in the event of the failure of the counterparty, the BWL will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. The BWL does not have a policy for custodial credit risk.

At June 30, 2016, the following investment securities were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent, but not in the BWL's name:

Type of Investment	 Cost Basis	How Held
U.S. government or agency bond or notes	\$ 92,921,202	Counterparty

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 2 - Cash, Investments, and Fair Value Disclosure (Continued)

At June 30, 2015, the following investment securities were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent, but not in the BWL's name:

Type of Investment	 Cost Basis	How Held
U.S. government or agency bond or notes	\$ 91,596,540	Counterparty

Interest Rate Risk – Interest rate risk is the risk that the value of investments will decrease as a result of a rise in interest rates. The BWL's investment policy restricts investments to a maximum weighted average life of five years unless matched to a specific cash flow.

At June 30, 2016, the average maturities of investments are as follows:

				Less than			
Investment Fair		Fair Value	air Value 1 year		 1-5 years	6-10 years	
Pooled investment funds	\$	47,145,988	\$	47,145,988	\$ -	\$	-
U.S. treasury bonds		38,056,849		1,743,554	36,313,295		-
U.S. agency bonds/notes		45,283,538		7,822,012	36,381,417		1,080,109
Commercial paper		7,447,318		7,447,318	-		-
Supra national agency bonds		2,008,658		501,352	1,507,306		-
Mutual funds		124,840		124,840	-		-
Totals	\$	140,067,191	\$	64,785,064	\$ 74,202,018	\$	1,080,109

At June 30, 2015, the average maturities of investments are as follows:

				Less than										
Investment	Fair Val		Investment Fair Value 1 year		ent Fair Value 1 year 1-5 yea			Investment Fair Value 1 y				1-5 years	6-10	years
Pooled investment funds Mutual funds	\$	71,700,404 150,565	\$	71,700,404 150,565	\$	-	\$	-						
U.S. government or agency bond or note Totals	\$	91,435,063 163,286,032	\$	29,617,760 101,468,729	\$	61,817,303 61,817,303	\$	<u>-</u>						

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 2 - Cash, Investments, and Fair Value Disclosure (Continued)

Credit Risk - State law limits investments in commercial paper to the top two ratings issued by nationally recognized statistical rating organizations.

As of June 30, 2016, the credit quality ratings of debt securities (other than the U.S. government) are as follows:

				Rating
Investment	Fair Value		Rating	Organization
Pooled investment funds	\$	47,145,988	AAA	S&P
U.S. treasury bonds		38,056,849	AA+	S&P
U.S. agency bonds/notes		45,283,538	AA+	S&P
Commercial paper		7,447,318	A1/A1+	S&P
Supra national agency bonds		2,008,658	AAA	S&P
Mutual funds		124,840	AAAM	S&P

As of June 30, 2015, the credit quality ratings of debt securities (other than the U.S. government) are as follows:

				Rating
Investment	Fair Value		Rating	Organization
Pooled investment funds Mutual funds U.S government or agency bonds/notes	\$	71,850,969 150,565 91,435,063	AAA AAAM AA+	S&P S&P S&P

Concentration of Credit Risk – As of June 30, 2016 and 2015 no more than 5 percent of the BWL's investments are invested in any one issuer or commercial paper or bonds/notes not guaranteed by the U.S. government.

Fair Value

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

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 2 - Cash, Investments, and Fair Value Disclosure (Continued)

The following investments are recorded at fair value using the Matrix Pricing Technique.

Enterprise funds

	June 30, 2016								
Investment	Level 1			Level 2		Level 3			Total
U.S. Treasury Bonds	\$	-	\$	38,056,849	\$		-	\$	38,056,849
Supra national agency bonds		-		2,008,659			-		2,008,659
Federal Agency Mortgage-Backed Security		-		1,080,107			-		1,080,107
Federal Agency Collateralized Mortgage Obligation		-		1,542,108			-		1,542,108
Federal Agency Bond/Note		-		42,661,321			-		42,661,321
Commercial Paper		-		7,447,318			-		7,447,318
Mutual funds		-		124,840			-		124,840
Total investments by fair value level	\$	-	\$	92,921,202	\$		_	\$	92,921,202
				June 30	, 2015				
Investment	Level 1			Level 2		Level 3			Total
U.S. Treasury Bonds	\$	-	\$	49,791,535	\$		-	\$	49,791,535
Supra national agency bonds		-		503,519			-		503,519
Federal Agency Collateralized Mortgage Obligation		-		351,881			-		351,881
Federal Agency Bond/Note		-		40,788,128			-		40,788,128
Mutual funds		-		150,565			-		150,565
Total investments by fair value level	\$	_	\$	91,585,628	\$		_	\$	91,585,628

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 2 - Cash, Investments, and Fair Value Disclosure (Continued)

Fiduciary Fund Investments

Interest Rate Risk - Pension Trust Funds

At June 30, 2016, the average maturities of investments are as follows:

			Weighted Average
Investment		Fair Value	Maturity (in years)
U.S. government or agency bond	\$	29,023,448	13.38
Money market trust funds		13,442,797	Less than 1 year
Corporate bonds		39,216,076	13.46

At June 30, 2015, the average maturities of investments are as follows:

		Weighted Average		
Investment	 Fair Value	Maturity (in years)		
U.S. government or agency bond	\$ 22,121,544	11.91		
Money market trust funds	7,958,648	Less than 1 year		
Corporate bonds	32,582,122	14.13		

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 2 - Cash, Investments, and Fair Value Disclosure (Continued)

Credit Risk - Pension Trust Funds

As of June 30, 2016, the credit quality ratings of debt securities (other than the U.S. government) are as follows:

				Rating
Investment	 Fair Value		Rating	Organization
Mutual funds	\$ 124,001,268		Not Rated	 Not Rated
Government or agency bond	7,565,160	ļ	Not Rated	Not Rated
Stable value	34,193,741		AA	S&P
Corporate bonds	1,885,055		AAA	S&P
Corporate bonds	14,401,372		AA+	S&P
Corporate bonds	710,620		AA	S&P
Corporate bonds	523,627		AA-	S&P
Corporate bonds	1,313,047		A+	S&P
Corporate bonds	4,246,010		Α	S&P
Corporate bonds	3,606,010		A-	S&P
Corporate bonds	7,510,323		BBB+	S&P
Corporate bonds	3,368,004		BBB	S&P
Corporate bonds	1,426,684		BBB-	S&P
Corporate bonds	8,185		BB+	S&P
Corporate bonds	56,350		BB	S&P
Corporate bonds	54,445		BB-	S&P
Corporate bonds	106,344		CCC	S&P
Money market trust funds	13,442,797	ı	Not Rated	Not Rated

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 2 - Cash, Investments, and Fair Value Disclosure (Continued)

As of June 30, 2015, the credit quality ratings of debt securities (other than the U.S. government) are as follows:

			Rating
Investment	Fair Value	Rating	Organization
Mutual funds	\$ 138,830,601	Not Rated	Not Rated
Government or agency bond	22,121,544	Not Rated	Not Rated
Stable value	31,844,948	AA	S&P
Corporate bonds	3,509,599	AAA	S&P
Corporate bonds	12,528,632	AA+	S&P
Corporate bonds	709,117	AA	S&P
Corporate bonds	441,815	AA-	S&P
Corporate bonds	1,424,862	A+	S&P
Corporate bonds	2,614,518	Α	S&P
Corporate bonds	3,513,111	A-	S&P
Corporate bonds	2,559,638	BBB+	S&P
Corporate bonds	1,982,318	BBB	S&P
Corporate bonds	1,195,013	BBB-	S&P
Corporate bonds	262,236	BB+	S&P
Corporate bonds	109,150	BB	S&P
Corporate bonds	279,092	BB-	S&P
Corporate bonds	102,069	B+	S&P
Corporate bonds	141,348	В	S&P
Corporate bonds	574,676	B-	S&P
Corporate bonds	508,305	CCC	S&P
Corporate bonds	126,625	CC	S&P

Fair Value - Pension Trust Funds

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3). The three levels of the fair value hierarchy under authoritative guidance are described as follows:

Level 1 - Inputs to the valuation methodology are unadjusted quoted market prices for identical assets in active markets that the Plan has the ability to access.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 2 - Cash, Investments, and Fair Value Disclosure (Continued)

Level 2 – Inputs to the valuation methodology include:

- > quoted prices for similar assets or liabilities in active markets;
- > quoted prices for identical or similar assets or liabilities in inactive markets;
- > inputs other than quoted prices that are observable for the asset or liability;
- > inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- > If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability

Level 3 - Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

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

The following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at June 30, 2016 and 2015:

Money market fund, growth funds, and international funds: Valued at the quoted net asset value ("NAV") of shares held by the Plan at year end.

Partnership: Valued using either NAV, valuations provided by management reflecting the partnership's share of capital account balance, or the income and market approach.

Common stock, corporate bonds and notes, U.S. government obligations, and fixed income securities: Valued at the most recent closing price reported on the market on which individual securities are traded.

Mutual funds: Valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily NAV and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 2 - Cash, Investments, and Fair Value Disclosure (Continued)

Stable value fund: The Plus Fund is a collective fund that seeks to maintain a stable net asset value. It invests primarily in a diversified portfolio of stable-value investments, including traditional guaranteed investment contracts (traditional GICs), separate account GICs, synthetic GICs backed by fixed income securities or investments, and short-term investment funds, including money market mutual funds.

Guaranteed Lifetime Income fund: The Retirement Income Advantage Fund seeks both moderate capital growth and current income. It invests in a separate account under a group variable annuity. The separate account, in turn, invests in a mix of registered funds and a collective trust fund with an allocation of approximately 60% domestic and foreign equities and 40% fixed income.

Self-directed brokerage account: The self-directed brokerage account allows participants of the Plan the option of selecting a more personalized and broad range of investment choices. The investments within the account consist of corporate stocks, which are valued at the most recent closing price reported on the market on which individual securities are traded.

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

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 2 - Cash, Investments, and Fair Value Disclosure (Continued)

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of June 30, 2016 and 2015:

	June 30, 2016										
Investment Type		Level 1		Level 2	Level 3		Total				
Cash and money market trust fund	\$	798,902	\$	13,446,056	\$ -	\$	14,244,958				
U.S. government obligations		-		29,023,448	-		29,023,448				
Fixed income securities		-		39,216,076	-		39,216,076				
Mutual funds		124,001,268		23,117,545	-		147,118,813				
Partnership		-		-	1,101,086		1,101,086				
Common Stocks		114,508,909		-	-		114,508,909				
Self-directed brokerage account		1,551,450		_			1,551,450				
Total investments by fair value level		240,860,529		104,803,125	1,101,086		346,764,740				
Investments measured at the net asset value (NAV)											
Stable value							34,193,741				
Guaranteed Lifetime Income							7,735,485				
Total investments measured at fair value						\$	388,693,966				
	June 30, 2015										
Investment Type		Level 1		Level 2	Level 3		Total				
Cash and money market trust fund	\$	193,939	\$	8,370,574	\$ -	\$	8,564,513				
U.S. government obligations		-		22,121,544	-		22,121,544				
Fixed income securities		-		32,582,122	-		32,582,122				
Mutual funds		130,790,091		2,819,994	-		133,610,085				
Partnership		-		-	1,098,790		1,098,790				
Common Stocks		162,370,016		-	-		162,370,016				
Self-directed brokerage account		1,376,730		-			1,376,730				
Total investments by fair value level		294,730,776		65,894,234	1,098,790		361,723,800				
Investments measured at the net asset value (NAV)											
Stable value							31,844,948				
Guaranteed Lifetime Income							5,220,516				
Total investments measured at fair value						\$	398,789,264				

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 3 – Restricted Assets

Restricted assets are required under the 2008A, 2011A, 2012A, and 2013A Revenue Bond resolutions and the related Nonarbitrage and Tax Compliance Certificates. These assets, which consist of cash, commercial paper, and United States government securities, are segregated into the following funds:

			Carrying Value					
	F	Required at						
	June 30, 2016			2016		2015		
Current:								
Operations and Maintenance Fund	\$	27,416,700	\$	80,922,920	\$	88,301,618		
Bond and Interest Redemption Fund		19,169,626		19,301,123		19,689,041		
Total current		46,586,326		100,224,043		107,990,659		
Noncurrent:								
Bond Reserve Fund		24,263,950		25,319,385		24,951,608		
Total noncurrent		24,263,950		25,319,385		24,951,608		
Total	\$	70,850,276	\$	125,543,428	\$	132,942,267		

The carrying value in excess of the required value for the current portion is reported as cash and cash equivalents or investments for the year ended June 30, 2016 and 2015. The restrictions of the various funds are as follows:

• Operations and Maintenance Fund – By the end of each month, this fund shall include sufficient funds to provide for payment of the succeeding month's expenses.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 3 - Restricted Assets (Continued)

- Bond and Interest Redemption Fund Restricted for payment of the current portion of bond principal and interest on the 2008A, 2009A, 2011A, 2012A, and 2013A Revenue Bonds.
- Bond Reserve Fund Shall include sufficient funds to cover the maximum annual principal and interest requirements of the 2008A, 2011A, 2012A, and 2013A Revenue Bonds. The Nonarbitrage and Tax Compliance Certification stipulates that the amount in the fund shall be valued at amortized cost to meet this requirement. As of June 30, 2016, the cost basis in the fund was \$24,936,608.

Note 4 - Utility Plant

The tables below reflect the capital asset activity of the utility plant categories for the years ended June 30, 2016 and 2015:

Capital Asset Activity for Year Ended June 30, 2016											
	(Capital Assets							(Capital Assets	
	FY Start		Transfers			Acquisition		Retirement	FY End		
Water	\$	296,802,952	\$	(17,925)	\$	7,034,735	\$	(1,653,985)	\$	302,165,777	
Electric		804,947,799		270,959		31,723,805		(62,513,349)		774,429,214	
Steam		67,510,134		-		1,962,134		(914,937)		68,557,331	
Chilled		33,622,140		-		376,000		-		33,998,140	
Common		87,132,519		(253,034)		2,320,478		(447,531)		88,752,432	
CUC		76,079,000								76,079,000	
Total	\$	1,366,094,544	\$		\$	43,417,152	\$	(65,529,802)	\$	1,343,981,894	

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 4 - Utility Plant (Continued)

Accumulated Depreciation for Year Ended June 30, 2016

						epr. / Amort.				
	1	Accum. Depr.		Depreciation and Impairment			Depreciation		Accum. Depr.	
		FY Start		Transfer		for Year		Retirement		FY End
Water	\$	(89,634,586)	\$	22,137	\$	(7,266,780)	\$	1,375,121	\$	(95,504,108)
Electric		(445,376,095)		(143,371)		(28,379,813)		43,306,278		(430,593,001)
Steam		(14,777,519)		-		(2,377,839)		542,937		(16,612,421)
Chilled		(9,027,683)		-		(1,203,561)		-		(10,231,244)
Common		(41,098,115)		121,234		(4,255,352)		311,397		(44,920,836)
CUC		(65,935,132)				(5,071,933)	_			(71,007,065)
Total	\$	(665,849,130)	\$	-	\$	(48,555,278)	\$	45,535,733	\$	(668,868,675)

Non-depreciable assets – Included in the table above are non-depreciable assets of \$1,196,847 for water, \$11,171,356 for electric, \$124,224 for steam and \$412,339 for common facilities.

