#### FINAL OFFICIAL STATEMENT DATED MARCH 26, 2013

NEW ISSUE BOOK-ENTRY ONLY RATINGS\*: Moody's: Aa3
Standard & Poor's: AA-

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 2013A (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 E "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.



# \$21,085,000 LANSING BOARD OF WATER AND LIGHT CITY OF LANSING, MICHIGAN UTILITY SYSTEM REVENUE REFUNDING BONDS, SERIES 2013A

Dated: Date of Delivery Due: July 1, as shown on the inside cover

The Bonds will be issued to provide funds for the purposes of (i) refunding the BWL's Water Supply, Steam and Electric Utility System Revenue Refunding Bonds, Series 2003A (the "2003A Bonds"), dated September 1, 2003, maturing in the years 2014 through and including 2026 (the "2003A Bonds to be Refunded"), on July 1, 2013 (the "Refunding") and (ii) paying costs of issuance of the Bonds. 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 hereinafter defined, derived from the water supply, steam, chilled water and electric 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 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, 2013. The Bonds maturing in the years 2014 through 2023, inclusive, shall not be subject to optional redemption prior to maturity. The Bonds, or portions of the Bonds in multiples of \$5,000 maturing in the years 2024 through 2026, 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, 2023 at par plus accrued interest to the date fixed for redemption.

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. Robert W. Baird & Co. Incorporated, Lansing, Michigan, 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 the DTC in New York, New York on or about April 17, 2013.

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 Wells Fargo Securities

<sup>\*</sup>See "Ratings" herein.

# \$21,085,000 LANSING BOARD OF WATER AND LIGHT CITY OF LANSING, MICHIGAN UTILITY SYSTEM REVENUE REFUNDING BONDS, SERIES 2013A

Due	Principal	Interest	Priced	Cusip	Due	Principal	Interest	Priced	Cusip
July 1	Amount	Rate	To Yield	Number (1)	July 1	Amount	Rate	to Yield	Number (1)
2014	\$ 255,000	2.000%	0.350%	516391BE8	2021	\$ 1,735,000	5.000%	2.160%	516391BM0
2015	1,380,000	3.000	0.480	516391BF5	2022	1,820,000	5.000	2.350	516391BN8
2016	1,425,000	3.000	0.750	516391BG3	2023	1,910,000	5.000	2.540	516391BP3
2017	1,465,000	4.000	0.970	516391BH1	2024	2,000,000	5.000	$2.660^{(2)}$	516391BQ1
2018	1,525,000	4.000	1.270	516391BJ7	2025	2,105,000	5.000	$2.780^{(2)}$	516391BR9
2019	1,585,000	4.000	1.620	516391BK4	2026	2,225,000	5.000	$2.900^{(2)}$	516391BS7
2020	1.655.000	5.000	1.880	516391BL2					

<sup>(1)</sup>Copyright 2013, American Bankers Association, CUSIP data herein are provided by Standard & Poor's CUSIP Service Bureau, a division of The McGraw Hill Companies, Inc. The CUSIP numbers listed above are being provided solely for the convenience of Bondholders only at the time of issuance of the Bonds. Neither the BWL nor the Underwriters make any representation with respect to such numbers or undertake any responsibility for their accuracy now or at any time in the future.

(2) Priced to July 1, 2023 call date.

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 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 City'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

<u>Mayor</u> Virg Bernero

#### **City Council**

President Carol Wood <u>Vice President</u> A'Lynne Boles Robinson

Kathie Dunbar Brian Jeffries Jody Washington

Derrick Quinney Tina Houghton Jessica Yorko

#### LANSING BOARD OF WATER AND LIGHT OFFICIALS

#### **Board of Commissioners**

<u>Chair</u> Sandra Zerkle Vice Chair
Dennis M. Louney

Margaret A. Bossenbery Anthony W. McCloud

Tracy Thomas Cynthia M. Ward

**BWL Administration** 

General Manager
J. Peter Lark

Assistant General Manager and Chief Financial Officer

David J. Price

Susan C. Devon

Executive Director of Strategic Planning and Development

George R. Stojic

Executive Director of Electric Operations

Anthony H. Mullen

Douglas K. Wood

Executive Director of Water Operations and Special Projects

Richard Peffley

General Counsel and Executive <u>Director of Employment Affairs</u>

Brandie Ekren

Lansing Board of Water and Light 1232 Haco Drive Lansing, Michigan 48901 Phone: (517) 702-6000 Fax: (517) 702-6855 www.lbwl.com

PROFESSIONAL SERVICES

Auditor: Plante & Moran, PLLC, East Lansing, Michigan

**Bond Counsel:** Miller, Canfield, Paddock and Stone, P.L.C., Lansing and Detroit, Michigan

Financial Advisor: Robert W. Baird & Co., Traverse City, Michigan

Transfer/Paying/Escrow

**Agent:** U.S. Bank National Association, Lansing, Michigan

Underwriters' Counsel: Dykema Gossett PLLC, Lansing, Michigan

#### **OFFICIAL STATEMENT**

# \$21,085,000 LANSING BOARD OF WATER AND LIGHT CITY OF LANSING, MICHIGAN UTILITY SYSTEM REVENUE REFUNDING BONDS, SERIES 2013A

#### INTRODUCTION

The Bonds are being issued for the purposes of (i) the Refunding and (ii) paying costs of issuance of the Bonds (together with the Refunding, the "Financing").

The City, located in the Counties of Ingham and Eaton, is a municipal corporation of the State, 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, heat, steam and electric utility services of the City.

The Bonds are authorized to be issued pursuant to Act No. 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 September 2, 1999, 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 August 12, 2003, the Ninth 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 May 10, 2011, the Twelfth Supplemental Revenue Bond Resolution adopted January 24, 2012 and the Thirteenth Supplemental Revenue Bond Resolution adopted on January 22, 2013 (collectively, the "Bond Resolution"). U.S. Bank National Association, Lansing, Michigan, currently is Transfer Agent and bond registrar under the Bond Resolution.

Pursuant to the Bond Resolution, all bonds issued and outstanding thereunder (except for certain Junior Lien Bonds previously or subsequently issued as described below) 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 Senior Lien Bonds" below.

#### THE FINANCING

#### **Purpose of the Bonds**

The Bonds are being issued for the purposes of (i) refunding the BWL's 2003A Bonds to be Refunded, on July 1, 2013 and (ii) paying costs of issuance of the Bonds. The 2003A Bonds maturing on July 1, 2013 (the "Outstanding 2003A Bonds") will not be refunded with the proceeds of the Bonds.

#### The Refunding

Proceeds from the sale of the Bonds will be used, together with other moneys transferred by the City at the time of delivery of the Bonds, to establish an escrow fund (the "Escrow Fund") consisting of cash and direct obligations of the United States of America (the "Government Obligations"). The Escrow Fund will be held by U.S. Bank National Association, Lansing, Michigan (the "Escrow Agent") and will be used to pay the principal of and interest on the 2003A Bonds to be Refunded. The Escrow Fund will be held by the Escrow Agent pursuant to an escrow agreement (the "Escrow Agreement") which irrevocably directs the Escrow Agent to take all steps necessary to call the 2003A Bonds to be Refunded on July 1, 2013. The Escrow Fund will be in such amounts so that the cash and the principal and interest payments received on the Government Obligations will be sufficient, without reinvestment, to pay the principal of and interest on the 2003A Bonds to be Refunded on July 1, 2013. Proceeds of the Bonds not being used to refund the 2003A Bonds to be Refunded will be used to pay costs of issuance of the Bonds. Principal and interest on the Outstanding 2003A Bonds maturing on July 1, 2013 are not being refunded with proceeds of the Bonds.

The BWL has retained the services of Causey, Demgen & Moore, Certified Public Accountants, Denver, Colorado, to review the Escrow Fund to verify that it meets the principal, interest and redemption premium requirements of the 2003A Bonds to be Refunded.

#### The 2003A Bonds to be Refunded

The following schedules set forth the principal of, coupons on and redemption prices of the 2003A Bonds to be Refunded that will be paid from the Escrow Fund.

# Lansing Board of Water and Light Principal Amounts, Coupon Rates, Redemption Prices and CUSIP Numbers The 2003A Bonds to be Refunded

<b>Maturity Date</b>	Par Amount	Coupon Rate	<b>Redemption Price</b>	CUSIP*
July 1, 2014	\$ 485,000.00	4,125%	100.00%	51639LDJ1
July 1, 2015	1,625,000.00	4.200%	100.00%	51639LDK8
July 1, 2016	1,695,000.00	4.300%	100.00%	51639LDL6
July 1, 2017	1,765,000.00	4.400%	100.00%	51639LDM4
July 1, 2018	1,845,000.00	4.500%	100.00%	51639LDN2
July 1, 2019	1,925,000.00	4.625%	100.00%	51639LDP7
July 1, 2020	2,020,000.00	4.700%	100.00%	51639LDQ5
July 1, 2021	2,115,000.00	5.000%	100.00%	51639LDR3
July 1, 2022	2,215,000.00	5.000%	100.00%	51639LDS1
July 1, 2023	2,325,000.00	5.000%	100.00%	51639LDT9
July 1, 2024	2,440,000.00	5.000%	100.00%	51639LDV4
July 1, 2025	2,565,000.00	5.000%	100.00%	51639LDV4
July 1, 2026	2,710,000.00	5.000%	100.00%	51639LDW2
	\$25,730,000.00			

<sup>\*</sup>Copyright 2013, American Bankers Association, CUSIP data herein are provided by Standard & Poor's CUSIP Service Bureau, a division of The McGraw Hill Companies, Inc. The CUSIP numbers listed above are being provided solely for the convenience of Bondholders only at the time of issuance of the Bonds. Neither the BWL nor the Underwriters make any representation with respect to such numbers or undertake any responsibility for their accuracy now or at any time in the future.

## **Estimated Sources and Uses of Funds**

## **Estimated Sources of Funds**

Principal Amount of the Bonds	\$ 21,085,000.00
Net Original Issue Premium (Discount)	3,566,586.60
Transfer from the Prior Issue Debt Service Fund	360,487.60
Bond Reserve Account Release (1)	 1,652,119.00
Total Sources	\$ 26,664,193.20
Estimated Uses of Funds	
Deposit to the Current Refunding Fund	\$ 26,339,445.64
Costs of Issuance (2)	188,659.66
Underwriters' Discount	 136,087.90
Total Uses	\$ 26 664 193 20

<sup>(1)</sup> Represents the excess amount above the Bond Reserve Account requirement.
(2) Includes legal, ratings, financial advisory, printing and other miscellaneous costs of issuance.

#### THE BONDS

#### Authorization

The Bonds are being issued by the BWL on parity with the outstanding portion of its Water Supply, Steam and Electric Utility System Revenue Refunding Bonds, Series 2002B ("2002B Bonds"), Outstanding 2003A Bonds, Water Supply, Steam and Electric Utility System Revenue Refunding Bonds, Series 2005A ("2005A Bonds"), 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") and Utility System Revenue Refunding Bonds, Series 2012A (the "Outstanding 2012A Bonds and, together with the Outstanding 2002B, 2003A, 2005A, 2008A and 2011A Bonds, the "Outstanding Senior Lien Bonds") under the provisions of Act 94 and the Bond Resolution.

The Fourth Supplemental Revenue Bond Resolution adopted by the BWL on October 26, 1999 authorized the issuance of the Water Supply, Steam and Electric Utility System Subordinate Lien Revenue Bonds, Series 1999B Bonds (Taxable) (the "1999B Subordinate Lien Bonds"). The Fourth Supplemental Revenue Bond Resolution was amended by the BWL on August 12, 2008 and June 9, 2009 in connection with the issuance of the Water Supply, Steam, Chilled Water and Electric Utility System Subordinate Lien Revenue Refunding Bonds, Series 2009A (Federally Taxable) (the "Outstanding 2009A Subordinate Lien Bonds"), which refunded the 1999B Subordinate Lien Bonds.

#### **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 below) of the System, 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 and other moneys available therefor. Pursuant to Act 94 and the Bond Resolution, the Net Revenues are pledged to the Bonds and the Outstanding Senior Lien Bonds on a parity basis, and there is created a statutory lien thereon which is a first lien on a parity basis. As of February 2, 2013 there were \$370,405,000 aggregate outstanding principal amount of Outstanding Senior Lien Bonds, including the 2003A Bonds to be Refunded and the Outstanding 2003A Bonds, 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 Senior Lien Bonds is senior in priority to the statutory lien on Net Revenues of the System pledged to pay the City's outstanding 2009A Subordinate Lien Bonds, which are the only currently outstanding Junior Lien Bonds (as defined in the Bond Resolution).

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 while any of the 2002B, 2003A and 2005A Bonds are outstanding, the BWL 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 150% of the principal and interest due on the Bonds, the Outstanding Senior Lien Bonds, the Outstanding 2009A Subordinate Lien Bonds and any Additional Bonds (as defined below) 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.

After payment or defeasance in full of the Outstanding 2002B, 2003A and 2005 Senior Lien Bonds, the BWL has covenanted 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 Senior Lien 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 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 (water supply, steam, chilled water and electric) is self-supporting. Rates are set on a cost of service basis.

#### **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 Senior Lien 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 Senior Lien 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 fifty percent (150%) of the maximum amount of principal and interest due in any current or future fiscal year on the Bonds, the Outstanding Senior Lien Bonds and any Additional Bonds outstanding or then being issued.

After payment or defeasance in full of the Outstanding 2002B, 2003A and 2005A Senior Lien Bonds, Additional Bonds of equal standing and priority of lien on the Net Revenues of the System with the Bonds, the Outstanding Senior Lien Bonds and any Additional Bonds then outstanding may be issued provided that the actual or augmented Net Revenues of the System for the fiscal year ending not more than 15 months prior to the sale of 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 Senior Lien 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 the System rates or charges are increased at or prior to the time of the authorizing of the Additional Bonds, the Net Revenues may be augmented by an amount which in the opinion of a Consulting Engineer (as defined in the Bond Resolution) will reflect the effect of the increase had the System's billings during such time been at the increased rates, or (ii) the actual Net Revenues may be augmented by the estimated increase in Net Revenues which in the opinion of the Consulting Engineer will accrue as a result of new customers which have not been serviced during the fiscal year described 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 above or which will be acquired in whole or in part from the proceeds of the Additional Bonds to be issued.

After payment or defeasance in full of the 2002B, 2003A and 2005A Bonds in determining whether Additional Bonds of equal standing and priority of lien on the Net Revenues of the System with the Bonds and the Outstanding Senior Lien Bonds can be issued in compliance with the Bond Resolution, Net Revenues may be augmented as follows, (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, or (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 proceeds of Additional Bonds to be issued.

Based on the opinion of a Consulting Engineer and schedules provided by the BWL's financial advisor, the BWL has determined that the Net Revenues (augmented as described in the preceding paragraph) for the fiscal year ended June 30, 2012 are equal to at least one hundred fifty percent (150%) of the maximum amount of principal and interest due in any current or future fiscal year on the Bonds, the Outstanding Senior Lien Bonds and any Additional Bonds outstanding or then being issued.

Additional Bonds 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, 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 D.

#### **Bond Reserve Account**

The BWL has established a bond reserve account (the "Bond Reserve Account") as required by the Bond Resolution. Until payment or defeasance in full of the Outstanding 2002B, 2003A and 2005A Bonds, the required deposit in the Bond Reserve Account shall be the lesser of (i) the maximum amount of principal and interest due on the Bonds, the Outstanding Senior Lien Bonds and any Additional Bonds in the then current or any subsequent operating year and (ii) ten percent of the aggregate proceeds of the Bonds, the Outstanding Senior Lien Bonds and any Additional Bonds.

After payment or defeasance in full of the Outstanding 2002B, 2003A and 2005A Bonds, the required deposit in the Bond Reserve Account shall be the lesser of (i) the maximum amount of principal and interest due on the Bonds, the Outstanding Senior Lien Bonds and any Additional Bonds in the then current or any subsequent operating year, (ii) one hundred twenty-five percent (125%) of the average annual amount of principal and interest due on the Bonds, the Outstanding Senior Lien Bonds and any Additional Bonds, or (iii) the total of ten percent (10%) of the original aggregate face amount of the Bonds, the Outstanding Senior Lien Bonds and any Additional Bonds, reduced by the net original issue discount, if any; but shall not exceed the amount allowed to be invested at an unrestricted yield pursuant to applicable U.S. Treasury regulations.