Eckert Power Station Impairment - In 2016, the Board approved to close the Eckert Power Station by 2020 due to increasing operating costs, pending environmental regulations, and an uncertain future for coal-fired plants. As a result, BWL recorded an impairment of \$15,763,520 in 2016 using the service units approach to measure the impairment.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 4 - Utility Plant (Continued)

Capital Asset Activity for Year Ended June 30, 2015

	С	apital Assets							C	apital Assets	
_		FY Start		Transfers		Acquisition	Retirement			FY End	
Water	\$	288,627,287	\$	25,014	\$	9,096,693	\$	(946,042)	\$	296,802,952	
Electric		773,262,520		51,658		34,925,022		(3,291,401)		804,947,799	
Steam		64,685,056		-		3,136,196		(311,118)		67,510,134	
Chilled		32,917,461		-		704,679		-		33,622,140	
Common		75,026,577		(76,672)		12,628,678		(446,064)		87,132,519	
CUC		76,079,000						<u> </u>		76,079,000	
Total	\$	1,310,597,901	\$	<u>-</u>	\$	60,491,268	\$	(4,994,625)	\$	1,366,094,544	

Accumulated Depreciation for Year Ended June 30, 2015

	Accum. Depr.		Depreciation		Depr. / Amort. for			Depreciation	Accum. Depr.		
		FY Start	T	ransfer		Year		Retirement		FY End	
Water	\$	(84,984,612)	\$	(25,014)	\$	(5,147,689)	\$	522,729	\$	(89,634,586)	
Electric		(420,474,747)		3,099		(27,158,634)		2,254,187		(445,376,095)	
Steam		(12,551,842)		-		(2,313,839)		88,162		(14,777,519)	
Chilled		(7,887,640)		-		(1,140,043)		-		(9,027,683)	
Common		(37,987,471)		21,915		(3,344,139)		211,580		(41,098,115)	
CUC		(60,863,199)				(5,071,933)	_	<u>-</u>		(65,935,132)	
Total	\$	(624,749,511)	\$	_	\$	(44,176,277)	\$	3,076,658	\$	(665,849,130)	

Non-depreciable assets – Included in the table above are non-depreciable assets of \$1,193,788 for water, \$6,793,620 for electric, \$124,224 for steam and \$412,339 for common facilities.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 5 - Long-term Debt

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

	2016	2015
Water Supply, Steam, Chilled Water, and Electric Utility System Revenue Refunding Bonds, Series 2013A, due in annual principal installments beginning July 1, 2013 through July 1, 2026, plus interest at rates ranging from 2.00% to 5.00%. Original amount of issue \$21,085,000.	\$ 19,450,000	\$ 20,830,000
Water Supply, Steam, Chilled Water, and Electric Utility System Revenue Refunding Bonds, Series 2012A, due in annual principal installments beginning July 1, 2013 through July 1, 2018, plus interest at rates ranging from 2.00% to 5.00%. Original amount of issue \$17,370,000.	15,735,000	16,355,000
Water Supply, Steam, Chilled Water, and Electric Utility System Revenue Bonds, Series 2011A, due in annual principal installments beginning July 1, 2015 through July 1, 2041, plus interest at rates ranging from 3.00% to 5.50%. Original amount of issue \$250,000,000.	249,995,000	250,000,000
Water Supply, Steam, Chilled Water, and Electric Utility System Revenue Refunding Bonds, Series 2009A, due in annual principal installments due serially through July 1, 2016, plus interest at a rate of 5.34%. Original amount of issue \$46,255,000.	3,030,000	11,215,000
Water Supply Utility System Revenue Bonds, Series 2008A, due serially beginning July 1, 2012 and continuing through July 1, 2032, plus interest at rates ranging from 3.00% to 5.00%. Original amount of issue \$40,000,000.	39,165,000	39,985,000
	55, 105,000	55,505,000

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 5 - Long-term Debt (Continued)

	 2016	2015
Promissory note, due to the City of Lansing in semi-annual installments through October 1, 2024, plus interest at a rate of 2.50%. Original amount of issue \$13,225,385.	\$ 8,932,605	\$ 9,554,048
Granger III Corporation for ash hauling services due in monthly installments ranging from \$150,000 to \$250,000	-	1,650,712
City of Lansing Agreement for the Enhancement of the Flood warning system \$10,000 annually with final payment in 2016.	-	10,000
Charter Township of Lansing Special Assessment pertaining to the Groesbeck II Park Drain. Due in annual installments ranging from \$132,000 to \$291,000 with final payment in		
2044.	 3,662,856	 <u>-</u>
Total	339,970,461	349,599,760
Less current portion	(11,642,389)	(13,299,345)
Plus unamortized premium	 9,777,301	10,743,879
Total long-term portion	\$ 338,105,373	\$ 347,044,294

The unamortized premium and deferral on refunded bonds is being amortized over the life of the bonds, using the straight-line method.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 5 - Long-term Debt (Continued)

Aggregate principal and interest payments applicable to long-term debt are as follows:

	Principal		incipal Interest		Total
2017	\$	11,642,389	\$	16,650,196	\$ 28,292,585
2018		8,986,310		16,184,020	25,170,330
2019		9,371,241		15,777,019	25,148,260
2020		7,839,147		15,391,183	23,230,330
2021		8,183,523		15,047,557	23,231,080
2022-2026		46,499,053		69,094,488	115,593,541
2027-2031		58,932,557		56,516,580	115,449,137
2032-2036		73,110,103		40,293,976	113,404,079
2037-2041		93,251,527		19,231,686	112,483,213
2042-2044		22,154,611		5,951,755	 28,106,366
Total	\$	339,970,461	\$	270,138,460	\$ 610,108,921

The 2008A, 2011A, 2012A, and 2013A bonds require the BWL to establish a reserve account equal to the highest annual principal and interest requirements of such issues. As of June 30, 2016, the balance of this reserve account was \$25,319,385 (see Note 3). The 2009A bonds were a private placement issue and have no reserve requirement.

All Water Supply and Electric Utility System Revenue Bonds were issued by authority of the BWL. Except for the Series 2009A Subordinate Lien Revenue Refunding Bond, all bonds were issued on a parity basis and are payable solely from the net revenue of the combined water, electric, chilled water, and steam operations of the BWL.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 5 – Long-term Debt (Continued)

The 2012A Bond is payable in annual installments in the years 2013 to 2018, inclusive, and shall not be subject to optional redemption prior to maturity.

The Series 2011A Bond is payable in annual installments in the years 2015 to 2022, inclusive, and shall not be subject to optional redemption prior to maturity. The Bonds maturing on or after July 1, 2022 shall be subject to redemption at the option of the BWL on or after July 1, 2021 as a whole or in part at any time and by lot within a maturity at par plus interest accrued to the redemption date.

The Series 2009A Bond is payable in annual installments in the years 2010 to 2016, inclusive, and shall not be subject to optional redemption prior to maturity.

The Series 2008A Bonds maturing in the years 2012 to 2028, inclusive, shall not be subject to optional redemption prior to maturity. The bonds, or portions of bonds in multiples of \$5,000 maturing in the years 2019 to 2032, inclusive, shall be subject to redemption at the option of the BWL in such order of maturity as the BWL shall determine and within a single maturity by lot on any date on or after July 1, 2018, at par plus accrued interest to the date fixed for redemption.

The long-term debt activity for the year ended June 30, 2016 is as follows:

	 Revenue Bonds	Other Notes	Total
Beginning balance	\$ 349,128,869	\$ 11,214,770	\$ 360,343,639
Additions Reductions	 - (11,976,578)	 3,789,161 (2,408,460)	 3,789,161 (14,385,038)
Ending balance	\$ 337,152,291	\$ 12,595,471	\$ 349,747,762
Due within one year	\$ 10,885,000	\$ 757,389	\$ 11,642,389

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 5 - Long-term Debt (Continued)

The BWL has pledged substantially all revenue, net of operating expenses, to repay the revenue bonds. Proceeds from the bonds provided financing for the construction of the utility plant. The bonds are payable solely from the net revenues of the BWL. The remaining principal and interest to be paid on the bonds total \$593,866,251. During the current year, net revenues of the BWL were \$57,353,974 compared to the annual debt requirements of \$25,871,300.

The long-term debt activity for the year ended June 30, 2015 is as follows:

		Revenue Bonds	 Other Notes	 Total
Beginning balance	\$	364,250,463	\$ 14,884,003	\$ 379,134,466
Additions Reductions		- (15,121,594)	 (3,669,233)	 - (18,790,827)
Ending balance	<u>\$</u>	349,128,869	\$ 11,214,770	\$ 360,343,639
Due within one year	\$	11,010,000	\$ 2,289,345	\$ 13,299,345

Note 6 - Costs/Credits Recoverable in Future Years

Central Utilities Complex

The BWL accounts for amortization of its Central Utilities Complex (CUC), which is a separate operating unit of the BWL, under the regulatory basis of accounting as per GASB 62. The BWL has recorded recoverable (revenue) amortization of \$(5,071,934) and \$(7,241,153) at June 30, 2016 and 2015, respectively. Under an agreement with a BWL customer, the bonded debt related to the construction of the CUC will be reimbursed through payments to be received from this customer through 2017. The recoverable (revenue) amortization balance represents the difference between calculated straight-line amortization expense and the reimbursement payments received from the customer at year end.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 6 - Costs/Credits Recoverable in Future Years (Continued)

Environmental Remediation

The GASB 49 environmental remediation liability related to a landfill site operated by the BWL was approved for regulated entity accounting under GASB 62 during the year ended June 30, 2004. As of June 30, 2016 and 2015, \$20,848,000 in total costs has been recoverable as a regulatory asset.

As of June 30, 2016 and 2015, the amounts remaining to be recovered in rates were \$0 and \$37,756, respectively. The BWL reviews the adequacy of its rates to recover its cost of service on an annual basis.

During the year ended June 30, 2006, the GASB 49 environmental remediation liability related to a second landfill was approved for regulated entity accounting under GASB 62. The balance of the regulatory asset at June 30, 2016 and 2015 was \$7,076,982 and \$14,176,684 respectively. The BWL reviews the adequacy of its rates to recover its cost of service on an annual basis. During the year ended June 30, 2009, regulatory accounting as per GASB 62 was authorized by the Board of Commissioners to collect rates for all environmental remediation sites. The balance as of June 30, 2016 and 2015 for additional sites was \$4,406,587 and \$4,401,565, respectively.

Recoverable Cost Adjustments

During the year ended June 30, 2005, the Board of Commissioners approved the use of regulatory accounting as per GASB 62 in accounting for the BWL's energy cost adjustment (ECA), power chemical adjustment (PCA), and fuel cost adjustment (FCA). These affect the amount to be billed to retail electricity, water, and steam customers to reflect the difference between the BWL's actual material costs and the amounts incorporated into rates. This resulted in recoverable assets of \$2,302,845 and \$4,652,068 at June 30, 2016 and 2015, respectively. This amount represents costs to be billed to customers in future years because actual costs of providing utilities were higher than the costs incorporated into the BWL's rates.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 6 - Costs/Credits Recoverable in Future Years (Continued)

Renewable Energy Plan (REP) and Energy Optimization (EO)

During the year ended June 30, 2010, the Board of Commissioners approved the implementation of regulatory accounting as per GASB 62 to account for Public Act 295 of 2008 (PA. 295). PA. 295 set forth requirements for all Michigan utilities to meet the new renewable energy standards and undertake energy optimization programs. As a municipally owned electric utility, the BWL was required to file a proposed energy plan with the Michigan Public Service Commission (MPSC) and this plan was approved on July 1, 2009. These changes will affect the amount to be billed to electric customers. This resulted in deferred inflow of resources of \$6,217,249 and \$6,953,049 as of June 30, 2016 and 2015, respectively.

Chiller Plant

During the year ended June 30, 2010, the BWL chose to use regulatory accounting as per GASB 62 to recognize the contribution in aid of construction (CIAC) for the development of a new chilled water plant. This resulted in recoverable inflow of resources of \$1,982,444 and \$2,202,716 as of June 30, 2016 and 2015, respectively. The BWL will recognize this as revenue monthly over the life of the new chilled water plant to offset depreciation expense.

Wise Road

During the year ended June 30, 2012, the BWL chose to use regulatory accounting as per GASB 62 to recognize the insurance proceeds for the damaged equipment at the Wise Road Water Conditioning Plant (see Note 13). The remaining recoverable inflow of resources as of June 30, 2016 and 2015 was \$12,692,245 and \$13,511,589 respectively.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 7 - Transactions with the City of Lansing, Michigan

Operations – The BWL recognized revenue of \$8,445,860 and \$9,834,276 in 2016 and 2015, respectively, for water, electric, and steam services provided to the City. The BWL incurred expenses for sewerage services purchased from the City of \$849,884 and \$964,302 in 2016 and 2015, respectively.

Additionally, the BWL bills and collects sewerage fees for the City. In connection with these services, the BWL received sewerage collection fees of \$929,243 and \$1,087,668 in 2016 and 2015, respectively, included in other income.

Return on Equity – Effective July 1, 1992, the BWL entered into an agreement with the City to provide an annual payment of a return on equity in accordance with a formula based on net billed retail sales from its water, steam heat, and electric utilities for the preceding 12-month period ending May 31 of each year. Effective March 1, 2002, the formula to calculate the amount owed to the City for return on equity will also include wholesale revenue generated from the BWL's electric, water, steam, and chilled water utilities for the preceding 12-month period ending May 31 of each year. Subject to the provisions of Act 94 Public Acts of 1933, as amended, and the BWL's various bond covenants, this amount is payable to the City no later than June 30 of each year. Under terms of this agreement, the BWL paid to the City \$21,033,531 in 2016 and \$20,840,065 in 2015 of operational cash flow in excess of debt service requirements.

Note 8 - Retirement Plans

The BWL has three retirement plans. The BWL administers a tax-qualified, single-employer, noncontributory, defined benefit public employee retirement pension plan (the "Defined Benefit Plan"), and the BWL has a tax-qualified, single-employer, noncontributory, defined contribution public employee retirement pension plan (the "Defined Contribution Plan"). The BWL also has a tax-qualified, single-employer, defined benefit plan to administer and fund retiree healthcare benefits (the "Retiree Benefit Plan and Trust").

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 8 - Retirement Plans (Continued)

Defined Benefit Plan

Plan Description – The BWL Board administers the Defined Benefit Plan – a noncontributory single-employer defined benefit pension plan for employees of the BWL. The benefit terms were established by the BWL and may be amended by future BWL actions.

The Plan for Employees' Pensions of the Board of Water and Light – City of Lansing, Michigan – Defined Benefit Plan issues a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained by writing to the Board of Water and Light, Chief Financial Officer, P.O. Box 13007, Lansing, Michigan 48901–3007.

Management of the Plan is vested in the BWL, which consists of eight members appointed by the mayor of the City of Lansing, Michigan.

Effective July 1, 1999, the Defined Benefit Plan was amended to include a medical benefit component, in addition to the normal retirement benefits, to fund a portion of the postretirement obligations for certain retirees and their beneficiaries. The funding of the medical benefit component is limited to the amount of excess pension plan assets available for transfer, as determined by the actuary. No medical benefits were paid by the Defined Benefit Plan during the years ended June 30, 2016 and 2015.

Employees Covered by Benefit Terms – At February 28, 2016 and 2015 (the most recent actuarial valuation for funding purposes), Defined Benefit Plan membership consisted of the following:

	2016	2015
Inactive plan members or beneficiaries currently receiving benefits	382	398
Inactive plan members entitled to but not yet receiving benefits	7	8
Active plan members	11	14
Total	400	420

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 8 - Retirement Plans (Continued)

The Defined Benefit Plan, by resolution of the board of commissioners, was closed to employees hired subsequent to December 31, 1996, and a defined contribution plan was established for employees hired after December 31, 1996. Effective December 1, 1997, all active participants in this plan were required to make an irrevocable choice to either remain in this plan (defined benefit) or move to the newly established defined contribution plan. Those participants who elected to move to the defined contribution plan received lump–sum distributions from this plan that were rolled into their accounts in the newly established defined contribution plan. Of the 760 employees who were required to make this election, 602 elected to convert their retirement benefits to the newly established defined contribution plan. As a result of this action, effective December 1, 1997, the board of commissioners transferred \$75,116,470 to the newly established defined contribution plan, reflecting the plan participants' accumulated benefits as of said date.

Benefits Provided – The Defined Benefit Plan provides retirement, early retirement, disability, termination, and death benefits. The Plan provides for an annual benefit upon normal retirement age equal to the product of the total number of years of credited service multiplied by a percentage equal to 1.80 percent of the highest annual pay during the last 10 years of service, paid in equal monthly installments.

Payments will either be non-increasing or increase only as follows: (a) By an annual percentage increase that does not exceed the annual percentage increase in a cost-of-living index that is based on prices of all items and issued by the Bureau of Labor Statistics; (b) To the extent of the reduction in the amount of the employee's payments to provide for a survivor benefit upon death, but only if the beneficiary whose life was being used to determine the distribution period described in subsection 8 dies or is no longer the employee's beneficiary pursuant to a qualified domestic relations order within the meaning of Internal Revenue Code Section 414(p); (c) To provide cash refunds of employee contributions upon the employee's death; or (d) To pay increased benefits that result from a plan amendment.

Contributions – Article 9, Section 24 of the State of Michigan constitution requires that financial benefits arising on account of employee service rendered in each year be funded during that year. Accordingly, the BWL Pension Board retains an independent actuary to determine the annual contribution. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability. There was no contribution required for the years ended June 30, 2015 and 2016. Plan documents do not require participant contributions.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 8 - Retirement Plans (Continued)

Net Pension Asset – The components of the net pension asset of the BWL at June 30, 2016 and June 30, 2015 were as follows (in thousands):

	2016		2015	
Total pension liability	\$	61,178	\$	65,395
Plan fiduciary net position		65,442		73,679
Plan's net pension asset	<u>\$</u>	(4,264)	\$	(8,284)
Plan fiduciary net position, as a percentage of the total pension liability		106.97%		112.67%

The BWL has chosen to use June 30, 2016 as its measurement date for fiscal year 2016. The June 30, 2016 reported net pension asset was determined using a measure of the total pension liability and the pension net position as of June 30, 2016. The June 30, 2016 total pension liability was determined by an actuarial valuation as of February 29, 2016, which used update procedures to roll forward the estimated liability to June 30, 2016.

The BWL has chosen to use June 30, 2015 as its measurement date for fiscal year 2015. The June 30, 2015 reported net pension asset was determined using a measure of the total pension liability and the pension net position as of June 30, 2015. The June 30, 2015 total pension liability was determined by an actuarial valuation as of February 28, 2015, which used update procedures to roll forward the estimated liability to June 30, 2015.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 8 - Retirement Plans (Continued)

Changes in the net pension asset during the measurement years were as follows:

	Increase (Decrease)					
	Total Pension		Plan Net		Net Pension	
Changes in Net Pension Asset		iability		Position		Asset
Balance at June 30, 2014	\$	69,341	\$	80,530	\$	(11,189)
Changes for the year:						
Service cost		274		-		274
Interest		4,919		-		4,919
Differences between expected		-		-		-
and actual experience		(1,093)		-		(1,093)
Net investment income		-		1,771		(1,771)
Benefit payments, including						
refunds		(8,046)		(8,046)		-
Administrative expenses		-		(576)		576
Miscellaneous other changes				<u>-</u>		
Net changes		(3,946)		(6,851)		2,905
Balance at June 30, 2015	\$	65,395	\$	73,679	\$	(8,284)
Changes for the year:						
Service cost		223		-		223
Interest		4,625		-		4,625
Differences between expected		-		-		-
and actual experience		299		-		299
Changes in assumptions		(1,468)		-		(1,468)
Net investment income		-		47		(47)
Benefit payments, including						
refunds		(7,896)		(7,896)		-
Administrative expenses		-		(388)		388
Miscellaneous other changes		<u>-</u>		<u>-</u>		<u> </u>
Net changes		(4,217)		(8,237)		4,020
Balance at June 30, 2016	\$	61,178	\$	65,442	<u>\$</u>	(4,264)

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 8 - Retirement Plans (Continued)

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions – For the year ended June 30, 2016, the BWL recognized pension expense of \$(1,111,385). At June 30, 2016, the BWL reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	rred Outflows Resources	Deferred Inflows of Resources		
Net difference between projected and actual earnings on pension plan investments	\$ 2,930,218	\$	-	

For the year ended June 30, 2015, the BWL recognized pension expense of \$(2,037,327). At June 30, 2015, the BWL reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Net difference between projected and actual earnings on pension plan investments	\$ -	\$ (2,201,407)

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 8 - Retirement Plans (Continued)

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

\$ 586,044
586,044
586,044
586,044
 586,042
\$
\$

Actuarial Assumptions – The total pension liability in the June 30, 2016 and June 30, 2015 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.00%
Salary increases	2016 - 3.5%; 2015 - 6.44 - 10.26%
Investment rate of return	7.50%

Mortality rates were based on the Healthy and Disabled, RP-2014 Mortality Table with MP-2015 Improvement Scale.

The most recent experience review was completed in 2014. Since the Defined Benefit Plan covered 11 active participants in fiscal year 2016 and 14 active participants in fiscal year 2015, assumptions like termination, retirement, and disability have an immaterial impact on the results and have not been changed.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 8 - Retirement Plans (Continued)

Discount Rate – The discount rate used to measure the total pension liability was 7.5 percent. The projection of cash flows used to determine the discount rate assumed that BWL contributions will be made at rates equal to the actuarially determined contribution rates.

Projected Cash Flows

Based on those assumptions, the Defined Benefit Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on the Defined Benefit Plan investments was applied to all periods of projected benefit payments to determine the total pension asset.

The long-term expected rate of return on Defined Benefit Plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return as of June 30, 2016 and 2015 for each major asset class included in the Defined Benefit Plan's target asset allocation, as disclosed in the Defined Benefit Plan's financial statements, are summarized in the following table:

	Long-term Expected
Asset Class	Real Rate of Return
Fixed Income	2.00%
Domestic equity	6.40%
International equity	6.80%

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 8 - Retirement Plans (Continued)

Sensitivity of the Net Pension Asset to Changes in the Discount Rate – The following presents the net pension asset of the BWL at June 30, 2016, calculated using the discount rate of 7.5 percent, as well as what the BWL's net pension asset would be if it were calculated using a discount rate that is 1 percentage-point lower (6.5 percent) or 1 percentage-point higher (8.5 percent) than the current rate:

		(Current				
	 ecrease 50 %)		count Rate 7.50 %)	1% Increase (8.50%)			
Net pension asset of the BWL							
(in thousands)	\$ 334	\$	(4,264)	\$ (8,5	541)		

The following presents the net pension asset of the BWL at June 30, 2015, calculated using the discount rate of 7.5 percent, as well as what the BWL's net pension asset would be if it were calculated using a discount rate that is 1 percentage-point lower (6.5 percent) or 1 percentage-point higher (8.5 percent) than the current rate:

			(Current		
	1%	Decrease	Disc	ount Rate	1	% Increase
	(6	6.50 %)	(7	7.50 %)		(8.50%)
Net pension asset of the BWL						
(in thousands)	\$	(3,053)	\$	(8,284)	\$	(13,128)

Defined Benefit Plan Fiduciary Net Position – Detailed information about the Defined Benefit Plan's fiduciary net position is available in the separately issued financial report. For the purpose of measuring the net pension asset, deferred outflows of resources, and deferred inflows or resources related to pension and pension expense, information about the Defined Benefit Plan's fiduciary net position and addition to/deduction from fiduciary net position have been determined on the same basis as they are reported by the Defined Benefit Plan. The Defined Benefit Plan uses the economic resources measurement focus and the full accrual basis of accounting. Investments are stated at fair value. Contribution revenue is recorded as contributions are due, pursuant to legal requirements. Benefit payments and refunds of employee contributions are recognized as expense when due and payable in accordance with the benefit terms.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 8 - Retirement Plans (Continued)

Defined Contribution Plan

The Defined Contribution Plan was established by the BWL in 1997 under Section 5–203 of the City Charter. The Defined Contribution Plan covers substantially all full-time employees hired after December 31, 1996. In addition, 602 employees hired before January 1, 1997 elected to convert their retirement benefits from the Defined Benefit Plan effective December 1, 1997.

The Plan for Employees' Pensions of the Board of Water and Light – City of Lansing, Michigan – Defined Contribution Plan issues a publicly available financial report. That report may be obtained by writing to the Board of Water and Light, Chief Financial Officer, P.O. Box 13007, Lansing, Michigan 48901–3007.

The Defined Contribution Plan operates as a money purchase pension plan and meets the requirements of Sections 401(a) and 501(a) of the IRC of 1986, as amended from time to time.

For employees hired before January 1, 1997, the BWL is required to contribute 15.0 percent of the employees' compensation. For employees hired after January 1, 1997, the BWL is required to contribute 8.1 percent of the employees' compensation. In addition, the BWL is required to contribute 3.0 percent of the employees' compensation for all employees who are not eligible to receive overtime pay and 0.5 percent of the employees' compensation for all nonbargaining employees. No participant contributions are required.

During the years ended June 30, 2016 and 2015, the BWL contributed \$5,661,884 and \$5,548,360, respectively. The BWL's contributions are recognized in the period that the contributions are due.

Basis of Accounting – The Defined Contribution Plan's financial statements are prepared using the accrual method of accounting in accordance with Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans*.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 8 - Retirement Plans (Continued)

Valuation of Investments and Income Recognition – The Defined Contribution Plan investments are stated at market value based on closing sales prices reported on recognized securities exchanges on the last business day of the year, or, for listed securities having no sales reported and for unlisted securities, upon the last reported bid prices on that date. The mutual funds are valued at quoted market prices, which represent the net asset values of shares held by the Defined Contribution Plan at year end.

Purchases and sales of investments are recorded on a trade-date basis. Interest income is accrued when earned. Dividend income is recorded on the ex-dividend date.

Regulatory Status – The Defined Contribution Plan is not subject to the reporting requirements of the Employee Retirement Income Security Act of 1974 (ERISA) as it has been established for the benefit of a governmental unit.

Retiree Benefit Plan and Trust

The Retiree Benefit Plan and Trust (the "Plan") is a single-employer defined benefit healthcare plan. The Plan provides medical, dental, and life insurance benefits in accordance with Section 5–203 of the City Charter. Substantially all of the BWL's employees may become eligible for healthcare benefits and life insurance benefits if they reach normal retirement age while working for the BWL. There were 715 participants eligible to receive benefits at June 30, 2016 and 725 participants eligible at June 30, 2015.

In October 1999, the BWL formed a Voluntary Employee Benefit Administration (VEBA) trust for the purpose of accumulating assets sufficient to fund retiree healthcare insurance costs in future years. During the years ended June 30, 2016 and 2015, the cost to BWL of maintaining the Retiree Benefit Plan was \$9,423,081 and \$9,670,794, of which respectively, was incurred as direct costs of benefits.

The Retiree Benefit Plan and Trust of the Board of Water and Light – City of Lansing, Michigan issues a publicly available financial report. That report may be obtained by writing to the Board of Water and Light, Chief Financial Officer, P.O. Box 13007, Lansing, Michigan 48901–3007.

Basis of Accounting - The plan statements are prepared using the accrual basis of accounting.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 8 - Retirement Plans (Continued)

Investment Valuation and Income Recognition – Plan investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price. Purchases and sales of investments are recorded on a trade-date basis. Appreciation or depreciation of investments is calculated based on the beginning of the period's fair value of investments.

Funding Policy – The BWL adopted a process for funding the retiree benefits using both a VEBA trust and, to the extent permitted by law, excess pension assets in the Defined Benefit Pension Plan. Additional contributions to the VEBA trust from BWL operating funds to supplement Section 420 transfers will not exceed the recommended annual contribution amount required to cover current service of active participants and amortize the unfunded accrued liability over 30 years. The required contribution is based on a projected pay–as–you–go financing requirement with an additional amount to prefund benefits. The pay–as–you–go retire benefits paid was more than the annual required contribution (ARC) and therefore, expensed on the statement of changes in trust net position.

The Plan's annual other postemployement benefit (OPEB) cost is calculated based on the ARC, an amount actuarially determined in accordance with the parameters of GASB Statement 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities over a period of 30 years. The annual OPEB contributions are on a pay-as-you-go accounting method because the Plan is overfunded.

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

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 8 - Retirement Plans (Continued)

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

The Plan has calculated the accrued actuarial liability and required contribution using certain methods and assumptions. Benefit payments have been computed using the individual entry age normal method. The assets have been valued in the actuary report using the fair market value. The healthcare cost trend rates used range from 2.5 to 9.0 percent for the year ended June 30, 2016 and 5.0 to 9.0 percent for the year ended June 30, 2015.

Contribution trend information is as follows (in thousands):

	An	nual OPEB	Annual OPEB	Annual OPEB	Net OPEB			
Fiscal Year Ended		Cost	Contributed	Cost Contributed	Obligation	(Asset)		
6/30/14	\$	9,202	\$ 9,268	101%	\$	(267)		
6/30/15		5,765	9,671	168%		(4,186)		
6/30/16		5,828	9,423	162%		(7,781)		

The net OPEB asset is included in other assets on the statement of net position.

Funded Status and Funding Progress – Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of the occurrence of events far into the future. Significant actuarial assumptions used in determining the annual OPEB cost include (a) rate of return on the investments of present and future assets of 7.5 percent, compounded annually, (b) projected healthcare trend rates ranging from 5.0 percent to 9.0 percent, (c) amortization method level dollar over a 30-year period, and (d) RP – 2014 mortality table fully generational using scale MP – 2015 and RP – 2014 Mortality Table fully generational using scale MP–2014, respectively.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 8 - Retirement Plans (Continued)

Funding status and funding progress trend information is as follows (in thousands):

					Unfunded				
			-	Actuarial	Actuarial				UAAL as % of
	/	Actuarial	/	Accrued	Accrued	Funded	С	overed	Covered
Valuation Date	As	set Value		Liability	Liability	Ratio	ı	Payroll	Payroll
2/28/14	\$	148,307	\$	194,365	\$ 46,058	76.30%	\$	47,012	98.0%
2/28/15		157,565		200,196	42,631	78.71%		50,613	84.2%
2/29/16		145,274		205,215	59,941	70.79%		53,540	112.0%

Other Postretirement Benefits

The BWL offers its employees a deferred compensation plan, created in accordance with IRC 457, which is administered by a trustee, the ICMA Retirement Corporation. The BWL makes contributions of \$1,000 annually for the employees as of January 1 of each year, during the month of January. The BWL also will match employee contributions at one dollar for every one dollar up to \$1,250 in a calendar year.

Note 9 - Commitments and Contingencies

At June 30, 2016 and 2015, the BWL has two letters of credit in the amounts of \$1,000,000 and \$817,220 issued to the Michigan Department of Natural Resources. The letters of credit were issued to satisfy requirements of the Michigan Department of Natural Resources to provide financial assurance to the State of Michigan for the cost of closure and postclosure monitoring and maintenance of a landfill site operated by the BWL.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 9 - Commitments and Contingencies (Continued)

Through monitoring tests performed on the landfill sites operated by the BWL, it has been discovered that the sites are contaminating the groundwater. The contamination does not pose a significant health risk, but does lower the quality of the groundwater. The BWL is currently in the process of applying for approval from the State of Michigan to remediate the sites. The BWL has estimated the total cost for remediation, including closure and postclosure cost of the landfills, and has recorded a liability of \$7,853,780 and \$10,172,203 for the years ended June 30, 2016 and 2015, respectively. Certain remediation activities have commenced and are in progress. The landfill sites are no longer receiving waste products. Landfill closure and postclosure requirements are associated with the Michigan Department of Environmental Quality. Annual postclosure costs of these landfill sites are not expected to exceed \$380,000 annually and are included in the liability above. Estimates will be revised as approvals are received from the State. In accordance with the regulatory basis of accounting as per GASB 62 (see Note 1), the BWL recorded a corresponding regulatory asset (see Note 6).

The BWL is subject to various laws and regulations with respect to environmental matters such as air and water quality, soil contamination, solid waste disposal, handling of hazardous materials, and other similar matters. Compliance with these various laws and regulations could result in substantial expenditures. The BWL has established a Designated Purpose Fund (see Note 1), of which one of the purposes of the fund is to meet extraordinary expenditures resulting from responsibilities under environmental laws and regulations. Management believes that all known or expected responsibilities to these various laws and regulations by the BWL will be sufficiently covered by the Designated Purpose Fund and the environmental remediation liability.

The BWL is involved in various other legal actions which have arisen in the normal course of business. Such actions are usually brought for claims in excess of possible settlement or awards, if any, that may result. After taking into consideration legal counsel's evaluation of pending actions, management has recorded an adequate reserve as of June 30, 2016 and 2015 in regard to specific pending legal cases.

The BWL has entered into contracts to purchase coal totaling \$11,858,000 through December 31, 2018. In addition, the BWL has entered into contracts for the rail services related to shipping the coal. Commitments for future rail services to be purchased are approximately \$5,380,000 through December 2016.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 9 – Commitments and Contingencies (Continued)

Construction in progress consists of projects for expansion or additions to the utility plant. The estimated additional cost to complete various projects is approximately \$131,593,000 and \$75,074,000 at June 30, 2016 and 2015, respectively, including commitments on existing construction contracts approximating \$5,449,000 and \$9,173,000 at June 30, 2016 and 2015, respectively. These projects will be funded through operational cash flow, including the project funds reported as other assets. There are additional commitments on projects in the process of being constructed that are not included above.

Sierra Club v BWL & Environmental Protection Agency (EPA) Notice of Violation

In June of 2014, the Sierra Club, an environmental special interest group, provided written notice to the BWL of their intent to file a complaint against the BWL asserting violation of the Clean Air Act (Act). Similar to the Sierra Club's allegations, the EPA served the BWL with a Notice of Violation.

As of the date of the financial statements, the claims alleged have no specific dollar figure claimed, nor has the resolution of the same been finalized. The amount of an anticipated loss, if any, cannot be reasonably estimated.

Note 10 - Power Supply Purchase

In 1983, the BWL entered into 35-year power supply and project support contracts with MPPA, of which the BWL is a member. Under the agreement, the BWL has the ability to purchase power from MPPA, will sell power to MPPA at an agreed-upon rate, and will purchase 64.29 percent of the energy generated by MPPA's 37.22 percent ownership in Detroit Edison's Belle River Plant (Belle River), which became operational in August 1984.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 10 - Power Supply Purchase (Continued)

Under the terms of its contract, the BWL must make minimum annual payments equal to its share of debt service and its share of the fixed operating costs of Belle River. The estimated required payments presented below assume no early calls or refinancing of existing revenue bonds and a 3.0 percent annual inflation of fixed operating costs, which include expected major maintenance projects.

		Estimated								
		Debt Service	Fixed	Total						
Year		and Capital	Operating Costs	Required						
2017	\$	24,957,228	\$ 15,005,514	\$ 39,962,742						
2018		16,603,644	15,466,998	32,070,642						
	_									
	Total \$	41,560,872	\$ 30,472,512	\$ 72,033,384						

In addition to the above required payments, the BWL must pay for fuel, other operating costs, and transmission costs related to any kilowatt hours (KWHs) purchased under these contracts.

The BWL recognized expenses for 2016 and 2015 of \$50,425,873 and \$53,051,047, respectively, to purchase power under the terms of this contract. The price of this power was calculated on a basis, as specified in the contracts, to enable MPPA to recover its production, transmission, and debt service costs.