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 Senior Lien 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. If Additional Bonds from time to time are issued, each resolution authorizing the Additional Bonds shall provide for additional deposits to the Bonds Reserve Account to be made from the proceeds of the Additional Bonds in an amount that will result in the Bonds Reserve Account being equal to the applicable reserve requirement.

# 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. Alternatively, the BWL 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 BWL may direct.

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 D.

### **Optional Redemption Prior to Maturity**

The Bonds maturing in the years 2014 through 2023, inclusive, shall not be subject to optional redemption prior to maturity. The Bonds, or portions of the Bonds in multiples of \$5,000 maturing in the years 2024 through 2026, 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, 2023 at par plus accrued interest to the date fixed for redemption.

#### **Notice and Manner of Redemption**

Notice of redemption for any Bond shall be given at least thirty (30) days prior to the date fixed for redemption by mail to the registered holder thereof at the address shown on the registration books of the BWL maintained by the U.S. Bank National Association, Lansing, Michigan (the "Transfer Agent"). The Bonds shall be called for redemption in multiples of \$5,000. The Bonds in denominations of more than \$5,000 shall be treated as representing the number of Bonds obtained by dividing the denomination of the Bond by \$5,000 within a maturity. The Bonds may be redeemed in part. In the event of redemption of the Bonds in part, upon surrender of the Bond to be redeemed a new Bond or Bonds in aggregate principal amount equal to the unredeemed portion of the Bond surrendered shall be issued to the registered owner thereof. No further interest payment on the Bonds or portions of the Bonds called for redemption shall accrue after the date fixed for redemption, whether presented for redemption or not, provided the BWL has funds on hand with the Transfer Agent to redeem the same.

#### Registration, Payment and Transfer

The Bonds are issuable only as fully registered Bonds without coupons, and when issued, will be registered in the name of Cede & Co., as nominee for 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 denomination 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 hereinafter defined) of the Bonds. See "THE BONDS – Book-Entry Only System," herein.

The Bonds will be issued in the original aggregate principal amount as shown on the cover. 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, 2013. 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 registered Bonds in the denomination of \$5,000 or multiples thereof not exceeding for each maturity the principal amount of such maturity. 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 Participants and Indirect Participants (both as hereinafter defined), 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.

#### **Book-Entry Only System**

The information in this section 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, its 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 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 DTC, New York, NY will act as securities depository for the Bonds. 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. One fully-registered Bond certificate will be issued for each maturity of the Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

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 m illion 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 actual purchaser of each Bond ("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 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 effect 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.

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. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of the notices be provided directly to them.

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 such 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 City 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).

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 in 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 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 section concerning DTC and DTC's book-entry system has been obtained from sources that the Authority believes to be reliable, but the Authority 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.

#### Transfer Outside Book-Entry Only System

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 ("Record Date") 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 CITY OF LANSING

The City, the capital of the State of Michigan, encompasses an area of approximately 33.9 square miles and has a 2010 Census population of 114,297 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 58.94%, 27.97% and 4.20%, respectively, of the City's 2012 Taxable Valuation, as hereinafter defined. The balance of the City's 2012 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.

#### THE LANSING BOARD OF WATER AND LIGHT

#### **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 the early 1900s 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 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.

# **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 May 2012 and consists of approximately \$367 million in capital expenditures including the cost associated with the new Reo Town Plant. The current plan includes approximately \$274 million of typical capital expenditures not associated with the Reo Town Plant that will be funded through surplus operating revenues. The entire Plan will be funded with surplus revenues and proceeds from bond issues. Currently, there is approximately \$93 million remaining in the construction fund relating to the Reo Town Plant from the Outstanding Series 2011A Bonds. No major changes to the current six-year plan are anticipated for the fiscal year 2014 Plan.

#### **Board of Water and Light Administrators**

J. Peter Lark has been the General Manager of the Lansing Board of Water and Light since 2007.

In his first year, Mr. Lark established the BWL as a State leader in renewable energy and energy conservation. Within a month of taking over the reins, he announced a historic, 21-year agreement to buy electricity generated by landfill gas, a source of renewable energy. In November 2008, thousands of Lansing-area homes began receiving this type of "green" energy. In December 2008, the BWL powered up its first solar array – Michigan's largest – which is now providing solar-generated electricity to its customers.

In 2009, under Mr. Lark's leadership, the BWL replaced its entire steam powered chiller plant with state-of-the-art electric chillers. The BWL is presently constructing gas fired steam generation that will replace the BWL's entire coal-fired steam generation plant. On July 1, 2013, the BWL will add 100 MW of gas-fired electric generation to its portfolio, as well as open a new headquarters for the company.

Mr. Lark is a Member of the Michigan Municipal Electric Association, where he has served as Director, Vice President and President and was presented the MMEA's Public Service Award.

Previously, Mr. Lark was Chairman of the Michigan Public Service Commission. In 2006, he authored "Michigan's 21st Century Electric Energy Plan," a blueprint for Michigan's energy future.

In 2003, Mr. Lark served on the Joint United States - Canada Energy Task Force, established by President George W. Bush and Prime Minister Jean Chrétien to investigate the 2003 blackout.

**Susan Devon** joined the BWL in 2007 and currently serves as Assistant General Manager and Chief Financial Officer. Ms. Devon is currently the project director of the BWL's planned Reo Town Plant. Ms. Devon is responsible for the BWL's financial and administrative operations including finance and planning, budgeting, accounting, library system planning, customer service, human resources, information technology, public relations and diversity, safety, purchasing, warehousing, fleet, and enterprise risk management.

Prior to joining the BWL, Ms. Devon served as the Director of the Regulated Energy Division for the Michigan Public Service Commission where she was responsible for rate proceedings and regulatory oversight of all of Michigan's regulated energy utilities. This included retail natural gas, electric, and steam utility rate cases, natural gas storage and pipeline company rate cases, as well as natural gas and electric power supply, accounting, and depreciation programs. She was also responsible for overseeing Michigan's retail gas and electric choice programs. Ms. Devon was involved in the rate regulation of Michigan's energy utilities for over 28 years and is a Certified Public Account in the State of Michigan.

**Brandie F. Ekren** is the Lansing Board of Water and Light's General Counsel and Executive Director of Personnel Development. She began her BWL career more than eight years ago as an Associate Attorney. During her career with the BWL, she has advised management on a number of business, employment, risk and compliance matters directly impacting the BWL. She reviews all contracts, which include coal supply and transportation agreements, construction, power sales and purchases, consulting and insurance agreements.

Her most recent activities involve contracting and addressing transactional matters surrounding the Reo Town Plant, which range from construction and material procurement to international trade and labor issues.

**Dick Peffley** is the Lansing Board of Water and Light's Executive Director of Water Operations and Special Projects. Mr. Peffley has been with the BWL for over 36 years.

His career achievements include:

- Project Director of the BWL's \$20 million Chilled Water Plant (2008, on time and on budget).
- Headed up the conversion to western coal at the BWL's Erickson and Eckert Power Stations.
- Oversaw control upgrades at both Erickson and Eckert, and the installation of a new electrostatic precipitator at the Erickson plant.

Mr. Peffley is currently the Project Manager of the BWL's planned Reo Town Plant.

**George Stojic** is the Executive Director of Strategic Planning and Development at the Lansing 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 also manages wholesale electric and water sales, expansion planning, and water regulatory compliance. Mr. Stojic joined the BWL in 2007. Prior to his current position; he was the Director of the Operations and Wholesale Markets 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. Mr. Stojic had numerous responsibilities including the Commission's power supply cost recovery and natural gas cost recovery programs.

**Douglas K. Wood** is the Lansing Board of Water and Light's Executive Director of Electric Operations. He began his BWL career more than 28 years ago as an Electric Planning Engineer.

Mr. Wood has held various manager and director positions responsible for electric, water and steam engineering. In 2008, he was named Executive Director of Electric Operations. In these positions, Mr. Wood has overseen the planning, engineering and implementation of 138kV substations, electric transmission and distribution system projects, water pumping and distribution projects, and the operation, maintenance and capital improvements of the BWL steam and electric power plants.

Prior to joining the BWL, he worked at Consumers Energy for five years in various engineer positions in their Power Resources and Planning Department.

Mr. Wood holds a Bachelor's of Science degree in Electrical Engineering, and is a registered Professional Engineer in the State of Michigan.

#### **Labor Relations and Personnel Matters**

During the fiscal year ending June 30, 2012, the BWL employed 680 people, of whom, 335 people were considered general System employees. The balance was considered utility-specific employees with electric, steam and combined water operations employing 249, 13 and 83 people, respectively.

The International Brotherhood of Electric Workers, AFL-CIO, Local Union 352, represents approximately 447 BWL employees. The labor agreement covering these employees expires on October 31, 2016. Remaining BWL employees are non-union.

The BWL has two 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"). See APPENDIX B for more detail.

#### 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 95,800 customers in the greater Lansing area.

The Electric Utility owns one operating hydroelectric generating unit, two coal-fired electric generating facilities, 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 seven units with a combined net generating capacity of 456 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.

In addition to its generating facilities, the Electric Utility maintains 48 miles of transmission lines, 13 substations, 1,196 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") 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 (except as noted below) from 2013 through 2017.

# 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
<u>Year</u>	Per kWh
2013	6.25 cents
2014	6.29 cents
2015	10.14 cents <sup>1</sup>
2016	9.29 cents <sup>1</sup>
2017	6.46 cents

<sup>(1)</sup> Belle River is projected to experience extended outages in 2015 and 2016 for environmental retrofits.. 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 7.8 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 renewed on January 1, 2013. The contract renews automatically 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.

### **Changes in Transmission Arrangements**

ITC, the principal transmission owner in Lower Michigan, is a member of the Midwest 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, a solar installation, and two coal-fired electric generating facilities. The hydroelectric generating unit produces 0.525 MW, 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 has six coal-fired generating units with a combined dependable net capacity of 301 MW. The generating units at the Eckert Station were placed in service between 1954 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 456 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 following table.

# 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. 1	Coal	1958	44.0	34.0
No. 2	Coal	1954	44.0	33.0
No. 3	Coal	1961	47.0	39.0
No. 4	Coal	1964	80.0	67.0
No. 5	Coal	1968	80.0	63.0
No. 6	Coal	1970	80.0	<u>65.0</u>
			375.0	301.0
Erickson Station				
No. 1	Coal	1973	<u>160.7</u>	<u>155.0</u>
Total			<u>535.7</u>	<u>456.0</u>

Source: Lansing Board of Water and Light

#### The Reo Town Plant

The BWL is nearing the completion of its new REO Town Plant, a combined-cycle, natural gas fueled, cogeneration facility. The new facility will produce both steam and electricity for its customers. The plant, being built on the southern edge of the City's REO Town neighborhood, will replace aging coal-fueled generating units at the BWL's Moore Park Steam Plant. When completed in July 2013, the plants two combined-cycle units and auxiliary boiler will produce approximately 960 million pounds of steam annually for the BWL's central steam loop. Each of the combined-cycle units and auxiliary boiler will be capable of producing 150 thousand pounds of steam per hour. The new plant's configuration is designed to meet projected maximum capacity of 300 thousand pounds per hour with any one steam production unit out of service. The plant will also be capable of producing 110 megawatts of electricity and is anticipated to generate at least 420,000 MWh annually by following steam demand and providing energy during the peak summer months. Following several months of design and procurement work, construction of the REO Town Plant began in June of 2011 and is expected to be completed July 2013 at a cost to the BWL of approximately \$182 million. The REO Town Plant is being financed with the proceeds of the Board's Outstanding Series 2011A Bonds. The construction plans for the REO Town plant are projected to be completed as scheduled, on budget, without the need for additional financing.

The BWL contracted with Consumers Energy Company ("CECo") to install a natural gas pipeline to the REO Town Plant. The construction of the gas pipeline has been completed and is ready to be placed into service. The BWL has entered into a transportation agreement with CECo to have firm delivery service to the new plant from CECo. In addition, the BWL has contracted with a consulting firm to provide natural gas procurement services until August 2016. Forward purchases of natural gas will be in accordance with the BWL's Energy Risk Management policy.

This highly efficient, natural gas, state-of-the-art facility, will replace the existing Moore Park coal fuel steam generating units. This switch to natural gas will reduce the BWL's dependency on coal and will reduce greenhouse gas emissions fifty percent (50%) compared to the existing steam generating units. The REO Town Plant will help the BWL achieve its goal for reducing overall greenhouse gas emissions by twenty percent (20%) by the year 2020, surpassing the proposed federal regulations that require a seventeen percent (17%) reduction.

In addition to rate increases implemented in the normal course of business and described herein, the BWL has preapproved rate increases to cover the costs of constructing and operating the new plant. Electric rates were increased by 3.75% on October 1, 2012 and another 3.75% will go into effect on October 1, 2013. Steam rates were increased by 2% on October 1, 2012.

#### **Operating Statistics**

The following tables show the gross generation, net generation, availability factor and net capacity factor for the Eckert and Erickson Stations for the fiscal years ended June 30, 2008 through 2012.

# Lansing Board of Water and Light Electric Utility Eckert Station Operating Statistics Fiscal Years Ended June 30, 2008 through 2012

Gross	Net	Availability	Net Capacity
Generation (MWh) (1)	Generation (MWh) (2)	Factor (%) (3)	Factor (%) (4)
1,903,467	1,753,038	79.9%	59.6%
1,300,060	1,179,120	68.4%	41.6%
1,412,432	1,285,617	76.7%	44.5%
1,576,038	1,424,724	74.4%	52.4%
1,150,862	814,324	80.5%	38.8%
	Generation (MWh) (1) 1,903,467 1,300,060 1,412,432 1,576,038	Generation (MWh)         (1)         Generation (MWh)         (2)           1,903,467         1,753,038           1,300,060         1,179,120           1,412,432         1,285,617           1,576,038         1,424,724	Generation (MWh)         Generation (MWh)         Factor (%)         73           1,903,467         1,753,038         79.9%           1,300,060         1,179,120         68.4%           1,412,432         1,285,617         76.7%           1,576,038         1,424,724         74.4%

<sup>(1)</sup> Annual total of MWh produced at the Eckert Station.

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

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

<sup>(4)</sup> 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, 2008 through 2012

Fiscal				
Year Ended	Gross	Net	Availability	Net Capacity
<u>June 30</u>	Generation (MWh) (1)	Generation (MWh) (2)	Factor (%) (3)	Factor (%) (4)
2008	1,115,889	1,030,479	85.8%	76.0%
2009	1,123,929	1,029,769	94.5%	76.5%
2010	978,442	897,189	84.6%	66.7%
2011	646,574	589,058	57.9%	44.3%
2012	919,127	847,331	86.6%	63.6%

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

#### **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 a 1 year contract with Arch Coal for the purchase of the Utility's coal requirements, approximately 900,000 tons annually. The current price is \$10.95 a ton for 2013. The contract with Arch Coal expires on December 31, 2013. Performance under the contract with Arch Coal is excused under force majeure. Within the current calendar year, the BWL will go through a competitive bid process to secure a coal contract for the future. The BWL is not projecting a significant increase in the cost of coal for the 2014 calendar year.

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 2013 cost to the Electric Utility of \$31.17 per ton plus a fuel surcharge. The contract with Burlington Northern/Canadian National is scheduled to expire on December 31, 2013. Performance under the combined Burlington Northern/Canadian National is excused under force majeure. The contract has a minimum of 900,000 tons per year and 3,000,000 tons over the three year contract. Within the current calendar year, the BWL will go through a competitive bid process to secure a transportation contract for the future. The BWL is not projecting a significant increase in the cost of transportation for the 2014 calendar year.

The BWL also leases 719 railcars. The BWL has one lease with GATX for 589 railcars at a current cost of \$405 per railcar per month and another with General Electric for 130 railcars at a current cost of \$600 per railcar per month. The BWL's obligation to pay the leases with GATX and General Electric Rail is absolute and unconditional. The term of the General Electric lease runs from April 1, 2007 through March 31, 2017, and the term of the GATX lease ran from December 1, 2009 through January 31, 2013. Upon the expiration of the GATX lease the BWL returned 135 railcars to GATX and extended the lease of the remaining 454 railcars for a 12 month period which will be at a reduced rate from \$420 per railcar per month to \$240 per railcar per month. Within the current calendar year the BWL will go through a competitive bid process to secure a railcar lease contract for the future. The BWL is not projecting a significant increase in the cost of railcars for the 2014 calendar year.

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 will be a transportation customer on the CECo natural gas system and will have firm delivery service from CECo. The BWL has contracted with Fellon-McCord to provide natural gas procurement services until August 2016. Forward purchases of natural gas will be in accordance to the BWL's Energy Risk Management Program. The natural gas portion of the Program will be finalized in the 2<sup>nd</sup> quarter of 2013.

#### **Environmental Standards**

Congress enacted the Clean Air Act Amendments of 1990 ("Clean Air Act Amendments") with the intent of improving ambient air quality throughout the United States. One objective of these amendments is to reduce the emissions of sulfur dioxide ("SO<sub>2</sub>") and oxides of nitrogen ("NO<sub>x</sub>") from power plants and other large combustion sources. Two programs under the Clean Air Act Amendments, The Acid Rain Program and the NO<sub>x</sub> Budget were combined into one program known as the Clean Air Interstate Rule ("CAIR"). In 2008, the U.S. Court of Appeals for the D.C. Circuit issued an opinion remanding the CAIR rules to EPA. On July 6,

2011, the EPA finalized a replacement for the CAIR rule and renamed it the Cross-State Air Pollution Rule ("CSAPR"). The CSAPR was to become effective January 1, 2012, however on December 30, 2011, the U.S. Court of Appeals for the D.C. Circuit stayed the CSAPR pending judicial review. On August 21, 2012, the Court vacated the CSAPR and again remanded to the EPA. The CAIR will remain in place pending the outcome of the EPA's third attempt to develop a rule.

Under the CAIR Cap-And-Trade Program, the Electric Utility is expected to have a sufficient allocation of  $SO_2$  and  $NO_x$  allowances to maintain compliance. Under the CSAPR's allocation of fewer allowances, however, the Electric Utility anticipated the need to reduce its  $NO_x$  emissions. Because of the need to reduce  $NO_x$  emissions by the original compliance date of CSAPR on January 1, 2012, the BWL installed a selective non-catalytic reduction ("SNCR") system at Erickson Station to eliminate or minimize the need to purchase additional  $NO_x$  allowances. It is anticipated that the SNCR will be operated when the EPA develops CSAPR's replacement. Once the requirements of the CSAPR are finalized following judicial review, the BWL will determine which units, if any, will be fitted with  $SO_2$  control equipment.  $SO_2$  control is likely to be achieved with a dry sorbent injection system which can be installed much quicker and at a much lower capital cost than the more complex and expensive technology offered by flue gas scrubbers.

On January 2, 2011, EPA's Tailoring Rule took effect requiring New Source Review permitting for greenhouse gases ("GHG"), primarily carbon dioxide ("CO<sub>2</sub>"). This rule also requires the use of Best Available Control Technology ("BACT") for all new or modified sources. At this time it does not appear as though Congress will set GHG limits, so EPA is pursuing Standards of Performance for New Stationary Sources ("NSPS") for electric utilities. The BWL will continue to track all greenhouse gas legislative efforts and other initiatives as well as their potential impact on operations.

In 2005 the EPA established the Clean Air Mercury Rule (the "CAMR"). The United States Court of Appeals in Washington D.C., however, invalidated the CAMR ruling that the EPA did not properly delist utility boilers from section 112 of the Clean Air Act (Maximum Available Control Technology or "MACT" Rules). To address the court's decision, the EPA moved to regulate mercury and other hazardous emissions from electric generating units ("EGUs") by means of new MACT rules for EGUs. On April 16, 2012, the EPA's new EGU MACT, commonly referred to as the Mercury and Air Toxics Standards ("MATS"), became effective. Unless the MATS is blocked or delayed by judicial or congressional action, on April 15, 2015, existing coal fired EGUs must achieve low emission limits for mercury, particulate matter (as a surrogate for toxic non-mercury metals) and hydrogen chloride (as a surrogate for all toxic acid gases); and institute work practice standards (instead of numeric emission limits) for organic air toxics, including dioxins and furans. The BWL sought and has been granted a 1-year extension to April 15, 2016 for the installation of controls under the MATS rule. In addition to the MATS, the Michigan Department of Environmental Quality ("DEQ") adopted its own mercury standard, which also requires compliance in 2015. The DEQ has issued a variance suspending enforcement of its rule and indicated that it intends to rescind its mercury rule as long as the MATS survives judicial challenge. Mercury control equipment has already been installed and is ready for operation at Erickson Station and the BWL is currently evaluating compliance options for the Eckert Station, which could include installation of control equipment or retirement of one or more units.

The Federal Clean Water Act contains requirements relating to the discharge of any pollutant and the environmental impact of cooling water intake structures. These requirements are enforced through a permitting program known as the National Pollutant Discharge Elimination System ("NPDES"). The NPDES permits for both the Eckert and Erickson Stations were renewed in June 2008 and applications for renewal of both permits were timely submitted in 2012 and renewal by the DEQ is anticipated. Both plants continue to operate under their existing permits until new permits are issued. On January 10, 2013, the DEQ issued a draft NPDES permit for public comment for the Reo Town Plant and a final permit could be issued as soon as February 18, 2013.

Under 316(b) of the Clean Water Act, 33 USC §1326, the design and operation of the cooling water intake structures is regulated to minimize impingement and entrainment of aquatic organisms. On April 20, 2011, the EPA's proposed rule governing cooling water intake structures at existing electric generation and manufacturing facilities was published. The final rule is expected by June, 2013. The Erickson Station already has closed cycle cooling in place which will likely be compliant with the new rule. Additional studies will be needed prior to determine the additional steps that need to be taken at Eckert to comply with the proposed 316(b) standards.

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, 2008 through 2012, the Electric Utility produced between 62.22% and 74.34% 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, 2008 through 2012.

# Lansing Board of Water and Light Electric Utility Power Availability, Sales and Losses in MWh Fiscal Years Ended June 30, 2008 through 2012

	Fiscal Year Ended June 30					
	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	
MWh Generated <sup>(1)</sup>		2,210,645 <u>1,060,734</u> 3,271,379	2,183,339 1,126,015 3,309,354	2,010,130 1,041,685 3,051,815	1,889,894 <u>1,147,436</u> 3,037,330	
Less MWh Sold <sup>(3)</sup> Transmission and Distribution Losses		3,181,598 89,781	3,213,991 95,363	2,956,683 95,132	2,948,363 88,967	
Losses as a percentage of MWh Available	2.57%	2.74%	2.88%	3.12%	2.93%	

<sup>(1)</sup> See "Electric Generation" herein.

Source: Lansing Board of Water and Light

The following table sets forth the peak demand, total power requirements and load factor for the fiscal years ended June 30, 2008 through 2012. Peak demand 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.

<sup>(2)</sup> Primarily from Belle River. See "Purchased Power" herein.

<sup>(3)</sup> Includes Power Pool sales through December 2010 and wholesale sales. See "The Power Pool" herein.

### Lansing Board of Water and Light Electric Utility

## Peak Demand, Total Power Requirement and Load Factor Fiscal Years Ended June 30, 2008 through 2012

Fiscal Year	Total Power							
Ended	Peak 1	<u>Demand</u>	<u>Requ</u>	Load				
June 30	MWh	% Change	MWh	% Change	Factor %			
2008	479.130	-7.1%	2,398,802	0.9%	57.0%			
2009	453.588	-5.3%	2,233,962	-6.9%	56.2%			
$2010^{(1)}$	401.687	-11.4%	2,140,425	-4.2%	60.8%			
2011	469.424	16.9%	2,272,466	6.2%	55.3%			
2012	507.396	8.1%	2,277,447	0.2%	51.1%			

<sup>(1)</sup> Fiscal year 2010 weather was 12% colder than normal.

Source: Lansing Board of Water and Light

#### **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, 2008 through 2012.

# Lansing Board of Water and Light Electric Utility Cost of Generated and Purchased Power (1) Fiscal Years Ended June 30, 2008 through 2012

Source	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Generated	\$ 98,418,253	\$ 84,937,022	\$ 84,000,740	\$ 98,366,938	\$ 91,535,285
Purchased:					
Wholesale	234,139	320,756	452,363	1,639,148	1,024,554
Green Power	434,188	2,782,047	6,405,682	6,485,646	6,383,923
Belle River	42,314,395	45,237,570	45,901,174	48,660,680	57,012,657
Total	\$141,400,975	\$133,277,395	\$136,759,959	<u>\$155,152,412</u>	<u>\$155,956,419</u>

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

#### Lansing Board of Water and Light Electric Utility

## Cost of Net Generated and Purchased Power per kWh (1) Fiscal Years Ended June 30, 2008 through 2012

			Cost Per kWh		
Source	2008	2009	<u>2010</u>	<u>2011</u>	2012
Generated	\$0.035	\$0.038	\$0.038	\$0.049	\$0.048
Purchased:					
Wholesale	\$0.039	\$0.028	\$0.029	\$0.042	\$0.034
Green Power-Granger	0.052	0.065	0.069	0.071	0.075
Belle River	0.045	0.045	0.045	0.053	0.055
Average Cost Per kWh	\$0.038	\$0.041	\$0.041	\$0.051	\$0.051

<sup>(1)</sup> 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 70 square miles. The estimated population in the service area is 266,472 persons. By comparison, the City encompasses an area of approximately 33.9 square miles and has a current estimated population of approximately 114,605 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	<b>Expiration Date</b>
Delhi	30 Years	08/01/88	08/01/18
Delta	30 Years	02/15/87	02/15/17
Dewitt	30 Years	11/10/86	11/10/16
Lansing	30 Years	07/22/12	07/22/42
Meridian	30 Years	02/20/89	02/20/19
Watertown	20 Years	04/27/89	04/27/09 (2)
Windsor	30 Years	07/18/86	07/18/16

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

<sup>(2)</sup> The BWL is pursuing an update of the Watertown Township agreement.

#### Customers

The Electric Utility currently serves over 95,800 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, 2008 through 2012.

# Lansing Board of Water and Light Electric Utility Average Number and Percent of Customers by Location Fiscal Years Ended June 30, 2008 through 2012

	Fiscal Year Ended June 30					
Location City Outside City Total	2008	2009	2010	2011	2012	
	60,332	60,103	59,969	59,766	59,461	
	36,048	36,100	36,096	36,236	36,341	
	96,380	96,203	96,065	96,002	95,802	
City Outside City Total	62.60%	62.48%	62.43%	62.25%	62.07%	
	<u>37.40</u>	37.52	37.57	37.75	<u>37.93</u>	
	<u>100.00</u> %	100.00%	100.00%	100.00%	<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, 2008 through 2012

<u> </u>	Fiscal Year Ended June 30					
Classification Residential Commercial	2008	2009	2010	2011	2012	
	83,166	83,005	82,925	82,925	82,823	
	12,933	12,919	12,866	12,806	12,708	
Industrial Total	280	278	274	<u>272</u>	<u>272</u>	
	96,379	96,202	96,065	<u>96,003</u>	<u>95,803</u>	
Residential	86.29%	86.28%	86.32%	86.38%	86.45%	
	13.42	13.43	13.39	13.34	13.26	
Industrial	<u>0.29</u>	<u>0.29</u>	<u>0.29</u>	<u>0.28</u>	<u>0.28</u>	
	100.00%	100.00%	100.00%	100.00%	100.00%	

#### **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, 2012.

### Lansing Board of Water and Light Electric Utility Ten Largest Customers Fiscal Year Ended June 30, 2012

			% of Total		% of Total
<u>Name</u>	Product/Service	Revenue	Revenues (1)	<u>kWh</u>	kWh (2)
General Motors	Automotive Manufacturing	\$21,364,841	7.91%	262,565,972	8.91%
State of Michigan	State Government	8,257,518	3.06	86,255,849	2.93
City of Lansing.	Municipal Government	6,725,237	2.49	48,441,762	1.64
Sparrow Hospital	Hospital	5,725,671	2.12	66,561,864	2.26
Meijer, Inc	Retailing, Warehousing	4,818,777	1.78	52,804,336	1.79
Jackson National	Insurance	3,079,344	1.14	33,365,483	1.13
Auto Owners	Insurance	2,459,353	0.91	24,087,151	0.82
Ingham Regional Medical Center	Hospital	2,399,694	0.89	26,889,901	0.91
City of East Lansing	Municipal Government	2,384,864	0.88	21,287,996	0.72
Liquid Web Inc.	Web Hosting Service	2,268,402	<u>0.84</u>	26,185,165	0.89
		\$59,483,880	22.03%	648,445,479	21.99%

<sup>(1)</sup> City of Lansing, City of East Lansing and State of Michigan totals include Street Lighting and Traffic Signal billings, which include a capital recovery factor on BWL investment in Street Lights and Traffic Signals. Based on total revenues of \$270,007,402 for the fiscal year ended June 30, 2012.

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. 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"). The Energy Cost Adjustment permits the monthly increase or decrease of the energy charge for the cost of fuel used in supplying electricity. In addition, customers are charged monthly Environmental, Renewal Energy, and Energy Optimization Surcharges. Customers are billed monthly. Historic and existing rates and charges by customer classification are set forth in the table below. The BWL has preapproved rates to cover the costs of operating the Reo Town Plant. Electric rates were increased by 3.75% on October 1, 2012, and will be increased by another 3.75% on October 1, 2013.

<sup>(2)</sup> Based on total sales of 2,948,363,718 kWh for the fiscal year ended June 30, 2012.