In connection with the Belle River purchase, in December 2002, MPPA issued \$280,180,000, principal amount, of its Belle River Project Refunding Revenue Bonds, 2002 Series A, with rates ranging from 2.125 percent to 5.25 percent to advance refund \$330,850,000 of outstanding 1993A and B bonds.

The BWL has entered into agreements with Granger Electric Company to purchase power generated from landfill gases. The agreements will expire as of June 30, 2028 and September 30, 2028. The minimum power to be purchased in the contract is 3.2 megawatts, with the option to purchase up to 12 megawatts depending on capacity. The price of the electricity is based on the BWL's cost of electricity generation. The total amount of electricity expected to be purchased for the remainder of these contracts is estimated at \$94,000,000.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 11 - Estimated Liability for Excess Earnings on Water Supply and Electric Utility System Revenue Bonds

In accordance with Section 148(f)(2) of the IRC of 1986, as amended, the BWL is required on each anniversary date (July 1) of the Water Supply, Electric Utility, and Steam Utility System Revenue Bonds, Series 2008A, 2011A, 2012A, and 2013A to compute amounts representing the cumulative excess earnings on such bonds. That amount essentially represents a defined portion of any excess of interest earned on funds borrowed over the interest cost of the tax-exempt borrowings. Expense is charged (credited) annually in an amount equal to the estimated increase (decrease) in the cumulative excess earnings for the year. On every fifth anniversary date and upon final maturity of the bonds, the BWL is required to remit to the Internal Revenue Service the amount of any cumulative excess earnings computed on the date of such maturity plus an amount equal to estimated interest earned on previous years' segregated funds.

The estimated liability for excess earnings was \$0 at June 30, 2016 and 2015. In accordance with the requirements of the bond indenture, the BWL is required to set aside any current year additions to this estimated liability in a rebate fund within 60 days of the anniversary date of the bonds.

Note 12 - Risk Management and Insurance

The BWL is exposed to various risks of loss related to property loss, torts, errors and omissions, and employee injuries (workers' compensation), as well as medical benefits provided to employees. The BWL has purchased commercial insurance for certain general liability, business auto, excess liability, property and boiler and machinery, public officials and employee liability claims, specific excess health insurance claims, and specific excess workers' compensation claims, subject to policy terms, limits, limitations, and deductibles. The BWL is self-insured for most workers' compensation and health insurance claims. Settled claims relating to the commercial insurance have not exceeded the amount of insurance coverage in any of the past three fiscal years.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 12 - Risk Management and Insurance (Continued)

The BWL estimates the liability for self-insured workers' compensation and health insurance claims that have been incurred through the end of the fiscal year, including claims that have been reported as well as those that have not yet been reported. Changes in the estimated liability for the past two fiscal years were as follows:

	Wor	kers' Compensa	tion	Health Insurance									
	2016	2015	2014	2016	2015	2014							
Unpaid claims - Beginning of year	\$ 2,200,000	\$ 2.000,000	\$ 2,000,000	\$ 1,188,172	\$ 1,637,276	\$ 1,590,814							
Incurred claims, including claims incurred	, , , , , , , , ,	, , , , , , , , ,	, ,,	, , , , ,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , ,							
but not reported	348,038	554,773	864,854	13,797,887	20,853,299	18,340,955							
Claim payments	(348,038)	(354,773)	(864,854)	(13,818,593)	(21,302,403)	(18,294,493)							
Unpaid claims - End of year	\$ 2,200,000	\$ 2,200,000	\$ 2,000,000	<u>\$ 1,167,466</u>	<u>\$ 1,188,172</u>	\$ 1,637,276							

The liability for health insurance is included with accounts payable on the statement of net position.

Note 13 - Wise Road Reconstruction Project

In July 2011, the Wise Road water treatment plant was damaged by a chemical spill. The piping and electrical systems were damaged and are being replaced or repaired. The reconstruction costs were \$19,492,299, of which \$18,151,549 was recouped from the insurance carrier.

Notes to Financial Statements As of and for the Years Ended June 30, 2016 and 2015

Note 14 – Upcoming Pronouncements

In June 2015, the GASB issue two new standards addressing accounting and financial reporting by state and local governments for postemployment benefits other than pensions (OPEB). GASB Statement No. 74 *Financial Reporting for Postemployment Benefit Plans other than Pension Plans*, addresses reporting by OPEB plans whereas GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, addresses accounting and reporting by employer governments that provide OPEB benefits to their employees. Along with the currently requirement statement of fiduciary net position and statement of changes in fiduciary net position, OPEB plans will now be require to include in the financial statement more extensive footnote disclosures and requirement supplementary information related to the measurement of the OPEB liabilities for which assets have been accumulated. In addition, the BWL will, after adoption of GASB 75, recognize on the face of the financial statements its net OPEB liability. The BWL is currently evaluating the impact these standards will have on the financial statements when adopted. GASB 74 is effective for fiscal years beginning after June 15, 2016 whereas GASB 75 is effective one year later.

Required Supplemental Information

Required Supplemental Information (unaudited)
Defined Benefit Plan – Schedule of Changes in the
BWL Net Pension Asset and Related Ratios
Last Ten Fiscal Years
(in thousands)

		2016		2015	2014		2013	201	2*	2011	1*	201	10*	200	9*	200	8*	200	7*
Total Pension Liability																			
Service cost	\$	224	\$	274	\$ 349	\$	407	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Interest		4,625		4,919	4,751		5,085		-		-		-		-		-		-
Changes in benefit terms		-		-	-		-		-		-		-		-		-		-
Differences between expected and actual experience		299		(1,093)	964		(1,716)		-		-		-		-		-		-
Changes in assumptions **		(1,468)		- (0.0.40)	4,538		-		-		-		-		-		-		-
Benefit payments, including refunds		(7,896)		(8,046)	 (8,541)	_	(7,777)							-					
Net Change in Total Pension Liability		(4,217)		(3,946)	2,061		(4,001)		-		-		-		-		-		-
Total Pension Liability - Beginning of year		65,395		69,341	 67,280		71,281												
Total Pension Liability - End of year		61,178		65,395	69,341		67,280		-		-		-		-		-		-
Plan Fiduciary Net Position Contributions - Employer Contributions - Member Net investment income Administrative expenses Benefit payments, including refunds Other Net change in Plan Fiduciary Net Position Plan Fiduciary Net Position - Beginning of year Plan Fiduciary Net Position - End of year	_	(388) (7,896) - (8,237) 73,679 65,442		1,771 (576) (8,046) (6,850) 80,529 73,679	 14,243 (596) (8,541) - 5,106 75,424 80,530		10,170 (536) (7,777) - 1,857 73,567 75,424				- - - - - -		- - - - - -		- - - - - -		- - - - - - -		
BWL Net Pension Asset - Ending	\$	(4,264)	<u>\$</u>	(8,284)	\$ (11,189)	\$	(8,144)	\$		\$		\$		\$		\$		<u>\$</u>	
Plan Fiduciary Net Position as a % of Total Pension Liability		106.97%		112.67%	116.14%	•	112.10%	-	%	-	%	-	%	-	%	-	%	-	%
Covered Employee Payroll		772		1,018	1,225		1,684		_		_		_		_		_		-
BWL's Net Pension Asset as a % of Covered Employee Payroll		(552%)		(814%)	(913%)		(484%)	-	%	-	%	-	%	-	%	-	%	-	%

^{*}GASB Statement No. 68 was implemented as of June 30, 2015. Information from 2006 - 2012 is not available and this schedule will be presented on a prospective basis.

^{**}Related to change in the mortality assumption from the RP2000CH table projected to 2018 with Scale AA to the RP-2014 table projected generationally with Scale MP-2015

Required Supplemental Information (unaudited)

Defined Benefit Plan – Schedule of Employer Contributions

Last Ten Fiscal Years

(in thousands)

	2	016	2015		2014	:	2013	2012	2011		2010		2009	2008		2007
Actuarially determined contribution Contributions in relation to the actuarially determined contribution	\$	<u>-</u>	\$	- \$ -	- -	\$	<u>-</u>	\$ - -		36 \$ 36	2,109 2,109	\$	<u>-</u>	\$ - -	\$	- -
Contribution Deficiency (Excess)	\$	<u>-</u>	\$	<u>- \$</u>	<u> </u>	\$	<u>-</u>	<u>\$ -</u>	\$	<u>-</u> §	<u>-</u>	<u>\$</u>	<u> </u>	<u> </u>	<u>\$</u>	<u>-</u>
Covered Employee Payroll Contributions as a Percentage of Covered Employee Payroll		772 - %	1,01 - %		1,225 - %		1,684 - %	2,101 - %	2,3 3.59		2,660 79.29%		3,089 - %	3,162 - %		3,391 - %

Required Supplemental Information (unaudited)
Retiree Benefit Plan and Trust Schedule
For the Years Ended June 30, 2016 and 2015

The schedule of funding progress is as follows:

Valuation Date	Actuarial sset Value	/	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Actuarial Accrued Funded Covered					
2/28/14 2/28/15 2/29/16	\$ 148,307 157,565 145,274	\$	194,365 200,196 205,215	\$ 46,058 42,631 59,941	76.30% 78.71% 70.79%	\$	47,012 50,613 53,540	98.0% 84.2% 112.0%		

Additional Information

Income Available for Revenue Bond Debt Retirement

	For the Year Ended June 30						
		2016		2015			
Income - Before capital contributions per statement of revenues, expenses, and changes in net position	\$	900,064	\$	12,627,295			
Adjustments to Income Depreciation and impairment Interest on long-term debt:		57,305,081		39,104,343			
Notes		51,049		49,691			
Revenue bonds		14,861,300		14,995,574			
Total additional income		72,217,430		54,149,608			
Income Available for Revenue Bonds and Interest Redemption	<u>\$</u>	73,117,494	\$	66,776,903			
Debt Retirement Pertaining to Revenue Bonds							
Principal Principal	\$	10,885,000	\$	11,010,000			
Interest	<u> </u>	16,569,252	_	17,095,181			
Total	\$	27,454,252	\$	28,105,181			
Percent Coverage of Revenue Bonds and Interest							
Requirements		266	_	238			

	 Coml	bine	d	Water					
	 2016		2015		2016		2015		
Operating Revenues									
Water	\$ 38,730,602	\$	37,910,106	\$	38,730,602	\$	37,910,106		
Electric:									
Retail	278,489,705		266,878,053		-		-		
Sales for resale	24,756,061		28,169,851		-		_		
Steam	12,683,463		14,959,212		-		_		
Chilled water	 6,275,583		5,568,287	_			<u> </u>		
Total operating revenues	360,935,414		353,485,509		38,730,602		37,910,106		
Operating Expenses									
Production:									
Fuel, purchased power, and									
other operating expenses	159,118,150		163,336,653		8,026,915		8,104,909		
Maintenance	19,839,991		24,415,690		3,239,156		3,134,979		
Transmission and distribution:									
Operating expenses	7,404,258		7,006,002		1,535,532		1,419,800		
Maintenance	14,189,340		13,864,024		2,651,954		3,582,512		
Administrative and general	64,007,040		61,297,460		10,271,709		10,875,024		
Depreciation	 41,541,561	_	39,104,343		6,607,984	_	6,155,947		
Total operating expenses	 306,100,340		309,024,172	_	32,333,250	_	33,273,171		
Operating Income	54,835,074		44,461,337		6,397,352		4,636,935		
Nonoperating Income (Expenses)									
Investment income	1,913,873		1,351,006		291,934		219,281		
Other (expense) income	(4,588,160)		1,534,922		(831,206)		921,168		
Impairment on Eckert Plant	(15,763,520)		-		-		-		
System capacity fee	3,351,392		9,223,075		293,582		807,942		
Bonded debt interest expense	(14,861,300)		(14,995,574)		(1,973,434)		(1,858,926)		
Amortization - Central Utilities Complex	(2,902,715)		(8,057,715)		(254,278)		(705,856)		
Payment in lieu of taxes	(21,033,531)		(20,840,065)		(2,298,643)		(2,248,922)		
Other interest expense	 (51,049)	_	(49,691)		(2,838)	_	(4,366)		
Total nonoperating expense	 (53,935,010)	_	(31,834,042)		(4,774,883)		(2,869,679)		
Net Income (Loss)	\$ 900,064	\$	12,627,295	\$	1,622,469	\$	1,767,256		

Detail of Statements of Revenues and Expenses For the Years Ended June 30, 2016 and 2015

Ele	ctric	Ste	am	Chilled Water				
2016	2015	2016	2015	2016	2015			
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
•	•	•	•	Ψ	Ψ			
278,489,705	266,878,053	-	-	-	-			
24,756,061	28,169,851	-	-	-	-			
-	-	12,683,463	14,959,212	-				
				6,275,583	5,568,287			
303,245,766	295,047,904	12,683,463	14,959,212	6,275,583	5,568,287			
144,516,334	147,658,997	4,862,084	6,103,489	1,712,817	1,469,258			
15,599,674	20,499,896	767,751	544,181	233,410	236,634			
5 5 4 5 0 0 4	5 005 000	050.005	050 000					
5,515,861	5,235,380	352,865	350,822	-	200			
11,136,141	9,979,670	401,245	301,536	249.022	306			
52,476,238 30,949,620	49,245,600 29,178,160	1,011,070 2,553,160	984,240 2,451,617	248,023 1,430,797	192,596 1,318,619			
00,040,020	23,170,100	2,000,100	2,401,011	1,400,707	1,010,010			
260,193,868	261,797,703	9,948,175	10,735,885	3,625,047	3,217,413			
43,051,898	33,250,201	2,735,288	4,223,327	2,650,536	2,350,874			
1,484,122	1,023,221	79,313	58,070	58,504	50,434			
(5,909,578)	586,071	1,928,331	(186,030)	224,293	213,713			
(15,763,520)	-	-	-	-	-			
2,802,434	7,712,335	255,376	702,798	-	-			
(10,242,601)	(10,744,870)	(1,984,250)	(2,044,620)	(661,015)	(347,158)			
(2,427,250)	(6,737,861)	(221,187)	(613,998)		-			
(17,667,200)	(17,386,779)	(687,791)	(871,399)	(379,897)	(332,965)			
(48,174)	(45,153)	(37)	(172)					
(47,771,767)	(25,593,036)	(630,245)	(2,955,351)	(758,115)	(415,976)			
\$ (4,719,869)	\$ 7,657,165	\$ 2,105,043	\$ 1,267,976	\$ 1,892,421	\$ 1,934,898			

Detail of Statements of Changes in Net Position

	Combined		Water		Electric		Steam		Chilled Water	
Net Position - June 30, 2014	\$	582,563,111	\$	93,647,830	\$	493,911,634	\$	(4,853,301)	\$	(143,052)
Income (loss) before contributions		12,627,295		1,767,256		7,657,165		1,267,976		1,934,898
Net Position - June 30, 2015		595,190,406		95,415,086		501,568,799		(3,585,325)		1,791,846
Income (loss) before contributions		900,064		1,622,469		(4,719,869)		2,105,043		1,892,421
Net Position - June 30, 2015	\$	596,090,470	\$	97,037,555	\$	496,848,930	\$	(1,480,282)	\$	3,684,267

Board of Water and Light - City of Lansing, Michigan

Pension Trust Funds - Detail of Statements of Net Position

				As of Jun	e 30,	2016	
	Defi	ned Contribution	De	efined Benefit			
		Plan		Plan		VEBA	 Total
Assets							
Receivable - Investment interest receivable	\$	-	\$	143,225	\$	386,930	\$ 530,155
Investments at fair value:							
Cash and money market trust fund		-		746,554		13,498,404	14,244,958
U.S. government obligations		-		7,565,160		21,458,288	29,023,448
Fixed income securities		-		10,491,022		28,725,054	39,216,076
Mutual funds		131,736,753		7,908,757		15,208,788	154,854,298
Stable value		34,193,741		-		-	34,193,741
Partnership		-		1,101,086		-	1,101,086
Common stock		-		37,486,031		77,022,878	114,508,909
Self-directed brokerage account		1,551,450		-		-	1,551,450
Participant notes receivable		3,749,371				<u>-</u>	 3,749,371
Total investments		171,231,315		65,298,610		155,913,412	 392,443,337
Net Position - Held in trust for pension and other employee benefits	\$	171,231,315	\$	65,441,835	\$	156,300,342	\$ 392,973,492

	As of June 30, 2015						
	Defir	ned Contribution	D	efined Benefit			
		Plan		Plan		VEBA	 Total
Assets							
Receivable - Investment interest receivable	\$	-	\$	104,768	\$	200,805	\$ 305,573
Investments at fair value:							
Cash and money market trust fund		-		2,321,310		6,243,203	8,564,513
U.S. government obligations		-		6,659,203		15,462,341	22,121,544
Fixed income securities		-		11,312,551		21,269,571	32,582,122
Mutual funds		136,010,607		925,065		1,894,929	138,830,601
Stable value		31,844,948		-		-	31,844,948
Partnership		-		1,098,790		-	1,098,790
Common stock		-		51,257,647		111,112,369	162,370,016
Self-directed brokerage account		1,376,730		-		-	1,376,730
Participant notes receivable		3,888,351	_	<u>-</u>		<u>-</u>	 3,888,351
Total investments		173,120,636		73,574,566		155,982,413	 402,677,615
Net Position - Held in trust for pension							
and other employee benefits	\$	173,120,636	\$	73,679,334	\$	156,183,218	\$ 402,983,188