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

Rate No. 1 - Residential Service	3/1/2008	5/1/2009		3/1/2010		5/1/2010		3/1/2011		3/1/2012	1	10/1/2012	1	0/1/2013
Basic Service Charge/month	\$ 4.76	\$ 5.00	\$	7.50	\$	7.50	\$	7.50	\$	7.50	\$	7.79	\$	8.10
Commodity Charge/kWh Summer Months (June-Oct.) 1st 500 kWh	\$0.0705	\$0.0799	\$	0.0799	\$	0.0799	\$	0.0812	\$	0.0847	\$	0.0879	\$	0.0912
over 500 kWh Winter Months (Nov-May)	\$0.0752	\$0.0847	\$	0.0847	\$	0.0847	\$	0.0861	\$	0.0896	\$	0.0929	\$	0.0964
1st 500 kWh over 500 kWh	\$ 0.0705 \$ 0.0734	\$0.0799 \$0.0829	\$ \$	0.0799 0.0829	\$ \$	0.0799 0.0829	\$ \$	0.0812 0.0842	\$ \$	0.0847 0.0877	\$ \$	0.0879 0.0910	\$	0.0912 0.0945
Environmental Charge/kWh Energy Optimization Surcharge/kWh Renewable Energy Plan Surcharge/Month	\$ - \$ - \$ -	\$ 0.0005 \$ - \$ -	\$ \$	0.0005 0.001853 2.50	\$ \$ \$	0.0025 0.001853 2.50	\$ \$ \$	0.0025 0.001853 2.50	\$ \$ \$	0.0025 0.001853 2.50	\$ \$0 \$	0.0025 0.001853 2.50		0.0025 0.001853 2.50
Rate No. 3 - General Secondary Voltage Service	3/1/2008	5/1/2009		3/1/2010		5/1/2010		3/1/2011		3/1/2012	1	0/1/2012	1	0/2/2012
Basic Service Charge/month	\$ 16.78	\$ 17.20	\$	17.98	\$	17.98	\$	17.98	\$	17.98	\$	18.66	\$	19.38
Commodity Charge/kWh Summer Months (June-Oct.) Winter Months (Nov-May)	\$0.0827 \$0.0796	\$0.0924 \$0.0892	\$	0.0924 0.0892	\$	0.0924 0.0892	\$	0.0939 0.0906	\$	0.0974 0.0941	\$ \$	0.1010 0.0975	\$	0.1048 0.1011
Environmental Charge/kWh Energy Optimization Surcharge/month Renewable Energy Plan Surcharge	\$ - \$ -	\$0.0005 \$ -	\$	0.0005 6.5800	\$	0.0025 6.5800	\$ \$	0.0025 6.5800	\$	0.0025 6.5800	\$ \$	0.0025 6.5800	\$	0.0025 6.5800
per kWh Minimum Charge/month Maximum Charge/month	\$ - \$ - \$ -	\$ - \$ - \$ -	\$ \$ \$	0.0030 3.50 15.00	\$ \$	0.0030 3.50 15.00	\$ \$ \$	0.0030 3.50 15.00	\$ \$	0.0030 3.50 15.00	\$ \$ \$	0.0030 3.50 15.00	\$ \$	0.0030 3.50 15.00
Rate No. 4 - Large General Secondary Voltage Service	3/1/2008	5/1/2009		3/1/2010		5/1/2010		3/1/2011		3/1/2012	1	10/1/2012	1	0/2/2012
Basic Service Charge/month	\$ 35.79	\$ 36.68	\$	38.35	\$	38.35	\$	38.35	\$	38.35	\$	39.80	\$	41.33
Capacity Charge/kW of Max Demand	\$ 9.79	\$ 10.03	\$	10.03	\$	10.03	\$	10.19	\$	10.19	\$	10.58	\$	10.99
Commodity Charge/kWh Summer Months (June-Oct.) Winter Months (Nov-May)	\$0.0441 \$0.0403	\$0.0528 \$0.0489	\$	0.0528 0.0489	\$	0.0528 0.0489	\$	0.0537 0.0497	\$	0.0572 0.0532	\$	0.0592 0.0551	\$	0.0613 0.0571
Reactive Power/kvar	\$0.0089	\$0.0091	\$	0.0091	\$	0.0091	\$	0.0092	\$	0.0092	\$	0.0095	\$	0.0099
Environmental Charge/kWh Energy Optimization Surcharge/month Renewable Energy Plan Surcharge	\$ - \$ -	\$0.0005 \$ -	\$	0.0005 65.78	\$	0.0025 65.78	\$ \$	0.0025 65.78	\$	0.0025 65.78	\$ \$	0.0025 65.78	\$ \$	0.0025 65.78
per kWh Minimum Charge/month	\$ - \$ -	\$ - \$ -	\$ \$	0.0030 3.50	\$ \$	0.0030 3.50	\$ \$	0.0030 3.50	\$ \$	0.0030 3.50	\$ \$	0.0030 3.50	\$ \$	0.0030 3.50
Maximum Charge/month	\$ -	\$ -	\$	15.00	\$	15.00	\$	15.00	\$	15.00	\$	15.00	\$	15.00
Rate No. 5 - Primary Service	3/1/2008	5/1/2009		3/1/2010		5/1/2010		3/1/2011		3/1/2012	1	0/1/2012	1	0/2/2012
Basic Service Charge/month	\$ 89.49	\$ 91.73	\$	95.90	\$	95.90	\$	95.90	\$	95.90	\$	99.53	\$	103.36
Capacity Charge per kW of On-Peak Billing Demand per kW of maximum Demand	\$ 7.94 \$ 2.63	\$ 8.14 \$ 2.70		8.14 2.70		8.14 2.70		8.27 2.74		8.27 2.74	\$	8.58 2.84	\$	8.91 2.95
Commodity Charge/kWh Summer Months (June-Oct.) On-Peak	\$0.0387	\$0.0473	\$	0.0473	\$	0.0473	\$	0.0481	\$	0.0516	\$	0.0534	\$	0.0553
Off-Peak Winter Months (Nov-May) On-Peak	\$0.0350 \$0.0369		\$		\$	0.0435	\$	0.0442	\$	0.0477	\$ \$	0.0494	\$	0.0512
Off-Peak	\$0.0350	\$0.0435	\$	0.0435	\$	0.0435	\$	0.0442	\$	0.0477	\$	0.0494	\$	0.0512
Reactive Power/kvar	\$0.0089	\$0.0091	\$	0.0091	\$	0.0091	\$	0.0092	\$	0.0092	\$	0.0095	\$	0.0099
Environmental Charge/kWh Energy Optimization Surcharge/delivery point Renewable Energy Plan Surcharge/delivery point	\$ - \$ - \$ -	\$ 0.0005 \$ - \$ -	\$ \$ \$	0.0005 461.20 160.00	\$ \$ \$	0.0025 461.20 160.00	\$ \$ \$	0.0025 461.20 160.00	\$ \$	0.0025 461.20 160.00	\$ \$	0.0025 461.20 160.00	\$ \$	0.0025 461.20 160.00

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.

Electric service outside of the Electric Utility's service area is provided by CECo. The rates and charges of the Electric Utility are currently lower than CECo. 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	\$7.50	\$29.76	\$37.26
500	\$7.50	\$56.64	\$64.14
750	\$7.50	\$84.29	\$91.79
1,000	\$7.50	\$111.96	\$119.46

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, 2008 through 2012. 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, 2008 Through 2012

	Fiscal Year Ended June 30						
Classification	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>		
Residential	598,233	570,987	554,129	595,247	580,963		
Commercial	1,201,530	1,182,000	1,155,024	1,173,657	1,165,864		
Industrial	451,338	367,885	350,005	400,615	395,225		
Wholesale (1)	1,355,444	1,018,660	1,113,770	747,962	767,342		
Other	42,360	42,066	41,063	39,202	<u>38,969</u>		
Total	<u>3,648,905</u>	<u>3,181,598</u>	<u>3,213,991</u>	<u>2,956,683</u>	<u>2,948,363</u>		
Classification							
Residential	16.39%	17.95%	17.24%	20.13%	19.70%		
Commercial	32.93	37.15	35.94	39.70	39.54		
Industrial	12.37	11.56	10.89	13.55	13.40		
Wholesale (1)	37.15	32.02	34.65	25.30	26.03		
Other	<u> 1.16</u>	1.32	1.28	1.33	<u>1.32</u>		
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %		

<sup>(1)</sup> 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, 2008 through 2012.

# Lansing Board of Water and Light Electric Utility Amount and Percent of Revenues by Customer Classification Fiscal Years Ended June 30, 2008 through 2012

_	Fiscal Year Ended June 30						
Classification	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>		
Residential	\$ 48,422,858	\$ 49,925,125	\$ 55,332,997	\$ 68,449,659	\$70,965,631		
Commercial	86,704,956	89,848,449	97,338,031	115,752,320	120,829,236		
Industrial	26,429,206	24,854,984	25,846,087	33,551,079	35,072,116		
Wholesale (1)	63,476,738	45,229,387	42,571,604	30,577,827	31,353,982		
Other	10,681,478	10,471,609	10,721,874	11,334,376	11,786,437		
Total	<u>\$235,715,236</u>	<u>\$220,329,554</u>	<u>\$231,810,593</u>	<u>\$259,665,261</u>	<u>\$270,007,402</u>		
Classification							
Residential	20.54%	22.66%	23.87%	26.36%	26.28%		
Commercial	36.78	40.78	41.99	44.58	44.75		
Industrial	11.21	11.28	11.15	12.92	12.99		
Wholesale (1)	26.93	20.53	18.36	11.78	11.61		
Other	4.53	4.75	4.63	4.36	<u>4.37</u>		
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %		

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

#### CERTAIN 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" by certain industrial and commercial 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.

Attempts to promote competition through retail customer choice and wholesale markets are prevalent in many parts of the country. Most states have either not implemented or suspended retail customer choice programs. Instead, the focus in much of the country is on 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

Several large power marketing and independent power producer companies have experienced difficulties as a result of accounting practices that have or could have misled investors or lenders. These difficulties have resulted in loss of stock value, reductions in activities and corporate bankruptcy of power marketers. This has resulted in an increase scrutiny of the financial stability and long-term viability of electric marketers and developers in general, and an associated concern for entities that have long-duration (greater than one year) agreements with electric marketers and developers. The BWL does not have any long-term agreements with a power marketer or developer. The BWL believes that its exposure to this situation 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 recently 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 carve-

out 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 Midwest 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 all six 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. The BWL received approximately \$28.91 million in revenues from these sales in 2012.

The BWL's wholesale portfolio consists of a long-term cost based sale to another Michigan Municipality, fixed price annual sale(s) to other companies, and other seasonal and opportunity sales. The term of the cost base sale is through December, 2015 and includes the recovery of fuel, and fixed and variable O&M costs with a 15% markup. 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 eight 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, which required all Michigan electric utilities to meet certain renewable energy and energy efficiency targets. Starting in 2012, the renewable energy standards are being phased in and require 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 each year is shown below:

	Required Renewable Energy
<u>Year</u>	Portfolio Percentage
2012	2.0%
2013	3.3
2014	5.0
2015	10.0

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, and a solar installation. Collectively, these sources provide approximately 4% 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, the Electric Utility is projected to have sufficient renewable energy credits to meet the standard through 2015.

The Electric Utility is currently exploring options to meet requirements after 2015 through use of biomass fuel and biofuel in its existing generation units, through a purchase power agreement for wind energy, construction of additional solar installations, and through the purchase of qualifying renewable energy credits from other sources and fully expects to comply with both the percentage of renewable energy requirements and the rate limits.

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.

The electric energy reduction goals are shown below:

<u>Year</u>	Percentage Energy Savings
2009	0.30%
2010	0.50
2011	0.75
2012	1.00

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 legislations constrains each electric utility to spend no more than the following percentage of retail revenues in complying with energy savings standards:

<u>Year</u>	Percentage Energy Savings
2009	0.75% of 2007 retail revenue
2010	1.00% of 2008 retail revenue
2011	1.50% of 2009 retail revenue
2012	2.00% of 2010 retail revenue

For each year after 2012, spending is limited to 2.0% of the retail revenue from the 2<sup>nd</sup> year preceding 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 2012 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 are likely to remain important components of the Electric Utility's resource portfolio in future years.

#### **Environmental Factors**

Electric generation, including that of the Electric Utility, is subject to multiple environmental regulations. Federal, state and local laws and regulations governing the environmental impact of these operations are subject to change. These changes may arise from legislative, regulatory and judicial actions. Consequently, there is no assurance that the regulations currently governing existing or contemplated electric generating units will remain in effect, that the units will always be in compliance with future regulations or that the BWL will always be able to obtain all required operating permits. An inability to comply with environmental standards could result in installation of environmental control equipment, reduced operating levels, or the complete shutdown of individual electric generating units.

Combustion of fossil fuels to generate electricity has caused concern among the public, the scientific community, regulators and legislators because of the impact these fuels, especially coal, can have on the environment. Congressional support for increased regulation of air, water and soil contaminants fluctuates over time, but there are a number of legislative and EPA regulations, both proposed and adopted, which will in all likelihood affect the electric utility industry. In particular, the Clean Air Act Amendments seek to improve the ambient air quality throughout the United States with specified deadlines for reducing emissions of various pollutants. Regulatory standards, both proposed and adopted for mercury and other hazardous emissions, for greenhouse gas emissions, SO<sub>2</sub> and NO<sub>x</sub>, fine particulates, and cooling water have created evolving standards which will almost certainly affect the Electric Utility. While the Electric Utility is currently in compliance with applicable environmental regulations, the BWL cannot predict how future, and currently unknown, legislation or rules will impact the operations of the Electric Utility.

#### Issues of General concern to the BWL

Coal Combustion Residuals ("CCRs"), commonly known as coal ash, are the materials remaining after burning coal at electric utilities. CCRs are currently regulated as non-hazardous waste under the Resource Conservation and Recovery Act (RCRA), which regulates both solid waste (Subtitle D) and hazardous waste (Subtitle C). On June 21, 2010, following the 2009 failure of a CCR surface impoundment retaining wall in Kingston, Tennessee, the EPA issued proposed rules that may force changes in how CCRs will be managed in the future. EPA's proposed rules are unusual in that they offer three

possible management options. One option is to manage the waste under the Subtitle C provisions of RCRA as a hazardous waste. The second option is to manage the waste under the Subtitle D provisions as non-hazardous with some additional management restrictions. The third is to manage the waste under a modified Subtitle D program that is somewhat less restrictive that the alternate "D" proposal. All three options would involve changes in operations.

Under the Subtitle C option, surface impoundment would have to cease operations five years from the effective date of the new regulations and be closed under RCRA protocols. Ash designated for disposal would be sent to licensed hazardous waste landfill, of which there is currently only one in Michigan. Disposal costs could increase substantially. Ash that is "beneficially reused" could continue, however this market could shrink substantially because the taint of a hazardous waste designation might be perceived as a liability. Plants may also need to be retrofitted for dry ash handling.

Under the Subtitle D option, surface impoundments would have to be retrofitted with a composite liner or cease receiving CCRs within five years of the effective date of the new regulations. Ground water monitoring would be required. Current disposal arrangements with licensed non-hazardous waste landfills could continue. Ash sales would not be impacted.

The third option, designated as the "D" Prime option by EPA, is the same as the first "D" option except that it allows for continued use of existing surface impoundments until the end of their useful life.

The proposed CCR rule has proven to be controversial and has generated considerable comment. The volume and substance of the comments from stakeholders appears to have delayed the original timetable for EPA's issuance of a final rule. On January 7, 2012, the EPA indicated that it cannot provide a "definitive time for promulgating final regulations and that it needs more time to issue an additional notice of data availability prior to issuing final regulations. To alleviate some of the uncertainty surrounding disposal of CCRs, the BWL is in the process of excavating CCRs from two sites and disposing of the material in licensed non-hazardous waste landfills.

On April 16, 2012, the EPA's new, National Emission Standards for Hazardous Air Pollutants from Coal-and Oil-fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility Generating Units, commonly referred to as the Mercury and Air Toxics Standarts (MATS) became effective. The MATS will require existing coal-fired electric generating units to achieve low emission limits for mercury, particulate matter (as a surrogate for toxic non-mercury metals) and hydrogen chloride (as a surrogate for all toxic acid gases); and institute work practice standards (instead of numeric emission limits) for organic air toxics, including dioxins and furans.

Also of general concern, is the EPA's proposal under 316(b) of the Clean Water Act, 33 USC §1326, to further regulate the design and operation of the cooling water intake structures to minimize impingement and entrainment of aquatic organisms. On April 20 2011, the EPA's proposed rule governing cooling water intake structures at existing electric generation and manufacturing facilities was published. The final rule is expected by June, 2013. The Erickson Station already has closed cycle cooling in place which will likely be compliant with the new rule. Additional studies will be needed prior to determine the additional steps that need to be taken at Eckert to comply with the proposed 316(b) standards.

#### Issues Specific to the Reo Town Project

State and federal air quality regulations required the BWL to obtain a permit to install from the MDEQ before commencing construction of the Reo Town Plant. MDEQ issued this permit (PTI No. 149-10) on December 7, 2010 and a revised permit on August 10, 2011 (PTI No. 149-10A). Construction of the new Plant commenced in June 2011 in accordance with the original permit (PTI 149-10).

#### THE WATER UTILITY

#### General

The Water Utility component of the System was established in 1885 and currently serves more than 54,000 customers. Water is obtained from 134 wells averaging 400 feet in depth with a total hydraulic capacity of approximately 89.2 million gallons per day ("MGD"). During the fiscal year ended June 30, 2012, the average and maximum daily flows were approximately 21.9 MGD and 37.8 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 750 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 22 million gallons.

#### **Lead Service Replacement**

The BWL is in the process of replacing all lead water service lines to be accomplished over a period of ten years. The BWL is in the eighth year of this program. Approximately 2,385 services remain, representing a financial obligation of approximately \$7.6 million. This project is 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 54,000 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. 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	06/30/13 <sup>(1)</sup>
Watertown Township	11/25/25
Lansing Township (Retail)	03/06/32
Lansing Township (Wholesale)	06/28/35
Windsor Township	12/18/31
Alaiedon Township	07/26/29
Dewitt Township	07/14/25
Delta Township (Wholesale)	06/30/35
East Lansing-Meridian Authority (Wholesale).	12/31/14
Bath Township	08/11/28
City of DeWitt	08/08/30

<sup>(1)</sup> Delhi agreement has been temporarily extended pending completion of a new 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, 2008 through 2012.

# Lansing Board of Water and Light Water Utility Average Number and Percent of Water Customers by Classification Fiscal Years Ended June 30, 2008 through 2012

	Fiscal Year Ended June 30						
Classification	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>		
Residential	47,938	48,078	48,282	48,243	48,218		
Commercial	6,800	6,546	6,563	6,541	6,530		
Industrial	<u>94</u>	<u>98</u>	<u>95</u>	<u>92</u>	<u>93</u>		
Total	<u>54,832</u>	<u>54,722</u>	<u>54,940</u>	<u>54,876</u>	<u>54,841</u>		
Classification							
Residential	87.43%	87.86%	87.88%	87.91%	87.92%		
Commercial	12.40	11.96	11.95	11.92	11.91		
Industrial	0.17	0.18	0.17	0.17	0.17		
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %		

#### Lansing Board of Water and Light Water Utility

### Average Number and Percent of Water Customers by Location Fiscal Years Ended June 30, 2008 through 2012

	Fiscal Year Ended June 30					
Location	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	
Inside of City	40,602	40,388	40,461	40,298	40,127	
Outside of City	14,230	14,333	14,479	<u>14,578</u>	<u>14,715</u>	
Total	<u>54,832</u>	<u>54,721</u>	<u>54,940</u>	<u>54,876</u>	<u>54,842</u>	
Location						
Inside of City	74.05%	73.81%	73.65%	73.43%	73.17%	
Outside of City	<u>25.95</u>	26.19	26.35	<u>26.57</u>	26.83	
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, 2012.

#### Lansing Board of Water and Light Water Utility Ten Largest Water Customers Fiscal Year Ended June 30, 2012

			% of Total		% of Total
Name	Principal Product or Service	Revenue	Revenue (2)	<u>ccf</u>	$\operatorname{\underline{ccf}}^{(3)}$
City of Lansing (1)	Municipal Government	\$4,180,127	12.03%	172,682	1.89%
State of Michigan	State Government	523,413	1.51	101,843	1.11
General Motors	Automotive Manufacturing	369,254	1.06	115,540	1.26
Sparrow Hospital	Hospital	367,443	1.06	106,109	1.16
Lansing School District	Education	229,517	0.66	44,433	0.49
Bioport	Medical Vaccines	228,225	0.66	82,911	0.91
DTN Management	Property Management	208,203	0.60	47,364	0.52
Ingham Regional Medical Center	Hospital	190,659	0.55	56,519	0.62
Lansing Housing Commission	Property Management	162,952	0.47	47,870	0.52
Trappers Cove	Property Management	153,587	0.44	<u>55,565</u>	<u>0.61</u>
		\$6,613,379	19.04%	<u>830,836</u>	<u>9.08</u> %

<sup>(1)</sup> City of Lansing includes fire hydrant rental sales of \$1,421,952 with no consumption for the fiscal year ended June 30, 2012

<sup>(2)</sup> Based on total water sales of \$34,737,716 for the fiscal year ended June 30, 2012.

<sup>(3)</sup> Based on total water volume in 100 CF totaling 9,148,940 the fiscal year ended June 30, 2012.

#### **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					
	July 1,	March 1,	May 1,	March 1,	March 1,	March 1,
Meter Size	<u>2006</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
5/8"	\$ 7.03	\$ 7.52	\$ 7.71	\$ 8.90	\$ 10.27	\$ 11.19
3/4"	9.84	10.53	10.79	12.46	14.38	15.67
1"	18.29	19.57	20.06	23.16	26.73	29.14
1 1/2"	40.79	43.65	44.74	51.65	59.61	64.97
2"	71.73	76.75	78.67	90.81	104.81	114.24
3"	161.74	173.06	177.39	204.77	236.34	257.61
4"	288.32	308.50	316.21	365.02	421.30	459.22
6"	648.37	693.70	711.04	820.79	947.34	1,032.60
8"	1,151.87	1,232.50	1,263.31	1,458.30	1,683.14	1,834.62
10"	n/a	n/a	1,974.42	2,279.16	2,630.56	2,867.31

Source: Lansing Board of Water and Light

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

Effective Date	Charge Per ccf
July 1, 2006	\$ 1.68
March 1, 2008	1.80
May 1, 2009	2.13
March 1, 2010	2.24
March 1, 2011	2.35
March 1, 2012	2.56

#### 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	\$11.19	\$12.80	\$23.99
750	11.19	19.20	30.39
1,000	11.19	25.60	36.79
1,250	11.19	32.00	43.19

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, 2008 through 2012.

# Lansing Board of Water and Light Water Utility Total Water Volume in ccf as Billed Fiscal Years Ended June 30, 2008 through 2012

Fiscal		
Year Ended	Water Sales	% Increase
<u>June 30</u>	<u>(ccf)</u>	(Decrease)
2008	10,187,505	0.51
2009	9,488,760	(7.36)
2010	9,173,813	(3.43)
2011	9,347,535	1.89
2012	9,148,940	(2.12)

#### Lansing Board of Water and Light Water Utility

### Total Water Volume in ccf as Pumped and Billed Fiscal Years Ended June 30, 2008 through 2012

		Fiscal Year Ended June 30				
Water Volume	2008	2009	<u>2010</u>	<u>2011</u>	2012	
Pumped	10,875,547	10,499,999	10,043,051	10,347,835	10,342,608	
Billed	10,187,505	9,488,760	9,173,813	9,347,535	9,148,940	
Unaccounted (1)	<u>688,042</u>	<u>1,011,239</u>	<u>869,238</u>	1,090,300	1,193,668	
Unaccounted as a Percent of Pumped	6.33%	9.63%	8.66%	10.44%	11.54%	

<sup>(1)</sup> 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, 2008 through 2012

	Fiscal Year Ended June 30				
Water Volume	2008	<u>2009</u>	<u>2010</u>	<u>2011</u>	2012
Average Daily	22.30	21.0	20.6	21.4	21.9
Peak Daily	41.00	32.0	29.3	33.8	37.8
Peak as a Percent of Average	183.9%	152.4%	142.2%	157.9%	172.6%

#### 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, 2008 through 2012

		Fiscal Year Ended June 30					
Classification	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>		
Residential	3,425,822	3,204,479	3,028,600	3,118,937	3,030,215		
Commercial	3,053,235	2,854,246	2,844,751	2,802,603	2,804,744		
Industrial	921,690	833,683	741,738	734,558	707,777		
Sales for Resale (1)	2,674,111	2,483,705	2,427,303	2,560,019	2,493,560		
Other	112,647	112,647	131,421	131,418	112,644		
Total	10,187,505	<u>9,488,760</u>	<u>9.173,813</u>	<u>9,347,535</u>	<u>9,148,940</u>		
Classification							
Residential	33.63%	33.77%	33.01%	33.37%	33.12%		
Commercial	29.97	30.08	31.01	29.98	30.66		
Industrial	9.05	8.79	8.09	7.86	7.74		
Sales for Resale (1)	26.25	26.18	26.46	27.39	27.26		
Other	<u> 1.11</u>	<u> </u>	1.43	<u> 1.41</u>	1.23		
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %		

<sup>(1)</sup> 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 Volume in ccf as Billed by Location Fiscal Years Ended June 30, 2008 through 2012

	Fiscal Year Ended June 30					
<u>Location</u>	2008	2009	<u>2010</u>	<u>2011</u>	<u>2012</u>	
Inside of City	5,469,557	5,159,088	4,939,955	4,943,903	4,825,145	
Outside of City (1)	<u>4,717,948</u>	4,329,672	<u>4,233,858</u>	4,403,632	4,323,795	
Total	10,187,505	<u>9,488,760</u>	<u>9,173,813</u>	<u>9,347,535</u>	<u>9,148,940</u>	
Location						
Inside of City	53.69%	54.37%	53.85%	52.89%	52.74%	
Outside of City (1)	46.31	45.63	46.15	<u>47.11</u>	47.26	
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	

<sup>(1)</sup> Includes the wholesale sales to Delta Township, Lansing Township and the East Lansing-Meridian Water and Sewer Authority.

#### **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, 2008 through 2012.

# Lansing Board of Water and Light Water Utility Amount and Percent of Water Sales by Customer Classification Fiscal Years Ended June 30, 2008 through 2012

	Fiscal Year Ended June 30						
Classification	2008	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>		
Residential	\$10,817,453	\$ 10.982,204	\$11,495,839	\$12,768,307	\$13,932,164		
Commercial	8,332,206	8,348,257	9,035,747	9,601,749	10,809,779		
Industrial	1,938,423	1,844,139	1,787,386	1,896,931	1,951,933		
Sales for Resale (1)	1,967,461	2,154,086	2,438,198	3,013,873	3,225,126		
Other	3,674,851	3,887,213	4,086,622	4,305,152	4,818,715		
Total	<u>\$26,730,394</u>	<u>\$27,215,900</u>	<u>\$28,843,792</u>	<u>\$31,586,012</u>	<u>\$34,737,716</u>		
Classification							
Residential	40.47%	40.35%	39.86%	40.42%	40.11%		
Commercial	31.17	30.67	31.33	30.40	31.12		
Industrial	7.25	6.78	6.20	6.01	5.62		
Sales for Resale (1)	7.36	7.91	8.45	9.54	9.28		
Other	<u>13.75</u>	<u>14.28</u>	<u>14.17</u>	<u>13,63</u>	<u>13.87</u>		
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %		

<sup>(1)</sup> 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, 2008 through 2012

	Fiscal Year Ended June 30							
Location	2008	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>			
Inside of City	\$18,200,768	\$18,092,927	\$18,820,053	\$19,678,782	\$22,514,327			
Outside of City (1)	8,529,638	9,122,973	10,023,739	11,907,230	12,223,389			
Total	<u>\$26,730,406</u>	<u>\$27,215,900</u>	<u>\$28,843,792</u>	<u>\$31,586,012</u>	<u>\$34,737,716</u>			
Location								
Inside of City	68.09%	66.48%	65.25%	62.30%	64.81%			
Outside of City (1)				37.70				
	31.91	33.52	34.75		35.19			
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %			

<sup>(1)</sup> Includes the wholesale sales to Delta Township, Lansing Township and the East Lansing-Meridian Water and Sewer Authority.

#### 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, 2012, the Steam Utility served approximately 190 customers. The following table sets forth average number and percent of steam customers by classification for the fiscal years ended June 30, 2008 through 2012.

#### **Steam Generation**

The Steam Utility owns and operates the Moores Park Steam Plant which consists of four coal burning steam generation units. The plant has a steam production capacity of 755 Mlbs/hour, and in the fiscal year ending June 30, 2012 produced a total of 729,806 Mlbs of steam. Three of the four steam generation units at the Moores Park facility are more than 56 years old, and the fourth unit is 45 years old. Due to numerous and costly environmental regulations, the Moores Park facility must be retired within a few years. As replacement for aging generation units located at Moores Park, the BWL is building the Reo Town Plant (see "The Reo Town Plant").

Lansing Board of Water and Light
Steam Utility
Average Number and Percent of Customers by Classification
Fiscal Years Ended June 30, 2008 through 2012

		Fise	cal Year Ended June	30	
Classification	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Residential	19	16	13	8	6
Commercial	219	213	206	198	184
Industrial	<u>3</u>	<u>3</u>	<u>_1</u>	_1	<u>_1</u>
Total	<u>241</u>	<u>232</u>	<u>220</u>	<u>207</u>	<u>191</u>
Classification					
Residential	7.88%	6.82%	6.03%	3.86%	3.14%
Commercial	90.87	91.89	93.37	95.65	96.34
Industrial	1.24	1.29	0.60	0.48	0.52
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %

#### **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.

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

Effective Date	9/1/2006	3/1/2008		5/1/2009		5/1/2010	3/1/2011	3/1/2012	10/1/2012
Basic Service Charge/month	\$ 9.45	\$ 10.02	\$	10.27	\$	10.27	\$ 11.19	\$ 12.20	\$ 12.44
Commodity Charge: per 1000 lbs									
Summer Month (June - November)									
1st 200,000 lbs	\$	\$	\$		\$		\$ 12.76	13.91	14.19
over 200,000 lbs	\$ 9.90	\$ 10.52	\$	12.29	\$	12.29	\$ 13.40	\$ 14.61	\$ 14.90
Winter Month (December through May)									
1st 200,000 lbs	\$ 9.52	10.09	*	11.85	*		\$ 12.92	14.08	14.36
over 200,000 lbs	\$ 10.06	\$ 10.66	\$	12.44	\$	12.44	\$ 13.56	\$ 14.78	\$ 15.08
Environmental Charge			\$	0.10	\$	0.30	\$ 0.30	\$ 0.30	\$ 0.30
Steam Rate 2 History - Industrial Steam Service									
Effective Date	9/1/2006	3/1/2008		5/1/2009		5/1/2010	3/1/2011	3/1/2012	10/1/2012
Monthly Rate:									
Demand Charge:									
lb/hrs of contract demand	\$ 1.08	\$ 1.14	\$	1.17	\$	1.17	\$ 1.28	\$ 1.40	\$ 1.43
lb/hrs exceeding contract demand	\$ 0.95	\$ 1.00	\$	1.03	\$	1.03	\$ 1.12	\$ 1.22	\$ 1.24
Commodity Charge: per Mlb	\$ 5.24	\$ 5.55	\$	7.20	\$	7.20	\$ 7.85	\$ 8.56	\$ 8.73
Environmental Charge			\$	0.10	\$	0.30	\$ 0.30	\$ 0.30	\$ 0.30
Steam Rate 5 History - Residential Steam Service									
Effective Date	9/1/2006	3/1/2008		5/1/2009		5/1/2010	3/1/2011	3/1/2012	10/1/2012
Monthly Rate:									
Basic Service charge:	\$ 7.00	\$ 7.42	\$	7.61	\$	7.61	\$ 8.29	\$ 9.04	\$ 9.22
Commodity Charge: per 1000 lbs.									
Summer Months(June - November)									
1st 200,000 lbs	\$	\$ 7.37	\$	9.06	\$	9.06	\$ 9.88	\$ 10.77	\$ 10.99
over 200,000 lbs	\$ 7.35	\$ 7.79	\$	9.49	\$	9.49	\$ 10.34	\$ 11.27	\$ 11.50
Winter Months (December - May)									
Winter Working (Beceimber Way)									
1st 200,000 lbs	\$ 7.05	\$ 7.47	\$	9.17	\$	9.17	\$ 10.00	\$ 10.90	\$ 11.12

Source: Lansing Board of Water and Light

**Environmental Charge (per Mlb)** 

0.10 \$

0.30 \$

0.30 \$

0.30 \$

0.30

#### 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, 2008 through 2012.

# 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, 2008 through 2012

Fiscal Year Ended June 30 Classification 2009 2012 2008 2010 2011 Residential..... 1,749 2,037 1,246 861 416 Commercial..... 427,383 371,355 405,147 402,164 359,358 Industrial ..... 249,825 209,708 178,098 199,255 202.513 Other..... 72,705 21,083 55,908 72,245 71,293 Total ..... 726,443 660,211 606,607 677,508 633,580 Classification Residential..... 0.24% 0.31% 0.21% 0.13% 0.07% Commercial..... 55.36 64.73 61.22 59.80 56.72 Industrial ..... 34.39 31.76 29.36 29.41 31.96 Other..... 10.01 3.19 9.22 10.66 11.25 100.00% <u>100.00</u>% 100.00% 100.00% 100.00% Total .....

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, 2008 through 2012.

# Lansing Board of Water and Light Steam Utility Amount and Percent of Steam Revenues as Billed by Customer Classification Fiscal Years Ended June 30, 2008 through 2012

	Fiscal Year Ended June 30							
Classification	2008	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>			
Residential	\$ 16,249	\$ 19,412	\$ 12,921	\$ 9,057	\$4,936			
Commercial	4,428,301	5,111,454	4,720,039	5,372,879	5,166,204			
Industrial	3,397,943	4,157,146	3,045,061	3,381,722	3,742,269			
Other	854,299	352,947	667,528	980,978	1,124,628			
Total	\$8,696,792	<u>\$9,640,959</u>	<u>\$8,445,549</u>	\$9,744,637	<u>\$10,038,038</u>			
Classification								
Residential	0.19%	0.20%	0.15%	0.09%	0.05%			
Commercial	50.92	53.02	55.89	55.14	51.47			
Industrial	39.07	43.12	36.06	34.70	37.28			
Other	9.82	3.66	<u>7.90</u>	<u>10.07</u>	<u>11.20</u>			
Total	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %	<u>100.00</u> %			

#### **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, 2012.

#### Lansing Board of Water and Light Steam Utility Ten Largest Steam Customers Fiscal Year Ended June 30, 2012

			% of		% of
<u>Name</u>	Principal Product or Service	Revenue	Revenues (1)	Mlbs	Mlbs (2)
General Motors	Automotive Manufacturing	\$3,445,229	34.32%	202,513	31.96%
State of Michigan	State Government	2,454,107	24.45	162,441	25.64
Lansing Comm. College	Education	401,631	4.00	26,910	4.25
City of Lansing	Municipal Government	280,430	2.79	18,480	2.92
LEPFA	Entertainment	224,534	2.24	14,975	2.36
Blue Cross/Blue Shield	Insurance	182,551	1.82	11,640	1.84
Ingham County	Municipal Government	156,833	1.56	10,458	1.65
Boji Group	Real Estate Management	128,052	1.28	8,073	1.27
Christman Company	Real Estate Development	105,179	1.05	6,600	1.04
Lake Trust Credit Union	Financial Institution	87,583	0.87	<u>5,550</u>	0.88
		\$7,466,128	<u>74.38</u> %	<u>467,640</u>	<u>73.81</u> %

<sup>(1)</sup> Based on total steam revenues of \$10,038,038 for the fiscal year ended June 30, 2012.