Board of Water and Light - City of Lansing, Michigan

Pension Trust Funds - Detail of Statement of Changes in Net Position For the Year Ended June 30, 2016

	Coi	Defined		Defined Benefit Plan		VEBA		Total
Increases								
Investment income (loss):								
Net appreciation (depreciation)								
in fair value of investments Interest and dividend income	\$	(8,061,276) 6,555,315	\$	(1,459,436) 1,506,198	\$	(2,293,242) 3,242,238	\$	(11,813,954) 11,303,751
Net investment income (loss)		(1,505,961)		46,762		948,996		(510,203)
Employer contributions		5,661,884		-		9,423,081		15,084,965
Participant rollover contributions		2,026,588		-		-		2,026,588
Interest from participant notes receivable		150,624		<u> </u>		<u>-</u>		150,624
Total increases		6,333,135		46,762		10,372,077		16,751,974
Decreases								
Retiree benefits paid		7,946,117		7,895,766		9,423,081		25,264,964
Loan defaults		186,801		-		-		186,801
Participants' note and administrative fees		89,538	_	388,495		831,872	_	1,309,905
Total decreases		8,222,456		8,284,261		10,254,953		26,761,670
Change in Net Position Held in Trust		(1,889,321)		(8,237,499)		117,124		(10,009,696)
Net Position Held in Trust for Pension								
and Other Employee Benefits								
Beginning of year		173,120,636	_	73,679,334	_	156,183,218		402,983,188
End of year	\$	171,231,315	\$	65,441,835	\$	156,300,342	\$	392,973,492

Board of Water and Light - City of Lansing, Michigan

Pension Trust Funds - Detail of Statement of Changes in Net Position For the Year Ended June 30, 2015

	Cor	Defined ntribution Plan		Defined Benefit Plan		VEBA	 Total
Increases							
Investment income (loss):							
Net appreciation (depreciation)							
in fair value of investments Interest and dividend income	\$	21,201 7,295,819	\$	215,209 1,556,214	\$	650,079 2,964,616	\$ 886,489 11,816,649
Net investment income (loss)		7,317,020		1,771,423		3,614,695	12,703,138
Employer contributions		5,548,360		-		9,670,794	15,219,154
Participant rollover contributions Interest from participant notes receivable		1,345,481 155,010		-		-	1,345,481 155,010
Other		152,128		<u>-</u>			 152,128
Total increases		14,517,999		1,771,423		13,285,489	29,574,911
Decreases							
Retiree benefits paid		10,451,713		8,045,948		9,670,794	28,168,455
Loan defaults		125,254		-		-	125,254
Participants' note and administrative fees		100,135	_	576,122	_	1,152,927	 1,829,184
Total decreases		10,677,102		8,622,070		10,823,721	 30,122,893
Change in Net Position Held in Trust		3,840,897		(6,850,647)		2,461,768	(547,982)
Net Position Held in Trust for Pension and Other Employee Benefits							
Beginning of year		169,279,739		80,529,981		153,721,450	 403,531,170
End of year	\$	173,120,636	\$	73,679,334	\$	156,183,218	\$ 402,983,188



Appendix D

SELECTED FINANCIAL INFORMATION

This Appendix contains excerpts from the BWL's annual financial reports for the fiscal years ended June 30, 2014, 2015 and 2016. The information contained in this Appendix does not include all of the financial information and disclosures required for a fair presentation of the BWL's financial position or the BWL's financial position in conformity with generally accepted accounting principles. The complete audited financial statements of the BWL for the same fiscal years are available https://www.lbwl.com/About-the-BWL/Related-Links/Financial-Statements/



City of Lansing Board of Water and Light Statement of Net Assets Fiscal Years Ended June 30, 2014, 2015 and 2016

	June 30					
<u>ASSETS</u>	2014	<u>2015</u>	2016			
Current Assets:						
Restricted cash and cash equivalents	\$51,773,756	\$52,752,941	\$46,586,326			
Cash and cash equivalents	51,545,956	55,925,376	53,637,717			
Investments	91,030,822	91,585,641	107,921,202			
Accounts receivable	23,602,383	22,014,605	23,168,659			
Estimated unbilled accounts receivable	17,157,806	18,280,777	19,526,475			
Inventories	23,474,266	25,860,743	25,067,737			
Other	3,617,737	3,344,122	3,997,490			
Total Current Assets Other assets:	<u>262,202,726</u>	<u>269,764,205</u>	<u>279,905,606</u>			
Long-term receivable						
Recoverable energy asset	2,797,695	4,652,068	2,302,845			
Recoverable environmental remediation	23,626,611	18,616,005	11,483,569			
Special deposit	14,225,000	11,380,000	8,535,000			
Net pension asset	11,188,702	8,284,230	4,263,990			
Other	4,220,485	8,123,949	10,265,098			
Total Other Assets	56,058,493	51,056,252	36,850,502			
Noncurrent restricted assets	46,828,045	24,263,950	<u>25,319,385</u>			
Utility Plant:						
Water	288,627,287	296,802,952	302,165,777			
Electric	773,262,520	804,947,799	774,429,214			
Steam	64,685,056	67,510,134	68,557,331			
Chilled Water	32,917,461	33,622,140	33,998,140			
Common facilities	75,026,577	87,132,519	88,752,432			
Central Utilities Complex	76,079,000	76,079,000	76,079,000			
Total	<u>1,310,597,901</u>	1,366,094,544	<u>1,343,981,894</u>			
Less accumulated depreciation	624,749,511	665,849,130	668,868,675			
Net	685,848,390	700,245,414	675,113,219			
Construction in progress	13,439,221	14,781,967	15,583,201			
Total utility plant	<u>699,287,611</u>	715,027,381	690,696,420			
Total assets	1,064,376,875	1,060,111,788	1,032,771,913			

City of Lansing Board of Water and Light Statement of Net Assets (Cont.) Fiscal Years Ended June 30, 2014, 2015 and 2016

_	June 30					
<u>Liabilities</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>			
Current Liabilities:						
Accounts payable	\$32,120,138	\$32,695,192	\$28,679,951			
Current portion of long-term debt	17,824,253	13,299,345	11,642,389			
Accrued payroll and related taxes	3,725,544	2,756,033	1,873,549			
Customer deposits	2,674,858	2,678,145	2,304,426			
Unearned revenue		1,127,500				
Accrued compensated absences	3,916,658	4,092,441	4,310,921			
Accrued interest	9,261,217	8,547,591	8,284,626			
Total Current Liabilities	69,522,668	65,196,247	57,095,862			
Compensated absences—Less current portion	7,182,984	6,916,286	7,112,200			
Other Long-term liabilities:						
Workers' compensation	2,000,000	2,200,000	2,200,000			
Environmental remediation liabilities	10,356,249	10,172,203	7,853,780			
Deferred Revenue						
Other	2,327,615	2,314,711	2,116,412			
Total Other Long-term Liabilities	14,683,864	14,686,914	12,170,192			
Long-term Debt—Less current portion	361,310,213	347,044,294	338,105,373			
Total Liabilities	452,699,729	433,843,741	414,483,627			
Deferred inflows and outflows:						
Recoverable revenue of Central Utilities Complex	4,255,372	7,241,153	5,071,934			
Revenue intended to cover future costs	18,944,163	22,667,354	20,891,938			
Net pension asset deferrals	7,143,206	2,201,407	0			
Total deferred inflows of resources	30,342,741	32,109,914	25,963,872			
Net Position						
Invested in capital assets	345,413,626	380,667,622	367,103,881			
Restricted for debt service	65,076,634	43,517,692	38,301,700			
Unrestricted	172,072,851	171,005,092	190,684,889			
Total Net Position	582,563,111	595,190,406	596,090,470			

Source: Lansing Board of Water and Light

City of Lansing Board of Water and Light Statement of Revenues, Expenses and Changes in Net Assets Fiscal Years Ended June 30, 2014, 2015 and 2016

				June 30		
Operating Revenues		<u>2014</u>		<u>2015</u>		2016
Water	\$	37,246,939	\$	37,910,106	\$	38,730,602
lectric		289,154,466		295,047,904		303,245,767
team		16,324,128		14,959,212		12,683,463
hilled Water	_	5,397,411		5,568,287	_	6,275,583
Total Operating Revenues		348,122,944		353,485,509		360,935,415
Operating Expenses						
roduction:						
Fuel, purchased power and other operating expenses		165,199,058		163,336,652		159,118,149
Maintenance		17,045,141		24,415,690		19,839,992
ransmission and distribution:						
Operating expenses		11,829,786		7,006,002		7,404,259
Maintenance		11,262,716		13,864,026		14,189,341
dministrative and general		62,484,318		61,297,461		64,007,041
epreciation and impairment		<u>38,997,186</u>		39,104,344		41,541,560
Total Operating Expenses		306,818,204		309,024,174		306,100,341
Operating Income (Loss)		41,304,740		44,461,335		54,835,073
Nonoperating Income (Expenses)						
vestment income	\$	1,866,463	\$	1,351,006	\$	1,913,873
ther income		(5,974,385)		1,534,923		(20,351,681)
ystem capacity fee		9,222,989		9,223,075		3,351,392
onded debt interest expense		(15,334,915)		(14,995,574)		(14,861,300)
mortization—Central Utilities Complex		(7,642,714)		(8,057,714)		(2,902,714)
ayment in lieu of taxes		(20,608,093)		(20,840,065)		(21,033,531)
ther interest expense		(41,554)	_	(49,690)	_	(51,049)
Total Nonoperating (expenses) income	_	(38,512,210)	_	(31,834,040)	_	(53,935,010)
Net Income (Changes in Net Assets)		2,792,530		12,627,295		900,063
Net Assets—Beginning of year		579,770,581		582,563,111		595,190,406
Net Assets—End of year		\$582,563,111		\$595,190,406		\$596,090,469

Source:Lansing Board of Water and Light



Appendix E

AMENDED AND RESTATED BOND RESOLUTION CONSOLIDATED VERSION

The Bonds are being issued by the Lansing Board of Water and Light under the provisions of an Amended and Restated Bond Resolution adopted by the Board on October 24, 1989 which has been supplemented and amended from time to time.

The Amended and Restated Bond Resolution has been supplemented or amended by the:

First Supplemental Revenue Bond Resolution adopted on October 26, 1993,

Second Supplemental Revenue Bond Resolution adopted on January 11, 1994,

Third Supplemental Revenue Bond Resolution adopted on September 2, 1999,

Fourth Supplemental Revenue Bond Resolution adopted on October 26, 1999

as amended on August 12, 2008 and June 9, 2009,

Fifth Supplemental Revenue Bond Resolution adopted on April 24, 2001,

Sixth and Seventh Supplemental Revenue Bond Resolutions adopted on July 23, 2002,

Eighth Supplemental Revenue Bond Resolution adopted on August 12, 2003,

Ninth Supplemental Revenue Bond Resolution adopted by the Board on July 26, 2005,

Tenth Supplemental Revenue Bond Resolution adopted by the Board on January 29, 2008,

Eleventh Supplemental Revenue Bond Resolution adopted by the Board on May 10, 2011,

Twelfth Supplemental Revenue Bond Resolution adopted by the Board on January 24, 2012, and

Thirteenth Supplemental Revenue Bond Resolution adopted by the Board on January 22, 2013.

Fourteenth Supplemental Revenue Bond Resolution adopted by the Board on November 15, 2016.

Copies of the Amended and Restated Bond Resolution and any supplements or amendments may be obtained from the Chief Financial Officer of the Board.

The 1989 Amended and Restated Bond Resolution is presented in this Appendix E in consolidated form with provisions regarding the 1989 bond and project details and obsolete provisions omitted unless they are brief. *Notes on amended and omitted language appear in italic font.*

References to the Series 2008-2013 Bonds refer to: the Water Supply, Steam, Chilled Water and Electric Utility System Revenue Bonds, Series 2011A, the Utility System Revenue Refunding Bonds, Series 2012A, and the Utility System Revenue Refunding Bonds, Series 2013A.

LANSING BOARD OF WATER AND LIGHT

AMENDED AND RESTATED BOND RESOLUTION

A RESOLUTION TO AUTHORIZE AND PROVIDE FOR THE ISSUANCE OF WATER SUPPLY AND ELECTRIC UTILITY SYSTEM REVENUE BONDS TO PAY PART OF THE COST OF REMODELING, UPDATING AND EXTENDING THE LIFE OF THE WATER SUPPLY AND ELECTRIC UTILITY SYSTEM OF THE CITY OF LANSING; TO PROVIDE FOR THE RETIREMENT AND SECURITY OF THE BONDS; AND TO PROVIDE FOR OTHER MATTERS RELATIVE TO THE IMPROVEMENTS AND BONDS.

- Section 1. <u>Definitions</u>. Whenever used in this Bond Resolution, except when otherwise indicated by the context, the following terms shall have the following meanings:
 - (a) "Accreted Amount" [1989 Bond Details omitted]
 - (b) "Act 94" means Act 94, Public Acts of Michigan 1933, as amended.
 - (c) "Additional Bonds" means any additional bonds of equal standing with the Series 1989A Bonds and the Series 1989B Bonds issued pursuant to Section 18 of this Bond Resolution.
 - (d) "Aggregate Debt Service" for any period means, as of any date of calculation by the Board, the sum of the amounts of the debt service for such period with respect to all Outstanding Bonds. In the event that any of the Outstanding Bonds bear interest at a variable rate, such Bonds shall, for purposes of calculating Aggregate Debt Service, be assumed by the Board to bear interest at a fixed rate of interest equal to the greater of (i) 10.00% or (ii) the rate published by The Bond Buyer or any successor publication as its "Index of 25 Revenue Bonds" applicable on a date not more than 20 days prior to the date of initial issuance of any such variable interest rate Bonds.
 - (e) "Aggregate Debt Service Requirement" means for any period, and as of any date of calculation, Aggregate Debt Service for such period, less any capitalized interest to be paid from the proceeds of the Bonds.
 - (f) "Award Resolution" means the resolution(s) of the Board authorizing the sale of the Bonds.
 - (g) "Board" means the Board of Water and Light established pursuant to Section 5-201 of Chapter 2 of the City Charter of the City.
 - (h) "Bond Reserve Account" means the Bond Reserve Account established pursuant to Section 11(B) of this Bond Resolution.
 - (i) "Bond Resolution" means this Amended and Restated Bond Resolution and any other resolution amendatory to or supplemental to this Amended and Restated Bond Resolution and shall include any resolution authorizing the sale of a series of Bonds.
 - (j) "Bonds" means the Series 1989A Bonds, the Series 1989B Bonds and, when issued and delivered, any Additional Bonds authorized and issued in accordance with Section 18 of this Bond Resolution.
 - (k) "Capital Appreciation Bonds" means the Series 1989B Bonds which mature on July 1, 2004.
 - (l) "City" means the City of Lansing, Ingham, Eaton and Clinton Counties, Michigan.
 - (m) "Code" means the Internal Revenue Code of 1986, as amended.
 - (n) "Consulting Engineer" means the engineer or engineering firm or firms appointed from time to time, and having a favorable reputation for skill and experience in the design and operation of municipal utility systems, at the time retained by the Board to perform the acts and carry out the duties provided for such Consulting Engineer in the Bond Resolution.
 - (o) "Current Interest Bonds" means (a) the Series 1989A Bonds and (b) the Series 1989B Bonds which mature in the years 1994 and 1999.
 - (p) "Depository" means First of America Bank-Central, or such other bank as shall be designated to act as depository pursuant to this Bond Resolution by resolution of the Board organized under the laws of any State of the United States of America or any national banking association having a combined capital stock and surplus of at least \$50,000,000.
 - (q) "Event of Default" means an Event of Default specified in Section 19 of this Bond Resolution.

The definition of "Government Obligations" was amended by Section 8 of the Fourteenth Supplemental Revenue Bond Resolution adopted November 15, 2016. The definition of "Government Obligations" as it appears in Section 1 Subsection (r) as adopted on October 24, 1989:

(r) "Government Obligations" means direct obligations of (including obligations issued or held in book entry form on the books of) the United States of America;

After payment or defeasance in full of the Outstanding Series 2008-2013 Bonds, the definition of "Government Obligations" is amended as follows:

- (r) "Government Obligations" means (i) direct obligations of (including obligations issued or held in book entry form on the books of) the United States of America, (ii) obligations the payment on which is guaranteed by the United States of America including, but not limited to, stripped interest components of obligations issued by the Resolution Funding Corporation (REFCORP) and non-callable, non-prepayable debt obligations of the United States Agency for International Development (US AID), which pay principal and interest at least three (3) business days prior to any respective escrow requirement dates, or (iii) non-callable, senior debt obligations of any government-sponsored enterprise or federal agency, corporation, or instrumentality of the United States of America created by an act of congress including, but not limited to, the Federal Home Loan Banks, Freddie Mac, Federal Farm Credit Banks Funding Corporation, and Fannie Mae.
- (s) "Investment Obligations" means, to the extent authorized by law, (i) United States government obligations; (ii) obligations the principal and interest on which is fully guaranteed by the United States; (iii) repurchase agreements that are secured by United States government obligations or obligations fully guaranteed by the United States and that are held by an independent third party; (iv) certificates of deposit or other accounts of, or bankers acceptances of, 1 or more of the following: (a) banks that are members of the federal deposit insurance corporation; (b) savings and loan associations that are members of the federal savings and loan insurance corporation; (c) credit unions whose accounts are insured by the national credit union share insurance fund; (v) commercial paper that is rated in the highest category by a nationally recognized rating agency; (vi) obligations of a state of the United States or of a political subdivision of a state of the United States that are rated in 1 of the 3 highest categories by a nationally recognized rating agency; (vii) a collective investment fund that invests solely in 1 or more of the securities described above; and (viii) Government Obligations.
- (t) "Junior Lien Bonds" means bonds or other obligations which may be issued or incurred by the Board to provide funds for any lawful purpose of the System which are of junior standing and priority of lien with respect to the Net Revenues to the claim of the Bonds.
- (u) "Mandatory Redemption Requirement" refers to the requirement, if any, to redeem the Bonds prior to maturity as set forth in the Award Resolution.

The definition of "Municipal Obligations" was amended by Section 8 of the Fourteenth Supplemental Revenue Bond Resolution adopted November 15, 2016. The definition of "Municipal Obligations" as it appears in Section 1 Subsection (v) as adopted on October 24, 1989:

(v) "Municipal Obligation" means any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state (i) which are not callable at the option of the obligor prior to maturity or as to which irrevocable notice has been given by the obligor to call on the date specified in the notice, and (ii) which are fully secured as to principal and interest and redemption premium, if any, by a fund consisting only of cash or Government Obligations, which fund may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the specified redemption date or dates pursuant to such irrevocable instructions, as appropriate, and (iii) which fund is sufficient, as verified by an independent certified public accountant, to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this definition of Municipal Obligation on the maturity date or dates thereof or on the redemption date or dates specified in the irrevocable instructions referred to in subclause (i) of this definition of Municipal Obligation, as appropriate, and (iv) which are rated, based on the escrow, in the highest rating category of Standard & Poor's Corporation and Moody's Investors Service, Inc. or any successors thereto.

After payment or defeasance in full of the Outstanding Series 2008-2013 Bonds, the definition of "Municipal Obligations" is amended as follows:

(v) "Municipal Obligation" means any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state (i) which are not callable at the option of

the obligor prior to maturity or as to which irrevocable notice has been given by the obligor to call on the date specified in the notice, and (ii) which are fully secured as to principal and interest and redemption premium, if any, by a fund consisting only of cash or Government Obligations, which fund may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the specified redemption date or dates pursuant to such irrevocable instructions, as appropriate, and (iii) which fund is sufficient, as verified by an independent certified public accountant, to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this definition of Municipal Obligation on the maturity date or dates thereof or on the redemption date or dates specified in the irrevocable instructions referred to in subclause (i) of this definition of Municipal Obligation, as appropriate, and (iv) which are rated, based on the escrow, in the highest rating category of either two of the following three ratings agencies: Standard & Poor's Corporation, Fitch Ratings, and Moody's Investors Service, Inc. or any successors thereto.

- (w) "Net Revenues" means the Revenues remaining after deducting the reasonable expenses of administration, operation, and maintenance of the System.
- (x) "Operation and Maintenance Fund" means the Operation and Maintenance Fund established pursuant to Section 11(A) of this Bond Resolution.
 - (y) "Outstanding Bonds" means Bonds issued under this Bond Resolution except:
 - (i) Bonds cancelled by the Transfer Agent at or prior to such date;
 - (ii) Bonds (or portions of Bonds) for the payment or redemption of which moneys or Government Obligations, equal to the principal amount or redemption price thereof, as the case may be, with interest to the date of maturity or redemption date, shall be held in trust under this Bond Resolution and set aside for such payment or redemption (whether at or prior to the maturity or redemption date), provided that if such Bonds (or portions of Bonds) are to be redeemed, notice of such redemption shall have been given as provided in this Bond Resolution or provision satisfactory to the Transfer Agent shall have been made for the giving of such notice;
 - (iii) Bonds in lieu of or in substitution for which other Bonds shall have been authenticated and delivered hereunder; and
 - (iv) Bonds no longer deemed to be Outstanding Bonds as provided in Section 5 of this Bond Resolution.
 - (z) "Project" means [description of project financed with 1989 Bonds omitted]
- (aa) "Rating Agency" means Moody's Investors Service and/or Standard and Poor's Corporation, or any successor to either thereof or similar national rating agency if the foregoing do not exist.
 - (bb) "Rebate Fund" means the Rebate Fund established pursuant to Section 12 of this Bond Resolution.
 - (cc) "Receiving Fund" means the Receiving Fund established pursuant to Section 11 of this Bond Resolution.
- (dd) "Redemption Fund" means the Bond and Interest Redemption Fund established pursuant to Section 11(B) of this Bond Resolution.
- (ee) "Registered Owner" means the owner of a Bond as shown by the registration records kept by the Transfer Agent.

Section 1 Subsection (ff) was amended by Section 11 of the Tenth Supplemental Revenue Bond Resolution adopted January 29, 2008 as follows:

- (ff) "Reserve Requirement" shall mean the lesser of (i) the maximum annual debt service requirements on the Outstanding Bonds, (ii) 125% of the average annual debt service requirements on the Outstanding Bonds, or (iii) the total of 10% of the original aggregate face amount of each series of the Outstanding Bonds, reduced by the net original issue discount, if any; provided, however, that the Reserve Requirement shall not at any time exceed the amount allowed to be invested at an unrestricted yield pursuant to Treas. Reg. Section 1.148-2(f)(2) or any successor provision thereto as applicable to the Bonds.
- (gg) "Revenues" means the income derived from the rates charged for the services, facilities, and commodities furnished by the System, earnings on investment of funds and accounts of the System required to be deposited in the Receiving Fund pursuant to this Bond Resolution and other revenues derived from or pledged to the operation of the System.
- (hh) "Series 1989A Bonds" means the Water Supply And Electric Utility System Revenue Bonds, Series 1989A issued pursuant to this Bond Resolution.

- (ii) "Series 1989B Bonds" means the Water Supply And Electric Utility System Revenue Bonds, Series 1989B issued pursuant to this Bond Resolution.
- (jj) "Sufficient" means with respect to (i) cash or (ii) Government Obligations or (iii) Municipal Obligations, or any combination thereof, not redeemable at the option of the issuer thereof, the principal and interest payments upon which, without reinvestment of the interest, come due at such times and in such amounts, as to be fully sufficient to pay the interest as it comes due on the Bonds or any portion thereof and the principal and redemption premium, if any, on the Bonds or any portion thereof as they come due whether on the stated maturity date or upon earlier redemption. Securities representing such obligations or cash shall be placed in trust with a bank or trust company, and if any of the Bonds are to be called for redemption prior to maturity, irrevocable instructions to call the Bonds for redemption shall be given to the Transfer Agent.

The definition of "System" was amended by Section 1 Subsection (k) of the Eleventh Supplemental Revenue Bond Resolution, adopted May 10, 2011 as follows:

- (kk) "System" means the complete facilities of the Board for the supply and distribution of water and the generation and distribution of electricity, steam, chilled water, and heat, including all plants, works, instrumentalities and properties used or useful in connection with the supply and distribution of water and the generation and distribution of electricity, steam, chilled water, and heat, and all additions, extensions and improvements thereto existing or hereafter acquired by the Board.
- (II) "Transfer Agent" means the bank or trust company designated by the Board in the Award Resolution or any subsequent resolution to perform the duties of the Transfer Agent pursuant to this Bond Resolution.
- Section 2. Necessity, Estimate of Cost and Useful Life. [1989 Project Details omitted]
- Section 3. Series 1989A Bonds and Series 1989B Bonds Authorized. [1989 Bond Details omitted]
- Section 4. Bond Details. [1989 Bond Details omitted]
- Section 5. Payment of Bonds; Defeasance. The Bonds and the interest thereon shall be payable solely from the Net Revenues, and to secure such payment, there is hereby created a statutory lien upon the whole of the Net Revenues. Pursuant to provisions of Act 94, the City, by and through its Board, hereby pledges to the repayment of principal of, redemption premium, if any, and interest on the Bonds, the funds and accounts established by this Bond Resolution, and a statutory lien is hereby created on such funds and accounts. The liens and pledge provided by this Bond Resolution shall continue until payment in full of the principal of and interest on all Bonds payable from Net Revenues, or, until Sufficient cash, Sufficient Government Obligations, Sufficient Municipal Obligations or any combination thereof shall have been deposited in trust for payment in full of the principal of and the interest on all Bonds to be paid to their maturity, or, if called or if irrevocable instructions have been given to call Bonds for redemption, to the date fixed for redemption together with the amount of the redemption premium, if any. Upon deposit of Sufficient cash, Sufficient Government Obligations, Sufficient Municipal Obligations or any combination thereof, the statutory lien created by this Bond Resolution shall be terminated with respect to the Bonds to be paid from the cash, Government Obligations or Municipal Obligations, or combination thereof, the Registered Owners of such Bonds shall have no further rights under this Bond Resolution except for payment from the deposited funds and for the rights of replacement, registration and transfer provided by this Bond Resolution, and such Bonds shall no longer be considered to be Outstanding Bonds under this Bond Resolution.
- Section 6. <u>Management</u>. The operation, repair and management of the System shall be under the supervision and control of the Board.
- Section 7. <u>Charges</u>. The rates to be charged for service furnished by the System and the methods of collection and enforcement of the collection of the rates shall be those permitted by law and established by the Board and in effect on the date of adoption of this Bond Resolution and thereafter as established by the Board.
- Section 8. <u>No Free Service</u>. No free service shall be furnished by the System to any person, firm or corporation public or private, or to any public agency or instrumentality.

Section 9 was amended by Section 12 of the Tenth Supplemental Revenue Bond Resolution adopted January 29, 2008 as follows:

Section 9. <u>Rate Covenant</u>. The Board will at all times fix, establish, maintain and collect rates, fees and charges for the sale of the output, capacity, use or service of the System which, together with other income, are reasonably expected to yield Net Revenues equal to at least 125% of the Aggregate Debt Service Requirement for the forthcoming twelve month period plus such amount as is necessary to comply with all covenants in the Bond Resolution and to pay all charges and liens whatsoever payable out of Net Revenues in such period.

Section 10. Operating Year. The System shall continue to be operated on the basis of an operating year commencing on July 1st and ending on the 30th day of the following June. For purposes of determining the annual Aggregate Debt Service Requirement on the Bonds for any operating year, payments of principal and interest due on July 1st shall be considered to be part of the Aggregate Debt Service Requirement for the preceding operating year.

Section 11. <u>Funds and Accounts: Flow of Funds</u>. All Revenues of the System shall be set aside as collected and credited to a fund established with the Depository to be designated WATER SUPPLY AND ELECTRIC UTILITY SYSTEM RECEIVING FUND. The Revenues so credited are pledged for the purpose of the following funds and shall be transferred from the. Receiving Fund periodically in the manner and at the times hereinafter specified:

A. <u>OPERATION AND MAINTENANCE</u> FUND: Periodically, out of the Revenues credited to the Receiving Fund there shall be first set aside in, or credited to, a fund designated OPERATION AND MAINTENANCE FUND, a sum sufficient to provide for the payment during the succeeding period of the next month's expenses of administration and operation of the System, including such current expenses for the maintenance thereof as may be necessary to preserve the same in good repair and working order.

Section 11B was amended by Section 9 of the Fourteenth Supplemental Revenue Bond Resolution adopted November 15, 2016. Section 11B as adopted on October 24, 1989:

B. <u>BOND AND INTEREST REDEMPTION FUND</u>: There shall be established and maintained a fund designated BOND AND INTEREST REDEMPTION FUND, the moneys on deposit therein from time to time to be used solely, except for required deposits to the Rebate Fund, for the purpose of paying the principal of, redemption premium, if any, and interest on the Bonds. The moneys in the Redemption Fund, including the Reserve Account, shall be kept on deposit with the bank or trust company which is the Transfer Agent.

After provision for the Operation and Maintenance Fund, there shall be set aside on or before the first day of each month, commencing December 1, 1989, in the Redemption Fund a sum proportionately sufficient to provide for the payment when due of the current principal of and interest on the Bonds, less any amount in the Redemption Fund representing accrued interest on the Bonds. Commencing December 1, 1989, the amount set aside each month for interest on the Bonds shall be 1/7 of the interest on the Bonds due July 1, 1990, and commencing July 1, 1990, and thereafter the amount set aside each month for interest on the Bonds shall be 1/6 of the interest on the Bonds next coming due.

The amount set aside each month for principal, commencing December 1, 1989, shall be 1/7 of the amount of principal due on the Bonds on July 1, 1990, and commencing July 1, 1990, and thereafter the amount set aside each month for principal of the Current Interest Bonds shall be 1/12 of the total amount of the principal of the Bonds due on the next July 1 and 1/12 of the maturing amount of Capital Appreciation Bonds due one year or less from the 1st day of such month. If there is any deficiency in the amount previously set aside, that deficiency shall be added to the requirements for the next succeeding month.

There shall be established a separate account in the Redemption Fund to be known as the BOND RESERVE ACCOUNT. On the date of delivery of any Additional Bonds issued pursuant to Section 18(a) or (c) of this Bond Resolution, the Board shall transfer to the Bond Reserve Account from the proceeds of the Additional Bonds or any other available source the lesser of (a) 10% of the proceeds of the Additional Bonds and (b) the maximum Aggregate Debt Service Requirement on the Additional Bonds for the then current and any subsequent operating year and commencing on the 1st day of the month following delivery of the Additional Bonds and on the 1st day of each month thereafter until the amount in the Bond Reserve Account equals the Reserve Requirement, 1/12 of the difference between the amount deposited on the delivery of the Additional Bonds and the Reserve Requirement.

Except as otherwise provided in this Bond Resolution, the moneys credited to the Bond Reserve Account shall be used solely for the payment of the principal of, redemption premium, if any, and interest on Bonds as to which there would otherwise be a default. If at any time it shall be necessary to use moneys credited to the Bond Reserve Account for such payment, then the moneys so used shall be replaced from the Net Revenues first received thereafter which are not required for expenses of administration, operation and maintenance of the system or for current principal and interest requirements on any of the Bonds.

The Board may satisfy the Reserve Requirement by a letter of credit, a surety bond or an insurance policy if the provider or issuer thereof shall be rated Aaa by Moody's Investors Service and AAA by Standard and Poor's Corporation.

If at any time the amount in the Bond Reserve Account exceeds the Reserve Requirement, the excess may be transferred to such fund or account as the Board may direct.

After payment or defeasance in full of the Outstanding Series 2008-2013 Bonds, Section 11B of the Bond Resolution is amended as follows:

B. BOND AND INTEREST REDEMPTION FUND: There shall be established and maintained a fund designated BOND AND INTEREST REDEMPTION FUND, the moneys on deposit therein from time to time to be used solely, except for required deposits to the Rebate Fund, for the purpose of paying the principal of, redemption premium, if any, and interest on the Bonds.

After provision for the Operation and Maintenance Fund, there shall be set aside on or before the first day of each month, commencing December 1, 1989, in the Redemption Fund a sum proportionately sufficient to provide for the payment when due of the current principal of and interest on the Bonds, less any amount in the Redemption Fund representing accrued interest on the Bonds. Commencing December 1, 1989, The amount set aside each month for interest on the Bonds shall be 1/7 of the interest on the Bonds due July 1, 1990, and commencing July 1, 1990, and thereafter The amount set aside each month for interest on the Bonds shall be 1/6 of the interest on the Bonds next coming due.

The amount set aside each month for principal, commencing December 1, 1989, shall be 1/7 of the amount of principal due on the Bonds on July 1, 1990, and commencing July 1, 1990, and thereafter The amount set aside each month for principal of the Current Interest Bonds shall be 1/12 of the total amount of the principal of the Bonds due on the next July 1 and 1/12 of the maturing amount of Capital Appreciation Bonds due one year or less from the 1st day of such month. If there is any deficiency in the amount previously set aside, that deficiency shall be added to the requirements for the next succeeding month.