Source: Lansing Board of Water and Light

#### 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 completely shortly thereafter and is no longer an asset of the BWL.

#### **Service Area and Customer Base**

During the fiscal year ended June 30, 2012, the Chilled Water Utility served 16 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 16 commercial accounts. The following table sets forth the number of service leads and chilled water volume for the fiscal years ended June 30, 2008 through 2012. Chilled water sales are measured in thousand ton hours ("Thrs").

<sup>(2)</sup> Based on total steam sales of 633,580 thousand pounds ("Mlbs") for the fiscal year ended June 30, 2012.

#### Lansing Board of Water and Light Chilled Water Utility

#### Number of Service Leads and Volume in Thrs by Classification Fiscal Years Ended June 30, 2008 through 2012

	Fiscal Year Ended June 30						
	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	2012		
Commercial Customers	14	14	15	16	16		
Sales	9,834	9,210	8,711	10,363	10,140		

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 2003	September 1 <u>2006</u>	March 1 <u>2008</u>	May 1 2009	March 1 <u>2011</u>
Capacity Charge per Thrs Up to 105% of Contract Demand	\$40.64	\$40.64	\$40.64	\$41.66	\$43.74
Over 105% of Contract Demand	\$56.90	\$56.90	\$56.90	\$58.32	\$61.24
Commodity Charger per Thrs	\$0.115	\$0.115	\$0.115	\$0.118	\$0.124

#### **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, 2008 through 2012.

## Lansing Board of Water and Light Chilled Water Utility Chilled Water Revenues by Classification (1) Fiscal Years Ended June 30, 2008 through 2012

Fiscal Year Ended June 30

		1 1500	T T CONT BINGCO CONTO	2 0	
Customer Classification	2008	<u>2009</u>	<u>2010</u>	<u>2011</u>	2012
Residential	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Commercial	4,720,885	4,670,157	4,733,042	5,116,727	5,271,400
Industrial	0	0	0	0	0
Other	0	0	0	0	0
Total	<u>\$4,720,885</u>	<u>\$4,670,157</u>	\$4,733,042	\$5,116,727	\$5,271,400

<sup>(1)</sup> 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, 2012.

### Lansing Board of Water and Light Chilled Water Utility Chilled Water Customers by Volume and Revenues Fiscal Year Ended June 30, 2012

<u>User</u>	Principal Product or Service	<u>Thrs</u>	% Thrs	Revenues	% Revenues
State of Michigan (1)	State Government	8,342,687	81.74%	\$4,731,211	89.56%
Accident Fund/Christman Co	Insurance/Property Mgmt	895,549	8.77	185,463	3.51
MEDC	State Government	217,981	2.14	136,730	2.59
Ingham Co Financial Services	Municipal Government	340,203	3.33	123,244	2.33
River St. Triangle (State Police					
Post)	Property Management	410,140	4.02	106,095	2.01
		10,206,560	100.00%	\$5,282,743	100.00%

<sup>(1)</sup> The State of Michigan has multiple service leads.

Source: Lansing Board of Water and Light

#### SYSTEM FINANCIAL INFORMATION

#### **System Debt**

The following tables set forth the outstanding debt of the BWL as well as the debt service supported by the BWL, including the Bonds described herein, for the fiscal years ending June 30, 2013 through 2041.

#### Lansing Board of Water and Light Outstanding Principal of Senior Lien Debt Fiscal Years Ending June 30, 2013 through 2041 (1)

								Total
	2002B	2003A	2005A	2008A	2011A	2012A	The	Sr. Lien
<u>Year</u>	<b>Bonds</b>	Bonds (2)	<b>Bonds</b>	<b>Bonds</b>	<b>Bonds</b>	<b>Bonds</b>	Bonds (3)	<b>Principal</b>
2013	\$2,410,000	\$465,000	\$2,720,000	\$5,000	\$0	410,000	\$0	\$6,010,000
2014	0	0	5,520,000	5,000	0	605,000	255,000	6,385,000
2015	0	0	0	820,000	5,000	620,000	1,380,000	2,825,000
2016	0	0	0	1,065,000	5,000	5,360,000	1,425,000	7,855,000
2017	0	0	0	1,675,000	5,000	5,065,000	1,465,000	8,210,000
2018	0	0	0	1,745,000	5,000	5,310,000	1,525,000	8,585,000
2019	0	0	0	1,825,000	3,630,000	0	1,585,000	7,040,000
2020	0	0	0	1,905,000	3,815,000	0	1,655,000	7,375,000
2021	0	0	0	1,985,000	3,965,000	0	1,735,000	7,685,000
2022	0	0	0	2,075,000	4,175,000	0	1,820,000	8,070,000
2023	0	0	0	2,170,000	4,395,000	0	1,910,000	8,475,000
2024	0	0	0	2,270,000	4,625,000	0	2,000,000	8,895,000
2025	0	0	0	2,375,000	4,835,000	0	2,105,000	9,315,000
2026	0	0	0	2,485,000	5,070,000	0	2,225,000	9,780,000
2027	0	0	0	2,600,000	8,180,000	0	0	10,780,000
2028	0	0	0	2,725,000	8,590,000	0	0	11,315,000
2029	0	0	0	2,855,000	9,030,000	0	0	11,885,000
2030	0	0	0	2,990,000	9,485,000	0	0	12,475,000
2031	0	0	0	3,135,000	9,965,000	0	0	13,100,000
2032	0	0	0	3,285,000	10,460,000	0	0	13,745,000
2033	0	0	0	0	14,435,000	0	0	14,435,000
2034	0	0	0	0	15,155,000	0	0	15,155,000
2035	0	0	0	0	15,915,000	0	0	15,915,000
2036	0	0	0	0	16,710,000	0	0	16,710,000
2037	0	0	0	0	17,545,000	0	0	17,545,000
2038	0	0	0	0	18,425,000	0	0	18,425,000
2039	0	0	0	0	19,435,000	0	0	19,435,000
2040	0	0	0	0	20,505,000	0	0	20,505,000
2041	0	0	0	0	21,635,000	0	0	21,635,000
Total	\$2,410,000	\$ 465,000	\$8,240,000	\$39,995,000	\$250,000,000	<u>\$17,370,000</u>	21,085,000	\$339,565,000

<sup>(1)</sup> Amounts shown for each fiscal year ending June 30<sup>th</sup> include principal due on the following day, which is July 1 of the next fiscal year.

<sup>(2)</sup> Does not include the 2003A Bonds to be Refunded.

<sup>(3)</sup> The Bonds described herein.

#### Lansing Board of Water and Light Outstanding Principal of All Debt Fiscal Years Ending June 30, 2013 through 2041 (1)

	Total	2009A	
	Sr. Lien	Subordinate	Total
Year	<u>Principal</u>	Lien Principal	<u>Principal</u>
2013	\$6,010,000	\$7,375,000	\$13,385,000
2014	6,385,000	7,770,000	14,155,000
2015	2,825,000	8,185,000	11,010,000
2016	7,855,000	3,030,000	10,885,000
2017	8,210,000	0	8,210,000
2018	8,585,000	0	8,585,000
2019	7,040,000	0	7,040,000
2020	7,375,000	0	7,375,000
2021	7,685,000	0	7,685,000
2022	8,070,000	0	8,070,000
2023	8,475,000	0	8,475,000
2024	8,895,000	0	8,895,000
2025	9,315,000	0	9,315,000
2026	9,780,000	0	9,780,000
2027	10,780,000	0	10,780,000
2028	11,315,000	0	11,315,000
2029	11,885,000	0	11,885,000
2030	12,475,000	0	12,475,000
2031	13,100,000	0	13,100,000
2032	13,745,000	0	13,745,000
2033	14,435,000	0	14,435,000
2034	15,155,000	0	15,155,000
2035	15,915,000	0	15,915,000
2036	16,710,000	0	16,710,000
2037	17,545,000	0	17,545,000
2038	18,425,000	0	18,425,000
2039	19,435,000	0	19,435,000
2040	20,505,000	0	20,505,000
2041	21,635,000	0	21,635,000
Total	<u>\$339,565,000</u>	\$26,360,000	<u>\$365,925,000</u>

<sup>(1)</sup> Amounts shown for each fiscal year ending June 30<sup>th</sup> include principal due the following day, which is July 1 of the next fiscal year.

### Lansing Board of Water and Light Total Senior Lien Debt Service Fiscal Years Ending June 30, 2013 through 2041 (1)

								Total
	2002B	2003A	2005A	2008A	2011A	2012A	The	Sr. Lien
<u>Year</u>	<b>Bonds</b>	Bonds (2)	<u>Bonds</u>	<u>Bonds</u>	<u>Bonds</u>	<u>Bonds</u>	Bonds (3)	<u>Debt Service</u>
2013	\$2,500,375	\$1,096,330	\$3,132,000	\$1,947,419	\$12,809,200	\$1,426,522	\$194,199	\$23,106,045
2014	0	0	5,796,000	1,947,262	12,809,200	1,428,500	1,199,750	23,180,712
2015	0	0	0	2,762,100	12,814,200	1,425,350	2,319,650	19,321,300
2016	0	0	0	2,978,400	12,814,050	6,146,750	2,323,250	24,262,450
2017	0	0	0	3,545,800	12,813,900	5,583,750	2,320,500	24,263,950
2018	0	0	0	3,548,800	12,813,750	5,575,500	2,321,900	24,259,950
2019	0	0	0	3,559,000	16,438,600	0	2.320,900	19,997,600
2020	0	0	0	3,547,750	16,442,100	0	2,327,500	22,317,350
2021	0	0	0	3,532,500	16,458,575	0	2,324,750	22,315,825
2022	0	0	0	3,523,250	16,470,325	0	2,323,000	22,316,575
2023	0	0	0	3,514,500	16,481,575	0	2,322,000	22,318,075
2024	0	0	0	3,506,000	16,491,825	0	2,316,500	22,314,325
2025	0	0	0	3,497,500	16,495,975	0	2,321,500	22,314,975
2026	0	0	0	3,488,750	16,489,225	0	2,336,250	22,314,225
2027	0	0	0	3,479,500	19,345,725	0	0	22,825,225
2028	0	0	0	3,474,500	19,346,725	0	0	22,821,225
2029	0	0	0	3,468,250	19,357,225	0	0	22,825,475
2030	0	0	0	3,460,500	19,360,725	0	0	22,821,225
2031	0	0	0	3,456,000	19,366,475	0	0	22,822,475
2032	0	0	0	3,449,250	19,371,000	0	0	22,820,250
2033	0	0	0	0	22,823,000	0	0	22,823,000
2034	0	0	0	0	22,821,250	0	0	22,821,250
2035	0	0	0	0	22,823,500	0	0	22,823,500
2036	0	0	0	0	22,822,750	0	0	22,822,750
2037	0	0	0	0	22,822,250	0	0	22,822,250
2038	0	0	0	0	22,825,000	0	0	22,825,000
2039	0	0	0	0	22,821,625	0	0	22,821,625
2040	0	0	0	0	22,822,700	0	0	22,822,700
2041	0	0	0	0	22,824,925	0	0	22,824,925
Total	<u>\$2,500,375</u>	<u>\$1,096,330</u>	<u>\$8,928,000</u>	<u>\$65,687,031</u>	<u>\$530,197,375</u>	<u>\$21,586,372</u>	<u>\$29,271,649</u>	<u>\$659,267,132</u>

<sup>(1)</sup> Amounts shown for each fiscal year ending June 30<sup>th</sup> include principal due the following day, which is July 1 of the next fiscal year.

<sup>(2)</sup> Does not include the 2003A Bonds to be Refunded.

<sup>(3)</sup> The Bonds described herein.

### Lansing Board of Water and Light Total Debt Service Fiscal Years Ending June 30, 2013 through 2041 (1)

	Total	2009A	
	Sr. Lien	Subordinate	Total
Year	<u>Debt Service</u>	<b>Bonds</b>	Debt Service
2013	\$23,106,045	\$8,782,624	\$31,888,669
2014	23,180,712	8,783,799	31,964,511
2015	19,321,300	8,783,881	28,105,181
2016	24,262,450	3,191,802	27,454,252
2017	24,263,950	0	24,263,950
2018	24,259,950	0	24,259,950
2019	19,997,600	0	19,997,600
2020	22,317,350	0	22,317,350
2021	22,315,825	0	22,315,825
2022	22,316,575	0	22,316,575
2023	22,318,075	0	22,318,075
2024	22,314,325	0	22,314,325
2025	22,314,975	0	22,314,975
2026	22,314,225	0	22,314,225
2027	22,825,225	0	22,825,225
2028	22,821,225	0	22,821,225
2029	22,825,475	0	22,825,475
2030	22,821,225	0	22,821,225
2031	22,822,475	0	22,822,475
2032	22,820,250	0	22,820,250
2033	22,823,000	0	22,823,000
2034	22,821,250	0	22,821,250
2035	22,823,500	0	22,823,500
2036	22,822,750	0	22,822,750
2037	22,822,250	0	22,822,250
2038	22,825,000	0	22,825,000
2039	22,821,625	0	22,821,625
2040	22,822,700	0	22,822,700
2041	<u>22,824,925</u>	0	22,824,925
Total	<u>\$659,267,132</u>	<u>\$29,542,106</u>	\$688,809,238

<sup>(1)</sup> Amounts shown for each fiscal year ending June 30<sup>th</sup> include principal due the following day, which is July 1 of the next fiscal year.

#### 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, 2009 through 2012 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, 2013 through 2017. 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.

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# Lansing Board of Water and Light Historic Operating Cash Flow and Debt Service Coverage Fiscal Years Ended June 30, 2009 Through 2012

		<u>2009</u> (1)		<u>2010</u> (1)		<b>2011</b> (1)		<u>2012</u> (1)
Operating Revenues (2)		27.217.000		20.042.502		24 50 5 042		0.4. = 0.= = 4.5
Water	\$	27,215,900	\$	28,843,792	\$	31,586,012	\$	34,737,716
Electric		220,200,316		231,810,593		259,665,261		270,007,402
Steam		9,640,959		8,445,549		9,744,637		10,038,038
Chilled Water		4,670,157		4,773,042		5,116,727		5,271,400
Total Operating Revenues	\$	261,727,332	\$	273,872,976	\$	306,112,637	\$	320,054,556
Operating Expenses								
Production	\$	154,055,211	\$	157,011,811	\$	175,948,993	\$	179,175,851
Transmission and distribution		14,159,236		13,382,010		13,921,732		15,480,996
Administrative and general		50,093,424		60,271,297		62,690,708		61,061,810
Depreciation and impairment		41,437,632		29,664,302		30,098,723		30,854,100
Total Operating Expenses	\$	259,745,503	\$	260,329,420	\$	282,660,156	\$	286,572,757
Operating Income (Loss)	\$	1,981,829	\$	13,543,556	\$	23,452,481	\$	33,481,799
Non-Operating Revenues (Expenses)								
Investment income	\$	3,567,772	\$	1,521,483	\$	(33,380)	\$	2,405,773
Other income	_	14,292,802	_	5,196,043	_	812,835	-	3,558,624
System capacity fee		9,332,685		9,220,856		9,258,007		9,220,495
Bonded debt interest expense		(9,174,755)		(8,093,536)		(7,388,739)		(6,966,835)
Amortization-Central Utilities Complex		(5,045,000)		(5,926,370)		(6,714,059)		(6,872,715)
Payment in lieu of taxes (3)		(10,293,071)		(10,523,512)		(11,732,538)		(12,169,097)
Other interest expense		(55,286)		(10,633)		(10,721)		(10,433)
<b>X</b> .	ф	1.000.070	ф	4 007 007	ф	7.642.006	ф	22 647 611
Net Income (Loss)	\$	4,606,976	\$	4,927,887	\$	7,643,886	\$	22,647,611
Add:								
Depreciation	\$	41,437,632	\$	29,664,302	\$	30,098,723	\$	30,854,100
Interest on long-term debtrevenue bonds		9,174,755		8,093,536		7,388,739		6,966,835
Interest on long-term debtnotes		55,286		10,633		10,721		10,433
Amortization of deferred costs		-		-		-		-
Gain on defeasance of bonds				<del>-</del>			_	
Total Additons/ Deductions	\$	50,667,673	\$	37,768,471	\$	37,498,183	\$	37,831,368
NET INCOME AVAILABLE FOR DEBT SERVICE	\$	55,274,649	\$	42,696,358	\$	45,142,069	\$	60,478,979
Debt Service Requirements	ф		di di		ф		ф	
1994A Bonds	\$	2 502 460	\$	-	\$	1.007.705	\$	-
1999A Bonds		2,583,460		2,572,785		1,087,785		-
1999B Bonds (Jr. Lien)		5,418,330		-		-		-
2002A Bonds		1,430,188		1,432,413		1,434,113		924,984
2002B Bonds		2,428,999		2,448,719		2,456,469		2,489,294
2003A Bonds		1,707,741		1,709,241		1,708,679		1,711,479
2005A Bonds		601,350		601,350		2,091,350		3,136,750
2008A Bonds		1,942,569		1,942,569		1,942,569		1,947,569
2009A Refunding Bonds (Jr. Lien)		-		8,781,767		8,781,267		8,781,424
2011A Bonds Total	\$	16,112,637	\$	19,488,844	\$	19,502,232	\$	18,991,500
ıotai	φ	10,112,037	Φ	17,700,077	Ф	17,304,434	Ψ	10,771,300
Senior Lien Debt Service Coverage		5.17x		3.99x		4.21x		5.92x
Total Debt Service Coverage		3.43x		2.19x		2.31x		3.18x

<sup>(1)</sup> Actual.

<sup>(2)</sup> This information was obtained from the Consolidated Financial Statements of the Board and includes eliminations between utilities of certain operating revenues.

<sup>(3)</sup> The payment in lieu of taxes equals 4% of revenue.

### Lansing Board of Water and Light Projected Operating Cash Flow and Debt Service Coverage Fiscal Years Ending June 30, 2013 Through 2017

		Projected 2013		Projected 2014		Projected 2015		Projected 2016		Projected 2017
Operating Revenues (1)										
Water	\$	37,884,810	\$	41,399,095	\$	45,228,947	\$	48,948,329	\$	52,025,914
Electric		270,627,941		295,998,715		303,866,528		320,984,234		329,512,897
Steam		13,448,829		14,479,190		16,605,142		17,534,257		18,530,789
Chilled Water		5,291,710	_	5,465,022		5,599,872		5,788,562	_	5,951,902
Total Operating Revenues	\$	327,253,290	\$	357,342,022	\$	371,300,489	\$	393,255,382	\$	406,021,502
Operating Expenses (2)										
Production	\$	184,905,713	\$	197,407,970	\$	198,870,224	\$	209,534,461	\$	214,758,717
Transmission and distribution		16,980,466		18,128,587		18,262,871		19,242,201		19,721,960
Administrative and general		60,074,543		64,136,437		64,611,512		68,076,247		69,773,570
Depreciation and impairment	_	32,857,650	_	33,851,759	_	42,508,870	_	43,077,031	_	43,499,322
Total Operating Expenses	\$	294,818,372	\$	313,524,753	\$	324,253,477	\$	339,929,940	\$	347,753,569
Operating Income (Loss)	\$	32,434,918	\$	43,817,269	\$	47,047,012	\$	53,325,442	\$	58,267,933
Non-Operating Revenues (Expenses)										
Investment income (3)	\$	1,683,710	\$	1,099,259	\$	2,186,457	\$	3,300,000	\$	3,340,000
Other income (3)		472,045		182,095		182,095		182,095		182,095
System capacity fee (3)		9,221,755		9,222,989		9,223,075		3,351,392		-
Bonded debt interest expense		(6,247,193)		(18,009,580)		(17,230,469)		(16,659,353)		(15,971,059)
Amortization-Central Utilities Complex		(7,375,000)		(7,770,000)		(8,185,000)		(3,030,000)		-
Payment in lieu of taxes (4)		(16,165,609)		(18,119,558)		(18,815,141)		(20,181,697)		(20,564,318)
Other interest expense	_	(27,406)	-	(37,768)		(72,136)		(67,919)		(46,272)
Net Income (Loss)	\$	13,997,220	\$	10,384,706	\$	14,335,893	\$	20,219,960	\$	25,208,379
Add:										
Depreciation	\$	32,857,650	\$	33,851,759	\$	42,508,870	\$	43,077,031	\$	43,499,322
Interest on long-term debtrevenue bonds		6,247,193		18,009,580		17,230,469		16,659,353		15,971,059
Interest on long-term debtnotes		27,406		37,768		72,136		67,919		46,272
Amortization of deferred costs		-		-		-		-		-
Gain on defeasance of bonds										
Total Additons/ Deductions	\$	39,132,249	\$	51,899,107	\$	59,811,475	\$	59,804,303	\$	59,516,653
NET INCOME AVAILABLE FOR DEBT SERVICE	\$	53,129,469	\$	62,283,813	\$	74,147,368	\$	80,024,263	\$	84,725,032
Debt Service Requirements										
1994A Bonds	\$	-	\$	-	\$	-	\$	-	\$	-
1999A Bonds		-		-		-		-		-
1999B Bonds (Jr. Lien)		-		-		-		-		-
2002A Bonds		-		-		-		-		-
2002B Bonds		2,500,375		-		-		-		-
2003A Bonds		1,096,330		-		-		-		-
2005A Bonds		3,132,000		5,796,000		-		-		-
2008A Bonds		1,947,419		1,947,263		2,762,100		2,978,400		2,978,400
2009A Refunding Bonds (Jr. Lien)		8,782,624		8,783,799		8,783,881		3,191,802		3,191,802
2011A Bonds (5)		-		12,809,200		12,814,200		12,813,900		12,813,900
2012A Refunding Bonds		1,426,522		1,428,500		1,425,350		6,146,750		6,146,750
2013A Refunding Bonds (6)	_	194,199	_	1,199,750	_	2,319,650	_	2,323,250	_	2,320,500
Total	\$	19,079,469	\$	31,964,512	\$	28,105,181	\$	27,454,102	\$	27,451,352
Senior Lien Debt Service Coverage		5.16x		2.69x		3.84x		3.30x		3.49x
Total Debt Service Coverage		2.78x		1.95x		2.64x		2.91x		3.09x

<sup>(1)</sup> Assumes a 2% increase in electric rates each year.

Assumes a 9% increase in water rates through 2015, and 6% for 2016 - 2017.

Assumes a 9% increase in steam rates through 2014, and 5% increases for 2015 - 2018

Assumes a 2% increase in chilled water rates each year.

<sup>(2)</sup> Operating expenses, excluding depreciation, are assumed to grow 3% annually.

 $<sup>\</sup>hbox{(3) Non-operating revenues are not assumed to change.}\\$ 

<sup>(4)</sup> The payment in lieu of taxes equals 5% of revenue.

<sup>(5)</sup> Excludes estimated capitalized interest.

<sup>(6)</sup> The Bonds described herein.

#### PENSION AND RETIREMENT SYSTEMS

The information on the following pages relating to the BWL's retirement plans is an excerpt from Note 8 of the BWL's June 30, 2012 Audited Financial Statements:

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").

#### **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.

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The Defined Benefit Plan, by resolution of the Board of Commissioners, was closed to employees hired subsequent to December 31, 1996, and the Defined Contribution Plan was established for employees hired after December 31, 1996. Effective December 1, 1997, all active participants in the Defined Benefit Plan were required to make an irrevocable choice to either remain in the Defined Benefit Plan 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 the Defined Benefit Plan, which were rolled into their accounts in the new 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.

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.

A participant's interest is fully vested when the participant has been credited with seven years of vesting service. The Defined Benefit Plan provides for an annual benefit upon normal retirement equal to the total number of years of credited service multiplied by 1.8 percent of the highest annual pay during the last 10 years of service, paid in equal monthly installments.

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, 2012 and 2011.

Basis of Accounting - The Defined Benefit Plan's financial statements are prepared using the accrual method of accounting in accordance with Governmental Accounting Standards Board (GASB) Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans. Benefits are recognized when due and payable in accordance with the terms of the Defined Benefit Plan.

**Investment Valuation and Income Recognition** - The Defined Benefit Plan investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price. Investments that do not have an established market are reported at estimated fair values.

Funding Policy and Annual Pension Cost - The BWL's funding policy provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are designed to accumulate sufficient assets to pay benefits when due. The normal cost and amortization payment for the years ended June 30, 2012, 2011, and 2010 were determined using an attained age projected unit credit actuarial funding method. No transition adjustments were required upon implementation of Governmental Accounting Standards Board Statement No. 27, Accounting for Pensions by State and Local Government Employers. Overfunded actuarial accrued liabilities were amortized as a level dollar reduction of contributions over a period of 15 years in 2012, 2011, and 2010.

Regulatory Status - The Defined Benefit 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.

The annual pension cost was determined as part of an actuarial valuation of the Defined Benefit Plan as of February 28, 2012, 2011, and 2010. Significant actuarial assumptions used in determining the annual pension cost include (a) rate of return on the investment of present and future assets of 7.5 percent in 2012, 2011, and 2010, compounded annually, (b) projected salary increases ranging from 5.0 to 11.0 percent in 2012, 2011, and 2010, compounded annually, depending on age, attributable to inflation, and (c) the assumption that benefits will not increase after retirement.

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 cost of living adjustments. 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.

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

The pension cost for the three most recent years is as follows:

	 2012	 2011	2010
Annual pension cost	\$ -	\$ 85,652	\$ 2,109,167
Percentage of APC contributed	100%	100%	100%
Net pension obligation	_	_	_

Employer contributions were made in accordance with contribution requirements determined by an actuarial valuation of the Defined Benefit Plan and consisted of the following:

		2012		2011	2010
Normal cost Amortization of the (overfunded)/	\$	477,418	\$	360,763	\$ 411,434
underfunded actuarial accrued liability	_	-	_	(281,087)	1,550,582
Total target contribution		477,418		79,676	1,962,016
Interest Factor		1.0750		1.0750	1.0750
Annual required contribution	\$	-	\$	85,652	\$ 2,109,167

Based on the overfunded status of the Defined Benefit Plan through June 30, 2009, no employer contributions were required.

Three-year Trend Information - Assets available at market, actuarial accrued liability - projected unit cost method (AAL), unfunded actuarial accrued liability (UAAL), and negative UAAL indicate a funding excess.

Schedule of Funding Progress (Unaudited - Required Information) (in thousands)

									UAAL as a
	Α	ctuarial							Percentage
		Asset				Funded	C	overed	of Covered
Valuation Date	\	Values	_	AAL	 UAAL	Ratio	F	ayroll	Payroll
2/28/2009	\$	64,844	\$	79,558	\$ 14,714	81.51%	\$	3,089	476.3
2/28/2010		78,244		75,577	(2,667)	103.53%		2,660	(100.3)
2/28/2011		85,587		74,292	(11,295)	115.20%		2,398	(471.0)
2/28/2012		79,142		72,302	(6,840)	109.46%		2,101	(325.6)

UAAL - Unfunded Actuarial Accrued Liability, negative UAAL indicates a funding excess

AAL - Actuarial Accrued Liability (Projected Unit Credit Accrued Liability)

#### 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.

During the years ended June 30, 2012 and 2011, the BWL contributed \$5,504,602 and \$5,607,367, 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. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans.

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 667 participants eligible to receive benefits at June 30, 2012 and 673 participants eligible at June 30, 2011.

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, 2012 and 2011, the cost to BWL of maintaining the Retiree Benefit Plan was \$15,854,530 and \$17,236,375, respectively, of which \$6,437,767 and \$8,063,558, respectively, was contributed to the VEBA trust and \$9,416,763 and \$9,172,817, 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.

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 Plan's annual other postemployement benefit (OPEB) cost is calculated based on the annual required contribution (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.

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.

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

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 are approximately 6.86 percent and 6.43 percent for the years ended June 30, 2012 and 2011, respectively.

Contribution trend information is as follows (in thousands):

						Percentage of Annual OPEB		
	Fiscal Year	Ann	nual OPEB	An	nual OPEB	Cost		Net OPEB
_	Ended		Cost	Co	ontributed	Contributed	Obligation	
	6/30/2009	\$	18,132	\$	17,866	99%	\$	(123)
	6/30/2010		21,291		21,318	100%		(150)
	6/30/2011		17,300		17,236	100%		(86)
	6/30/2012		15,774		15,854	101%		(166)

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 salary increases ranging from 5.0 percent to 11.0 percent, depending on age, and (c) amortization method level dollar over a 30-year period.

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

				ι	Infunded	
			Actuarial	P	Actuarial	
	P	Actuarial	Accrued	1	Accrued	Funded
Valuation Date	Asset Value		Liability	Liability		Ratio
2/28/2009	\$	45,320	\$256,888	\$	211,568	17.64%
2/28/2010		76,117	252,143		176,026	30.19%
2/28/2011		100,604	260,097		159,493	38.68%
2/28/2012		110,029	245,418		135,389	44.83%

#### 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 I of each year, during the month of January. The BWL also will match employee contributions after employees contribute \$1,000 at a rate of 75 percent until they reach the maximum of an additional \$500 in contributions.

#### 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 is disconnected when the unpaid balance is 90 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 0.6% 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 \$600 million for property losses on a replacement cost basis. The amount of deductibles currently varies, with the largest deductible being \$2,000,000. There is also a combination of liability coverages that total \$31 million for certain bodily injury and property damage claims.

#### **RETURN ON CITY EQUITY**

Effective June 30, 2012, the BWL entered into 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 5% 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
2004	8,526,209
2005	8,795,755
2006	9,227,727
2007	9,910,616
2008	10,747,503
2009	10,293,071
2010	10,485,037
2011	11,771,013
2012	12,169,097
2013	16,166,000

#### LITIGATION

There is no litigation pending or, to the knowledge of the BWL or the City, 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 Standard & Poor's Rating Services, a division of The McGraw-Hill Companies, Inc. 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.

#### BOND COUNSEL'S RESPONSIBILITY

The fees of Miller, Canfield, Paddock and Stone, P.L.C. ("Bond Counsel") for services rendered in connection with their approving opinion are expected to be paid from the proceeds of the Bonds. Except to the extent necessary to issue their approving opinion as to the validity of the Bonds and except as stated below, Bond Counsel has not been retained to examine or review and has not examined or reviewed any financial documents, statements or materials that have been or may be furnished in connection with the authorization, issuance or marketing of the Bonds, and accordingly will not express any opinion with respect to the accuracy or completeness of any such financial documents, statements or materials.

Bond Counsel has reviewed the statements made under the captions entitled "THE BONDS" (except for the section captioned "Book-Entry Only System"), "TAX MATTERS," "LEGAL MATTERS," "CONTINUING DISCLOSURE UNDERTAKING" (except for the last two paragraphs thereof) and "BOND COUNSEL'S RESPONSIBILITY" and in Appendix D and E. Bond Counsel has not been retained for review and has not reviewed any other portions of the Official Statement for accuracy or completeness and has not made inquiry of any official or employee of the BWL or the City, or any other person and has made no independent verification of such portions hereof, and further has not expressed and will not express an opinion as to any such portions hereof.

#### MUNICIPAL FINANCE QUALIFYING STATEMENT

The BWL has filed a Qualifying Statement for the fiscal year ended June 30, 2012. 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.

#### Tax Treatment of Accruals on Original Issue Discount Bonds

Under existing law, if the initial public offering price to the public (excluding bond houses and brokers) of a Bond is less than the stated redemption price of such Bonds at maturity, then such Bond is considered to have "original issue discount" equal to the difference between such initial offering price and the amount payable at maturity (such Bonds are referred to as "OID Bonds"). Such discount is treated as interest excludable from federal gross income to the extent properly allocable to each registered owner thereof. The original issue discount accrues over the term to maturity of each such OID Bond on the basis of a constant interest rate compounded at the end of each six-month period (or shorter period) from the date of original issue with straight-line interpolations between compounding dates. The amount of original issue discount accruing during each period is added to the adjusted basis of such OID Bonds to determine taxable gain upon disposition (including sale, redemption or payment on maturity) of such OID Bonds.