There shall be established a separate account in the Redemption Fund to be known as the BOND RESERVE ACCOUNT. On the date of delivery of any Additional Bonds issued pursuant to Section 18(a) or (c) of this Bond Resolution, the Board shall transfer to the Bond Reserve Account from the proceeds of the Additional Bonds or any other available source the lesser of (a) 10% of the proceeds of the Additional Bonds and (b) the maximum Aggregate Debt Service Requirement on the Additional Bonds for the then current and any subsequent operating year and commencing on the 1st day of the month following delivery of the Additional Bonds and on the 1st day of each month thereafter until the amount in the Bond Reserve Account equals the Reserve Requirement, 1/12 of the difference between the amount deposited on the delivery of the Additional Bonds and the Reserve Requirement.

Except as otherwise provided in this Bond Resolution, the moneys credited to the Bond Reserve Account shall be used solely for the payment of the principal of, redemption premium, if any, and interest on Bonds as to which there would otherwise be a default. If at any time it shall be necessary to use moneys credited to the Bond Reserve Account for such payment, then the moneys so used shall be replaced from the Net Revenues first received thereafter which are not required for expenses of administration, operation and maintenance of the system or for current principal and interest requirements on any of the Bonds.

The Board may satisfy the Reserve Requirement by a letter of credit, a surety bond, or an insurance policy if the provider or issuer thereof shall be rated by any nationally recognized bond rating agency as high or higher than the Bonds at the time of purchase of the letter of credit, a surety bond, or an insurance policy.

If at any time the amount in the Bond Reserve Account exceeds the Reserve Requirement, the excess may be transferred to such fund or account as the Board may direct.

The Supplemental Resolution authorizing Additional Bonds may either (i) provide that the Additional Bonds are equally and ratably secured by the Bond Reserve Account funded according to the Reserve Requirement, or (ii) provide for the creation of a separate bond reserve account securing that series of Additional Bonds and a different reserve requirement, or state that no bond reserve account is required.

- C. JUNIOR LIEN BOND AND INTEREST REDEMPTION FUND: If the Board shall ever issue Junior Lien Bonds, there shall be established and maintained a separable depositary fund for the purpose of paying the principal of, redemption premium, if any, and interest on such Junior Lien Bonds as they come due (the "Junior Lien Bond and Interest Redemption Fund"). Revenues remaining in the Receiving Fund, after provision has been made for the requirements of the Operation and Maintenance Fund and of the Redemption Fund, shall be set aside, but not more often than monthly, in a fund for the Junior Lien Bonds in accordance with the resolution authorizing the issuance of the Junior Lien Bonds. A separate account may also be established within such fund as a bond reserve account to be funded on a junior lien basis in accordance with the resolution authorizing the issuance of the Junior Lien Bonds. The detail of the establishment and maintenance of such fund shall be provided in the resolution of the Board authorizing the issuance of such Junior Lien Bonds.
- D. <u>SURPLUS MONEYS</u>: Any Revenues in the Receiving Fund after satisfying all requirements of the Operation and Maintenance Fund, the Redemption Fund, the Rebate Fund and the Junior Lien Bond and Interest Redemption Fund

shall be deemed to be surplus moneys and may be used for such purposes as the Board deems to be for the best interests of the City.

If there should be any deficit in the Operation and Maintenance Fund, Redemption Fund or the Rebate Fund on account of defaults in setting aside required amounts therein, then transfers shall be made from the moneys remaining in the Receiving Fund at the end of any operating year to those funds in the priority and order specified herein, to the extent of any deficit, before any other disposition is made of the monies in the Receiving Fund at the end of any operating year.

Section 12. Rebate Fund. There shall be established and maintained a fund designated the REBATE FUND. Moneys representing investment earnings or profits shall be transferred annually from all funds and accounts established under this Bond Resolution and deposited in the Rebate Fund in an amount sufficient to enable the City to rebate investment earnings to the federal government, if necessary, in accordance with the requirements of the Code. Funds on deposit in the Rebate Fund are not pledged as security for the Bonds. Monies shall be deposited in the Rebate Fund and shall be rebated to the federal government unless the City has received an opinion of nationally recognized bond counsel that failure to take such actions will not adversely affect the exclusion from gross income for federal income tax purposes of the interest on such Bonds.

The City, by and through its Board, covenants and agrees that to the extent permitted by law, it shall take all actions within its control and that it shall not fail to take any action as may be necessary to maintain the exclusion of interest on the Bonds from gross income for federal income tax purposes, including but not limited to, actions relating to the rebate of arbitrage earnings and the expenditure and investment of Bond proceeds and moneys deemed to be Bond proceeds, all as more fully set forth in the Non-Arbitrage and Tax Compliance Certificate to be delivered by the City in connection with the issuance of the Series 1989A Bonds and the Series 1989B Bonds.

Section 13. <u>Priority of Funds</u>. In the event the moneys in the Receiving Fund are insufficient to provide for the current requirements of the Operation and Maintenance Fund or the Redemption Fund or the Rebate Fund or the Junior Lien Bond and Interest Redemption Fund, any moneys or securities in other funds of the System, except the proceeds of sale of the Series 1989A Bonds and the Series 1989B Bonds, shall be credited or transferred, first, to the Operation and Maintenance Fund, second, to the Redemption Fund, to the extent of any deficit therein, third, to the Rebate Fund and fourth, to the Junior Lien Bond and Interest Redemption Fund.

Section 14. Investments. Moneys in the funds and account established herein, and moneys derived from the proceeds of sale of the Bonds, may be invested by the Board on behalf of the City in Investment Obligations. Investment of moneys in the Redemption Fund being accumulated for payment of the next maturing principal or interest on the Bonds shall be limited to Government Obligations bearing maturity dates prior to the date of the next maturing principal or interest payment respectively on the Bonds. Investment of moneys in any other funds or account, including moneys derived from the proceeds of sale of the Bonds, shall be limited to obligations bearing maturity dates or subject to redemption, at the option of the holder thereof, not later than the time estimated by the City when the moneys from such investments will be required. Any securities representing investments shall be kept on deposit with the bank or trust company having on deposit the fund or funds or account from which such purchase was made. Earnings or profits on any investment of funds in any fund or account established in this Bond Resolution shall be deposited in or credited to the Rebate Fund to the extent necessary as required by Section 12 of this Bond Resolution and any earnings or profits remaining in the Receiving Fund, Operation and Maintenance Fund and Redemption Fund, shall be deposited in or credited to the Receiving Fund. Investments of moneys in the Bond Reserve Account shall be valued at amortized cost, including any amount paid as accrued interest at the time of purchase until the payment of such interest or the next interest payment date.

Section 15. <u>Applicable Law</u>. The Series 1989A and the Series 1989B Bonds shall be sold and the proceeds applied in accordance with the provisions of Act 94.

Section 16. Bond Proceeds. [1989 Bond Details omitted]

Section 17. <u>Covenants</u>. The City covenants and agrees with the Registered Owners of the Bonds that so long as any of the Bonds remain as Outstanding Bonds and unpaid as to either principal or interest:

- (a) The Board will maintain the System in good repair and working order and will operate the same efficiently and will faithfully and punctually perform all duties with reference to the System required by the Constitution and laws of the State of Michigan and this Bond Resolution.
- (b) The City and the Board will not sell, lease, mortgage or otherwise dispose of any part of the System, except for sales or exchanges of property or facilities (1) which are not useful in the operation of the System, or (2) for which the proceeds received are, or the fair market value of the subject property is, less than 1% of the Revenues for the preceding fiscal year, or (3) which will not impair the ability of the Board to comply with the rate covenant described in Section 9 of this Bond Resolution.

The first paragraph of Section 18, and Section 18(a), were amended by Section 13 of the Tenth Supplemental Revenue Bond Resolution adopted January 29, 2008. The remainder of Section 18 has not been amended. Section 18 reads as follows:

Section 18. <u>Additional Bonds</u>. The right is reserved, in accordance with the provisions of Act 94, to issue additional bonds payable from the Net Revenues of the System which shall be of equal standing and priority of lien on the Net Revenues of the System with the Series 2008A Bonds, but only for the following purposes and under the following terms and conditions:

(a) For repairs, extensions, enlargements and improvements to the System or for the purpose of refunding a part of any Outstanding Bonds (unless such partial refunding is done in compliance with (b) below) and paying costs of issuing such Additional Bonds, including deposits which may be required to be made to a bond reserve account. Bonds for such purposes shall not be issued pursuant to this subparagraph (a) unless the actual or augmented Net Revenues of the System for the fiscal year of the System ending not more than 15 months prior to the sale of Additional Bonds shall be equal to at least one hundred twenty-five (125%) percent of the maximum Aggregate Debt Service Requirement in any current or future fiscal year on the Outstanding Bonds and on the Additional Bonds then being issued. If the Additional Bonds are to be issued in whole or in part for refunding Outstanding Bonds, the maximum Aggregate Debt Service shall be determined by deducting from the principal and interest requirements for each operating year the annual Aggregate Debt Service Requirement of any Bonds to be refunded from the proceeds of the Additional Bonds.

Net Revenues may be augmented as follows for the purposes of this subsection (a):

- (1) If the System rates, fees or charges shall be increased at or prior to the time of authorizing the Additional Bonds, the Net Revenues may be augmented by an amount which in the opinion of the Board's financial advisor will reflect the effect of the increase had the System's billings during such time been at the increased rates.
- (2) The actual Net Revenues may be augmented by the estimated increase in Net Revenues which in the opinion of the Board's financial advisor will accrue as a result of new customers which have not been serviced during the fiscal year described in paragraph (a) above or as a result of the acquisition of the repairs, extensions, enlargements and improvements to the System which have been made during or subsequent to the fiscal year described in paragraph (a) above or which will be acquired in whole or in part from the proceeds of the Additional Bonds to be issued.

No Additional Bonds of equal standing as to the Net Revenues of the System shall be issued pursuant to the authorization contained in subparagraphs (a) or (c) if the City shall then be in default in making its required payments to the Operation and Maintenance Fund or the Redemption Fund.

- (b) For refunding all of the Outstanding Bonds and paying costs of issuing such Additional Bonds. For refunding a part of the Outstanding Bonds and paying costs of issuing such Additional Bonds, if after giving effect to the refunding the maximum amount of Aggregate Debt Service in each future fiscal year shall be less than the Aggregate Debt Service in each future fiscal year prior to giving effect to the refunding.
- (c) Additional Bonds may be issued without meeting any of the conditions and tests set forth in subsection (a) above for any one or more of the following purposes: (i) to pay the cost of acquisition and construction of any repairs, replacements, betterments, improvements, major renewals or corrections of any damage or loss to the System necessary, in the opinion of the Consulting Engineer, to keep the System in good operating condition or to prevent a loss of Revenues therefrom or (ii) to pay the cost of decommissioning, disposal or termination of the System.

Determination by the Board as to existence of conditions permitting the issuance of Additional Bonds shall be conclusive.

Notwithstanding the foregoing requirements of Section 18, the Board reserves the right to issue Junior Lien Bonds payable as provided herein.

- Section 19. Events of Default. Each of the following events, with respect to an issue of Bonds, is hereby declared an "Event of Default":
 - (a) default in the payment of the principal of, or interest, or redemption premium, if any, on any Bond after the same shall become due, whether at maturity or upon call for redemption; or
 - (b) default by the City or the Board in the performance or observance of any other of the covenants, agreements or conditions on their part in this Bond Resolution, or contained in the Bonds; provided no default shall constitute an Event of Default until written notice thereof shall have been given by the Registered Owners of not less than twenty percent (20%) in principal amount of the Outstanding Bonds to the City and the City shall have had sixty (60) days after receipt of such notice to correct such default or cause the same to be corrected and shall not have corrected such

default or caused the same to be corrected within such period; and provided, further, that if the default be such that it cannot be corrected within such period, it shall not constitute an Event of Default if action to correct the same is instituted within such period and diligently pursued until the default is corrected.

- Section 20. Appointment of Receiver and Statutory Rights. The Registered Owners of Bonds representing in the aggregate principal amount not less than twenty percent (20%) of all Outstanding Bonds, may protect and enforce the statutory lien and pledge of the funds and accounts and Net Revenues created by Act 94, and enforce and compel the performance of all duties of the officials of the City and the Board, including the fixing of sufficient rates, the collection of Revenues, the proper segregation of Revenues, and the proper application of Revenues. In addition to the rights conferred to Registered Owners by the Resolution, the Registered Owners shall have all the rights conferred by Act 94. The statutory lien upon the Net Revenues, however, shall not be construed to compel the sale of the System or any part thereof.
- Section 21. <u>Effect of Waiver and Other Circumstances</u>. No delay or omission of any Registered Owner to exercise any right or power arising upon the happening or an Event of Default shall impair any right or power or shall be construed to be a waiver of any such Event of Default or be an acquiescence therein and every power and remedy given by this Bond Resolution to the Registered Owners may be exercised from time to time and as often as may be deemed expedient by the Registered Owners.
 - Section 22. Bond Form. [1989 Bond Forms omitted]
 - Section 23. Amendments: Consent of Registered Owners.
 - (a) The City, from time to time and at any time, subject to the conditions and restrictions in this Bond Resolution, may by and through its Board, adopt one or more supplemental or amendatory resolutions which thereafter shall form a part hereof, for any one or more or all of the following purposes:
 - (i) To issue Additional Bonds or Junior Lien Bonds;
 - (ii) To add to the covenants and agreements of the. City contained in this Bond Resolution, other covenants and agreements thereafter to be observed or to surrender, restrict or limit any right or power herein reserved to or conferred upon the City and the Board (including but not limited to the right to issue Additional Bonds);
 - (iii) To make such provisions for the purpose of curing any ambiguity, or of curing, correcting or supplementing any defective provisions contained in this Bond Resolution, or in regard to matters or questions arising under this Bond Resolution, as the City may deem necessary or desirable and not inconsistent with this Bond Resolution and which shall not have a material, adverse effect on the interests of the Registered Owners of the Bonds;
 - (iv) To increase the size or scope of the System; and
 - (v) To make such modifications in the provisions hereof as may be deemed necessary by the City to accommodate the issuance of Additional Bonds or Junior Lien Bonds which (a) are "Capital Appreciation Bonds" or "Zero Coupon Bonds" to the extent permitted by law or (b) are variable rate bonds, but only if such modifications, in the written opinion of nationally recognized bond counsel filed with the Board, do not result in materially diminishing the security hereby granted to the Registered Owners of any Outstanding Bonds.

Any amendment or supplemental resolution or resolution authorized by the provisions of this Section 23(a) may be adopted by the City, by and through its Board, without the consent of or notice to the Registered Owners of any of the Outstanding Bonds, notwithstanding any of the provisions of Section 23(b) below.

(b) With the consent of the Registered Owners of not less than fifty one percent (51%) in principal amount of the Bonds then outstanding the City, by and through its Board, may from time to time and at any time adopt a resolution or resolutions supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Bond Resolution or of any supplemental resolution; provided, however, that no such supplemental resolution shall (i) extend the fixed maturity of any Bond, change a Mandatory Redemption Requirement for any series of Bonds or reduce the rate of interest thereon or extend the time of payment of interest, or reduce the amount of the principal thereof, or reduce or extend the time for payment of any premium payable on the redemption thereof, without the consent of the Registered Owner of each Bond so affected, or (ii) reduce the aforesaid percentage of Registered Owners of the Bonds required to approve any such supplemental resolution, or (iii) deprive the Registered Owners of the Bonds, except as aforesaid, of the right to payment of the Bonds from the Net Revenues, without the consent of the Registered Owners of all the Outstanding Bonds or, (iv) cause any modification or reduction of the lien on or pledge of the Net Revenues or the funds or accounts established hereunder. No amendment may be made under this Section 23(b) which affects the rights or duties of the insurer of any of the Bonds without its consent.

It shall not be necessary for the consent of the Registered Owners under this Section 23(b) to approve the particular form of any proposed supplemental resolution, but it shall be sufficient if such consent shall approve the substance thereof.

Promptly after the adoption by the City of any supplemental resolution pursuant to the provisions of this Section 23(b), the City shall cause the Transfer Agent to mail a notice by registered or certified mail to the Registered Owners of all Outstanding Bonds at their addresses shown on the bond register or at such other address as is furnished in writing by such Registered Owner to the Transfer Agent setting forth in general terms the substance of such supplemental resolution.

Section 24. Sale of the Bonds. [1989 Bond Details and Notice of Sale omitted]



Appendix F

FORM OF APPROVING OPINION

February 15, 2017

Lansing Board of Water and Light City of Lansing State of Michigan

We have acted as bond counsel to the City of Lansing, State of Michigan, acting through the governing body of the Lansing Board of Water and Light (the "Issuer") in connection with the issuance by the Issuer of bonds in the aggregate principal sum of \$30,365,000, designated UTILITY SYSTEM REVENUE REFUNDING BONDS, SERIES 2017A (the "Bonds"). In such capacity, we have examined such law and the transcript of proceedings relating to the issuance of the Bonds and such other proceedings, certifications and documents as we have deemed necessary to render this opinion.

The Bonds are issued pursuant to Act 94, Public Acts of Michigan, 1933, as amended ("Act 94"), and a bond resolution adopted by the Issuer as supplemented and amended from time to time (the "Bond Resolution"). Under the Bond Resolution, the Issuer has pledged certain revenues for the payment of the principal and interest on the Bonds when due.

The Bonds are in fully-registered form in the denomination of \$5,000 each or multiples thereof, numbered in order of registration, bearing original issue date of February 15, 2017, payable as to principal and interest as provided in the Bonds, and are subject to redemption prior to maturity in the manner, at the times and at the prices specified in the Bonds.

As to questions of fact material to our opinion, we have relied on the representations of the Issuer contained in the Bond Resolution, and in the certified proceedings and other certifications of public officials and others furnished to us.

Based upon the foregoing, we are of the opinion that, under existing law:

- 1. The Bonds are valid and binding obligations of the Issuer, according to their tenor, payable solely and only from and secured by a statutory first lien on the revenues of the Issuer's facilities for the supply and distribution of water and the generation and distribution of electricity, steam, chilled water, and heat (collectively, the "System"), after payment of the expenses of administration, operation and maintenance thereof (the "Net Revenues"), and are entitled to the benefits of the Bond Resolution and Act 94.
- 2. The Bonds are of equal standing and priority of lien as to the Net Revenues of the System with the Issuer's outstanding Water Supply, Steam, Chilled Water and Electric Utility System Revenue Bonds, Series 2008A, Utility System Revenue Bonds, Series 2011A, Utility System Revenue Refunding Bonds, Series 2012A, and Utility System Revenue Refunding Bonds, Series 2013A (together the "Outstanding Bonds"). The Issuer has reserved the right to issue additional bonds of equal standing with the Bonds and the Outstanding Bonds on conditions stated in the Bond Resolution.
- 3. The Issuer is obligated to charge and collect rates from every user of the service supplied by the System sufficient to provide adequate revenues for the payment of the expenses of administration, operation and maintenance of the System and for the payment of the principal of and interest on the Bonds, the Outstanding Bonds and all other bonds

payable from the revenues of the System, and to provide for such other expenditures and funds for the Bonds and the Outstanding Bonds and the System as are required by the Bond Resolution.

- 4. The interest on the Bonds (a) is excludable from gross income for federal income tax purposes and (b) is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations. It should be noted, however, that with respect to corporations (as defined for federal income tax purposes), the interest is taken into account in determining adjusted current earnings for the purpose of computing the alternative minimum tax imposed on such corporations. The opinion set forth in clause (a) above is subject to the condition that the Issuer comply with all requirements of the Internal Revenue Code of 1986, as amended, that must be satisfied subsequent to the issuance of the Bonds in order that interest thereon be (or continue to be) excludable from gross income for federal income tax purposes. The Issuer has covenanted to comply with all such requirements. Failure to comply with certain of such requirements could cause the interest on the Bonds to be included in gross income retroactively to the date of issuance of the Bonds.
- 5. The Bonds and the interest thereon are exempt from all taxation by the State of Michigan or by any taxing authority within the State of Michigan except inheritance and estate taxes and taxes on gains realized from the sale, payment or other disposition thereof.

Except as stated in paragraphs 4 and 5 above, we express no opinion regarding other federal or state tax consequences arising with respect to the Bonds and the interest thereon.

The rights or remedies of bondholders may be affected by bankruptcy, insolvency, fraudulent conveyance or other laws affecting creditors' rights generally, now existing or hereafter enacted, and by the application of general principles of equity, including those relating to equitable subordination.

This opinion is given as of the date hereof, and we assume no obligation to revise or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention, or any changes in law that may hereafter occur.

Very truly yours,	
Miller, Canfield, Paddock and Stone, P.L.C.	
D ₁	
By: William J. Danhof	

Appendix G

FORM OF CONTINUING DISCLOSURE UNDERTAKING

LANSING BOARD OF WATER AND LIGHT UTILITY SYSTEM REVENUE REFUNDING BONDS, SERIES 2017A

Continuing Disclosure Undertaking

The Lansing Board of Water and Light (the "Issuer"), an administrative Board of the City of Lansing, Michigan existing under the City's Charter, hereby executes and delivers this Continuing Disclosure Undertaking (the "Undertaking") in connection with the issuance by the Issuer of the Utility System Revenue Refunding Bonds, Series 2017A (the "Bonds"). The Issuer hereby covenants and agrees for the benefit of the Bondholders (as hereinafter defined), as follows:

(a) Definitions. The following terms used herein shall have the following meanings:

"Audited Financial Statements" means the annual audited financial statement pertaining to the Issuer prepared by an individual or firm of independent certified public accountants as required by Act 2, Public Acts of Michigan, 1968, as amended, which presently requires preparation in accordance with generally accepted accounting principles.

"Bondholders" shall mean the registered owner of any Bond or any person (a) with the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bond (including any person holding a Bond through a nominee, depository or other intermediary) or (b) treated as the owner of any Bond for federal income tax purposes.

"EMMA" shall mean the MSRB's Electronic Municipal Market Access System, or such other system, Internet Web site, or repository hereafter prescribed by the MSRB for the submission of electronic filings pursuant to the Rule.

"MSRB" means the Municipal Securities Rulemaking Board.

"Rule" means Rule 15c2-12 promulgated by the SEC pursuant to the Securities Exchange Act of 1934, as amended.

"SEC" means the United States Securities and Exchange Commission.

"Undertaking" means this Continuing Disclosure Undertaking.

- (b) Continuing Disclosure. The Issuer shall, in accordance with the provisions of the Rule, provide or cause to be provided to the MSRB through EMMA, on or before the last day of the sixth month after the end of the fiscal year of the Issuer, the following annual financial information and operating data, commencing with the fiscal year ended June 30, 2017, in an electronic format as prescribed by the MSRB:
 - (1) Updates of the numerical financial information and operating data (excluding any pictorial representation) included in the official statement for the Bonds (the "Official Statement") appearing in the Tables or under the headings as described in Exhibit A.
 - (2) Audited Financial Statements, or in the event audited financial statements are not available, the Issuer shall provide unaudited financial statements, and then provide audited financial statements immediately after they become available.

- (3) Such additional financial information or operating data as may be determined by the Issuer and its advisors as desirable or necessary to comply with the Rule.
- Such annual financial information and operating data described above are expected to be provided directly by the Issuer or by specific reference to documents available to the public through EMMA or filed with the SEC.
- If the fiscal year of the Issuer is changed, the Issuer shall send a notice of such change to the MSRB through EMMA, prior to the earlier of the ending date of the fiscal year prior to such change or the ending date of the fiscal year as changed.
- (c) *Notice of Failure to Disclose*. The Issuer shall provide or cause to be provided, in a timely manner, to the MSRB through EMMA, in an electronic format as prescribed by the MSRB, notice of a failure by the Issuer to provide the annual financial information with respect to the Issuer described in subsection (b) above on or prior to the dates set forth in subsection (b) above.
- (d) Occurrence of Events. The Issuer shall provide or cause to be provided to the MSRB through EMMA, in an electronic format as prescribed by the MSRB, in a timely manner not in excess of ten business days after the occurrence of the event, notice of the occurrence of any of the following events listed in (b)(5)(i)(C) of the Rule with respect to the Bonds:
 - (1) principal and interest payment delinquencies;
 - (2) non-payment related defaults, if material;
 - (3) unscheduled draws on debt service reserves reflecting financial difficulties;
 - (4) unscheduled draws on credit enhancements reflecting financial difficulties;
 - (5) substitution of credit or liquidity providers, or their failure to perform;
 - (6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;
 - (7) modifications to rights of holders of the Bonds, if material;
 - (8) bond calls, if material, and tender offers;
 - (9) defeasances;
 - (10) release, substitution, or sale of property securing repayment of the Bonds, if material;
 - (11) rating changes;
 - (12) bankruptcy, insolvency, receivership or similar event of the Issuer, which is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the Issuer in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Issuer, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Issuer;
 - (13) the consummation of a merger, consolidation, or acquisition involving the Issuer or the sale of all or substantially all of the assets of the Issuer, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; or
 - (14) appointment of a successor or additional trustee or the change of name of a trustee, if material.
- (e) Materiality Determined Under Federal Securities Laws. The Issuer agrees that its determination of whether any event listed in subsection (d) is material shall be made in accordance with federal securities laws.
- (f) *Identifying Information*. All documents provided to the MSRB through EMMA shall be accompanied by the identifying information prescribed by the MSRB.

- (g) Termination of Reporting Obligation. The Issuer reserves the right to terminate its obligation to provide annual financial information and notices of material events, as set forth above, if and when the Issuer is no longer an "obligated person" with respect to the Bonds within the meaning of the Rule, including upon legal defeasance of all Bonds.
- (h) *Benefit of Bondholders*. The Issuer agrees that its undertaking pursuant to the Rule set forth in this Undertaking is intended to be for the benefit of the Bondholders and shall be enforceable by any Bondholder; provided that, the right to enforce the provisions of this Undertaking shall be limited to a right to obtain specific enforcement of the Issuer's obligations hereunder and any failure by the Issuer to comply with the provisions of this Undertaking shall not constitute a default or an event of default with respect to the Bonds.
- (i) Amendments to the Undertaking. Amendments may be made in the specific types of information provided or the format of the presentation of such information to the extent deemed necessary or appropriate in the judgment of the Issuer, provided that the Issuer agrees that any such amendment will be adopted procedurally and substantively in a manner consistent with the Rule, including any interpretations thereof by the SEC, which, to the extent applicable, are incorporated herein by reference. Such interpretations currently include the requirements that (a) the amendment may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature, or status of the Issuer or the type of activities conducted thereby, (b) the undertaking, as amended, would have complied with the requirements of the Rule at the time of the primary offering of the Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances, and (c) the amendment does not materially impair the interests of Bondholders, as determined by parties unaffiliated with the Issuer (such as independent legal counsel), but such interpretations may be changed in the future. If the accounting principles to be followed by the Issuer in the preparing of the Audited Financial Statements are modified, the annual financial information for the year in which the change is made shall present a comparison between the financial statements as prepared on the prior basis and the statements as prepared on the new basis, and otherwise shall comply with the requirements of the Rule, in order to provide information to investors to enable them to evaluate the ability of the Issuer to meet its obligations. A notice of the change in accounting principles shall be sent to the MSRB through EMMA.

IN WITNESS WHEREOF, the Issuer has caused this Undertaking to be executed by its authorized officer.

		LANSING BOARD OF WATER AND LIGHT
		Ву
		Its: Chief Financial Officer
Dated:	, 2017	

EXHIBIT A CONTINUING DISCLOSURE UNDERTAKING TABLES IN THE OFFICIAL STATEMENT TO BE UPDATED ANNUALLY

The Lansing Board of Water and Light will update the numerical financial information and operating data included in the following Official Statement Tables for the current year:

THE ELECTRIC UTILITY:

Power Requirements:

Electric Utility – Power Availability, Sales and Losses in MWh;

Customers:

Electric Utility – Average Number and Percent of Customers by Classification;

Ten Largest Customers:

Electric Utility – Ten Largest Customers;

Rates and Charges:

Electric Utility – Total Estimated Monthly Billing;

Electric Sales:

Electric Utility - Amount in MWh and Percent of Sales by Customer Classification; and

Electric Revenues:

Electric Utility - Amount and Percent of Revenues by Customer Classification.

THE WATER UTILITY:

Service Area and Customer Base:

Water Utility - Average Number and Percent of Water Customers by Classification;

Ten Largest Customers:

Water Utility - Ten Largest Water Customers;

Rates and Charges:

Water Utility - Monthly Basic Service Charge by Water Meter Size; and

Water Revenues:

Water Utility - Amount and Percent of Water Sales by Customer Classification.

THE STEAM UTILITY:

General:

Steam Utility - Average Number and Percent of Customers by Classification;

Rates and Charges:

Steam Utility - Historic and Existing Rates by Customer Classification;

Steam Revenues:

Steam Utility - Amount and Percent of Steam Revenues as Billed by Customer Classification; and

Ten Largest Customers:

Steam Utility - Ten Largest Steam Customers.

THE CHILLED WATER UTILITY:

Service Area and Customer Base:

Chilled Water Utility - Number of Service Leads and Volume in Thrs by Classification;

Rates and Charges:

Chilled Water Utility - Historic and Existing Rates;

Chilled Water Revenues:

Chilled Water Utility - Chilled Water Revenues by Classification; and

Chilled Water Customers by Volume and Revenues:

Chilled Water Utility - Chilled Water Customers by Volume and Revenues.

SYSTEM FINANCIAL INFORMATION:

Historical and Projected Operating Cash Flows and Debt Service Coverage.



Appendix H

BOOK-ENTRY ONLY SYSTEM

The information in this appendix has been furnished by DTC. No representation is made by the BWL, Bond Counsel, the Transfer Agent, or the Underwriters as to the completeness or accuracy of such information or as to the absence of material adverse changes in such information subsequent to the date hereof. No attempt has been made by the BWL, Bond Counsel, the Transfer Agent, or the Underwriters to determine whether DTC is or will be financially or otherwise capable of fulfilling its obligations. Neither the BWL nor the Transfer Agent will have any responsibility or obligation to DTC Direct Participants, Indirect Participants or the persons for which they act as nominees with respect to the Bonds, or for any principal or interest payment thereof.

The Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC, as registered owner of the Bonds. So long as Cede & Co., as nominee of DTC, is the registered holder of all of the Bonds, one bond certificate will be issued for the Bonds in the aggregate principal amount thereof and will be deposited with DTC. Purchasers of the Bonds (the "Beneficial Owners") will not receive physical delivery of bond certificates. By purchasing a Bond, a Beneficial Owner shall be deemed to have waived the right to receive a bond certificate, except under the circumstances described herein. For purposes of this Official Statement, so long as all Bonds are immobilized in the custody of DTC, references to Bondowners or holders means DTC or its nominee.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each Beneficial Owner is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co. or such other name as may be requested by an authorized representative of DTC. The deposit of Bonds with DTC and their registration in the name of Cede & Co. or such other nominee do not affect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Bonds are credited, which may or may not be the

Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers. Neither the BWL nor the Transfer Agent is responsible or liable for sending transaction statements or for maintaining, supervising or reviewing such records.

The BWL and the Transfer Agent will recognize DTC or its nominee as the Bondowner for all purposes, including notices and voting. Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Bonds may wish to take certain steps to augment transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Bond documents. For example, Beneficial Owners of Bonds may wish to ascertain that the nominee holding the Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners.

Redemption notices shall be sent to DTC. If less than all of the Bonds within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Bonds unless authorized by a Direct Participant in accordance with DTC's Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the BWL as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal, redemption proceeds, distributions and dividend payments on the Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from the BWL or Transfer Agent, on payable date in accordance with their respective holdings on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with Bonds held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Transfer Agent or the BWL, subject to any statutory or regulatory requires as may be in effect from time to time. Payments of principal, redemption proceeds, distributions and divided payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the BWL or Transfer Agent, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as securities depository with respect to the Bonds at any time by giving reasonable notice to the BWL or the Transfer Agent. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates are required to be printed and delivered to DTC.

The BWL may decide to discontinue use of the system of book-entry only transfers through DTC (or a successor securities depository). In that event, Bond certificates will be printed and delivered to DTC.

The BWL, Bond Counsel, the Transfer Agent, and the Underwriters cannot and do not give any assurances that DTC, the Direct Participants or the Indirect Participants will distribute to the Beneficial Owners of the Bonds (i) payments of principal of or interest on the Bonds, (ii) any document representing or confirming beneficial ownership interests in the Bonds, or (iii) notices sent to DTC or Cede & Co. its nominee, as the registered owner of the Bonds, or that it will do so on a timely basis or that DTC, Direct Participants or Indirect Participants will serve and act in the manner described in this Official Statement. The current "rules" applicable to DTC are on file with the Securities and Exchange Commission, and the current "procedures" of DTC to be followed in dealing with the Participants are on file with DTC.

The information in this appendix concerning DTC and DTC's book-entry system has been obtained from sources that the BWL believes to be reliable, but the BWL takes no responsibility for the accuracy thereof.

Neither the BWL, Bond Counsel, the Transfer Agent nor the Underwriters will have any responsibility or obligation to any Direct Participant, Indirect Participant or any Beneficial Owner or any other person with respect to: (a) the Bonds; (b) the accuracy of any records maintained by DTC or any Direct Participant or Indirect Participant; (c) the payment by DTC to any Participant, or by any Direct Participant or Indirect Participant to any Beneficial Owner of any amount due

with respect to the principal of or interest on the Bonds; (d) the delivery by DTC to any participant, or by and Direct Participant or Indirect Participant to any Beneficial Owner of any notice which is required or permitted under the terms of the authorizing resolution for each issue to be given to Bondholders; (e) the selection of the Beneficial Owners to receive payment in the event of any partial redemption of the Bonds; or (f) any consent given or other action taken by DTC as Bondholder.



\$30,365,000 LANSING BOARD OF WATER AND LIGHT CITY OF LANSING, MICHIGAN UTILITY SYSTEM REVENUE REFUNDING BONDS, SERIES 2017A