The Code contains certain provisions relating to the accrual of original issue discount in the case of purchasers of OID Bonds who purchase such OID Bonds after the initial offering of a substantial amount thereof. Owners who do not purchase such OID Bonds in the initial offering at the initial offering prices should consult their own tax advisors with respect to the tax consequences of ownership of such OID Bonds.

All holders of the OID Bonds should consult their own tax advisors with respect to the allowance of a deduction for any loss on a sale or other disposition of an OID Bond to the extent such loss is attributable to accrued original issue discount.

#### **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 E. 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 an aggregate underwriters' discount of \$136,087.90.

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 Inc., parent company of Citigroup Global Markets Inc., an underwriter of the Bonds, has entered into a retail brokerage joint venture with Morgan Stanley. As part of the joint venture, Citigroup Global Markets Inc. distributes municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, Citigroup Global Markets Inc. may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the Bonds.

Wells Fargo Securities is the trade name for the capital markets and investment banking services of Wells Fargo & Company and its subsidiaries, including Wells Fargo Bank, National Association ("WFBNA"). WFBNA, one of the underwriters of the 2013A Bonds, has entered into an agreement (the "Distribution Agreement") with Wells Fargo Advisors, LLC ("WFA") for the retail distribution of certain municipal securities offerings, including the 2013A Bonds. Pursuant to the Distribution Agreement, WFBNA will share a portion of its underwriting or remarketing agent compensation, as applicable, with respect to the 2013A Bonds with WFA. WFBNA and WFA are both subsidiaries of Wells Fargo & Company.

#### FINANCIAL ADVISOR TO THE BWL

Robert W. Baird & Co., Traverse City, Michigan (the "Financial Advisor"), has been retained by the BWL to provide certain financial advisory services including, among other things, preparation of the deemed "final" Preliminary Official Statement and the final Official Statement (the "Official Statements"). The information contained in the Official Statements was prepared in form by the Financial Advisor and is based on information supplied by various officials from records, statements and reports required by various local, county or state agencies of the State in accordance with constitutional or statutory requirements.

To the best of the Financial Advisor's knowledge, all of the information contained in the Official Statements, which it assisted in preparing, while it may be summarized, is (i) complete and accurate; (ii) does not contain any untrue statement of a material fact; and (iii) does not omit to state any material fact necessary in order to make the statements made, in light of the circumstances under which these statements are being made, not misleading. However, the Financial Advisor has not or will not independently verify the completeness and accuracy of the information contained in the Official Statement.

The Financial Advisor's duties, responsibilities and fees arise solely as financial advisor to the BWL and it has no secondary obligation or other responsibility. The Financial Advisor's fees are expected to be paid from Bond proceeds.

#### 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 F – 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 Assistant General Manager and Chief Financial Officer have been duly authorized by the BWL.

Lansing Board of Water and Light						
By:	/s/ Susan Devon					
·						
Its:	Assistant General Manager and Chief					
	Financial Officer					

# GENERAL INFORMATION REGARDING THE CITY OF LANSING

The following information is provided for informational purposes only. The Bonds are payable solely from the Net Revenues of the System. See "THE BONDS - Authorization" and "-Security" herein.



#### CITY OF LANSING

#### General

The City, the capital of the State of Michigan, encompasses an area of approximately 33.9 square miles and has a 2010 Census population of 114,297 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 58.94%, 27.97% and 4.20%, respectively, of the City's 2012 Taxable Valuation, as hereinafter defined. The balance of the City's 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.

### **Population**

The City's 1980, 1990, 2000 and 2010 Census populations are set forth in the following table.

# City of Lansing Population Statistics

Census	<b>Population</b>
1980	130,414
1990	127,321
2000	119,128
2010	114,297

### **Property Assessments**

Real property is land and the things permanently attached to or part of the land ("Real Property"). Examples of Real Property include land, buildings, crops and mineral rights. Personal property is property consisting of movable articles, both corporeal, such as furniture or jewelry, or incorporeal, such as stocks or bonds ("Personal Property").

As of December 31 of each year, Real and Personal Property is assessed, or valued, by the City, equalized by the Counties of Clinton, Eaton and Ingham (the "Counties") and further equalized by the State. The value as equalized by the State becomes the state equalized valuation ("State Equalized Valuation" or "SEV"). See "Property Valuations" following.

Article IX, Section 3, of the Michigan Constitution provides that Real and Personal Property assessments will not exceed 50% of true cash value. The Michigan Legislature has provided, by statute, that Real and Personal Property will be assessed at 50% of true cash value. The Michigan Legislature, or the electorate, may change the percentage of true cash value at which Real and Personal Property is assessed.

Personal Property assessments also reflect the taxpayer reported cost of the Personal Property and the application of one or more depreciation schedules formulated by the State Tax Commission. The City's assessor determines which depreciation schedule will be used to value the Personal Property.

Owners of taxable property may appeal their assessment to the City Assessor, the City's Board of Review and to the State Tax Tribunal. Outstanding appeals are not anticipated to adversely impact the financial condition of the City.

# **Property Valuations**

On March 15, 1994, the electors of the State approved an amendment to the Michigan Constitution permitting the Legislature to authorize the levy of taxes on a non-uniform basis. The legislation implementing this constitutional amendment added a new measure of property value known as taxable value ("Taxable Value"). Since 1995, property that is taxable has two valuations, SEV and Taxable Value. Michigan statute provides that Real and Personal Property taxes ("Ad Valorem Taxes") be levied on Taxable Value (the "Ad Valorem Tax Roll").

Generally, the Taxable Value of Real or Personal Property is the lesser of (a) the SEV or Taxable Value of the property in the immediately preceding year, adjusted for losses, multiplied by the lesser of the inflation rate, plus additions, or (b) the property's current SEV. Under certain circumstances, the Taxable Value of property may be different from the same property's SEV. When Real or Personal Property is sold or transferred, Taxable Value is adjusted to the SEV, which under existing law is 50% of the true cash value. The Taxable Value of new construction is equal to its SEV.

City of Lansing
History of State Equalized and Taxable Valuations (1)
Fiscal Years Ended or Ending June 30, 2009 through 2013

	Fiscal Year	Real Property	Personal		Taxable
Year	<b>Ending</b>	<b>SEV Valuation</b>	SEV Valuation	Total SEV	<u>Value</u>
2012	2013	\$1,892,945,928	\$180,680,300	\$2,073,626,228	\$2,031,802,369
2011	2012	\$2,114,357,650	\$183,233,681	\$2,297,591,331	\$2,196,850,901
2010	2011	\$2,331,405,600	\$204,951,200	\$2,536,356,800	\$2,345,554,884
2009	2010	\$2,611,937,348	\$214,605,100	\$2,826,542,448	\$2,509,268,730
2008	2009	\$2,821,793,030	\$197,985,400	\$3,019,778,430	\$2,496,988,704

<sup>(1)</sup> Does not include the value of any property granted tax abatement under Act 198 of the Public Acts of Michigan of 1974, as amended ("Act 198").

Source: City of Lansing

City of Lansing
Taxable Value by Location, Use and Classification
Fiscal Year Ending June 30, 2013

By County	Taxable Value	Percent of Total
Ingham County	\$1,976,358,729	97.27%
Eaton County	<u>55,443,640</u>	<u>2.73</u> %
Total	<u>\$2,031,802,369</u>	100.00%
By Class		
Real Property	\$1,851,122,069	91.11%
Personal Property	180,680,300	<u>8.89</u> %
Total	<u>\$2,031,802,369</u>	<u>100.00</u> %
By Use		
Commercial	\$568,303,805	27.97%
Industrial	85,275,164	4.20%
Residential	1,197,543,100	58.94%
Personal	180,680,300	<u>8.89</u> %
Total	<u>\$2,031,802,369</u>	<u>100.00</u> %

Source: City of Lansing

### **Profile of the Ten Largest Taxpayers**

Reflected below are the City's ten largest property taxpayers, their principal product or service and respective Taxable Value for the fiscal year ending June 30, 2013.

### City of Lansing Ten Largest Taxpayers Fiscal Year Ending June 30, 2013

	Total Taxable	%
Principal Product or Service	Value (1)	of Total (2)
Automotive	\$81,468,000	4.01%
Insurance	32,771,500	1.61
Utility	22,283,300	1.10
Stamping Plant	14,898,600	0.73
Communication	11,644,000	0.57
Developer	10,661,000	0.52
Communication	9,496,000	0.47
Real Estate	7,271,400	0.36
Biodefense	6,881,400	0.34
Dairy Farm	6,759,700	0.33
•	<u>\$204,134,900</u>	10.05%
	Automotive	Principal Product or Service         Value (1)           Automotive         \$81,468,000           Insurance         32,771,500           Utility         22,283,300           Stamping Plant         14,898,600           Communication         11,644,000           Developer         10,661,000           Communication         9,496,000           Real Estate         7,271,400           Biodefense         6,881,400           Dairy Farm         6,759,700

<sup>(1)</sup> Includes the Full Taxable Value of property granted tax abatement under Act 198 for the fiscal year ending June 30, 2013. See "Property Valuations" herein.

### **Profile of Major Employers**

The following table reflects the diversity of major employers in the Lansing area by the products manufactured or services performed and the approximate number of employees.

		Approximate Number
<u>Company</u>	Principal Product or Service	of Employees
State of Michigan	State Government	13,700
Michigan State University	College Education	10,725
Sparrow Hospital System	Health Care	5,735
General Motors Corporation	Automotive	5,522
Liberty Life National Insurance	Insurance	5,000
Lansing Community College	Education	2,990
Ingham Regional Medical Center	Health Care	2,400
Lansing School District	Education	1,613
Meijer, Inc.	Retail	1,880
Auto Owners Insurance	Insurance	1,500
Peckham Industries	Textiles, Auto Parts	1,400
Jackson National Life Insurance	Insurance	1,393

Source: City of Lansing

<sup>(2)</sup> Based on \$2,031,802,369, which is the City's Total Taxable Value for its fiscal year ending June 30, 2013, including the total value of property granted tax abatement under Act 198.

<sup>(3)</sup> Currently, the City's Delta Plant continues to operate three production shifts, and the City's second plant, the LGR plant, is currently operating two production shifts with plans to add a third shift during the 2012 calendar year. Source: City of Lansing

### **Employment:**

Reflected below are the unadjusted yearly average unemployment statistics for the City and the State for the calendar years 2007 through 2012.

For the fiscal year ended June 30, 2012, electric and waters sales accounted for approximately 95% of the BWL's total revenues. The service area for the BWL's electric and water operations includes the cities of Lansing, East Lansing and DeWitt and the townships of Alaiedon, Bath, Delhi, Delta, DeWitt, Lansing and Windsor. Collectively, these municipalities make up much of the population in the Lansing-East Lansing Metropolitan Statistical Area. For the month of December 2012 the seasonally unadjusted unemployment rate for the Lansing-East Lansing Metropolitan Statistical Area totaled 6.7%, versus 8.9% for the State.

# City of Lansing:

	2007	2008	2009	2010	<u>2011</u>	2012 (1)
Employed	61,612	60,833	56,859	56,412	55,351	56,226
Unemployed	5,474	6,392	10,087	9,099	7,334	6,262
Labor Force	<u>67,086</u>	<u>67,225</u>	<u>66,946</u>	<u>65,511</u>	<u>62,685</u>	<u>62,487</u>
Unemployed as Percent of						
Labor Force (2)	8.2%	9.5%	15.1%	13.9%	11.7%	10.0%

<sup>(1)</sup> Annual statistics through December 2012.

Source: Office of Labor Market Information - Michigan Department of Career Development

# State of Michigan:

	<u>2007</u>	2008	<u>2009</u>	<u>2010</u>	<u>2011</u>	$2012^{(1)}$
Employed	4,667,000	4,519,000	4,224,000	4,193,000	4,178,000	4,217,000
Unemployed	357,000	416,000	665,000	597,000	480,000	411,000
Labor Force	5,024,000	4,936,000	<u>4,889,000</u>	4,790,000	<u>4,658,000</u>	<u>4,629,000</u>
Unemployed as Percent of						
Labor Force (2)	7.1%	8.4%	13.6%	12.5%	10.3%	8.9%

<sup>(1)</sup>As of December 2012.

Source: Office of Labor Market Information – Michigan Department of Career Development

<sup>(2)</sup> Totals and percentages may differ due to rounding by the Office of Labor Market Information – Michigan Department of Career Development.

<sup>(2)</sup> Totals and percentages may differ due to rounding by the Office of Labor Market Information – Michigan Department of Career Development.

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# FINANCIAL STATEMENTS AND RELATED NOTES

This Appendix contains the financial statements of the BWL for the fiscal year ended June 30, 2012. The entire comprehensive annual financial report for the fiscal year ended June 30, 2012, is available at <a href="https://www.michigan.gov/treasury">www.michigan.gov/treasury</a>.





Financial Report
with Additional Information
June 30, 2012

# **Board of Water and Light - City of Lansing, Michigan**

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Plante & Moran, PLLC

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#### Independent Auditor's Report

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

We have audited the accompanying financial statements of the Enterprise Fund and Pension Fiduciary Funds of the Board of Water and Light - City of Lansing, Michigan (the "BWL") as of and for the years ended June 30, 2012 and 2011, which collectively comprise the Board of Water and Light's basic financial statements as listed in the table of contents. These financial statements are the responsibility of the BWL's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Enterprise Fund and Pension Fiduciary Funds of the BWL as of June 30, 2012 and 2011 and the respective changes in financial position and cash flows, where applicable, as of and for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Accounting principles generally accepted in the United States of America require that management's discussion and analysis 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, which considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplemental 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.



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

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the BWL's basic financial statements. The accompanying additional information on pages 48 through 55 is presented for the purpose of additional analysis and is not a required part of the 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 financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

Plante + Moran, PLLC

September 12, 2012

### **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 fiscal year 2012.

#### **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 95,000 residential, commercial, and industrial customers in the greater Lansing area. The BWL generated 62 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 nearly 55,000 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 190 customers, and a chilled water facility and distribution piping system serving 16 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 \$115.9 and \$41.4 million in fiscal years 2012 and 2011, 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. In June 2011, however, the BWL began construction on a new combined-cycle cogeneration plant which will be funded from the proceeds of revenue bonds. The new plant, which will serve steam and electric customers, is expected to be placed in service during the 2013 calendar year.

Detailed financial information for the separate utilities of water, electric, steam, and chilled water can be found in the additional information section beginning on page 50.

## **Board of Water and Light - City of Lansing, Michigan**

#### **Management's Discussion and Analysis (Continued)**

#### Condensed Financial Information (dollars in millions)

	June 30			% Change			
		2012		2011		2010	2011 to 2012
Assets							
Utility plant	\$	607.9	\$	534.3	\$	532.4	13.8
Other assets		443.6		489.9		227.3	(9.5)
Total assets		1,051.5		1,024.2		759.7	2.7
Liabilities							
Long-term liabilities		426.9		439.4		189.6	(2.8)
Other liabilities		65.1	_	48.0	_	40.8	35.6
Total liabilities		492.0	_	487.4		230.4	0.9
Net Assets							
Invested in capital assets		393.2		373.7		386.9	5.2
Restricted for debt service		34.1		37.2		38.6	(8.3)
Unrestricted	_	132.2		125.9	_	103.8	5.0
Total net assets	\$	559.5	\$	536.8	\$	529.3	4.2

Utility plant increased by \$73.6 million primarily due to the ongoing construction of the new combined-cycle cogeneration plant.

Other assets decreased by \$46.3 million. The decrease is largely attributable to the disbursement of revenue bond funds during the year to pay for costs associated with construction of the combined-cycle cogeneration plant. The decrease in other assets due to construction spending was partially offset by cash flows generated from operations.

#### **Management's Discussion and Analysis (Continued)**

Condensed Financial Information (dollars in millions) (Continued)

			Ju	une 30			% Change
		2012		2011		2010	2011 to 2012
Results of Operations	¢	320.1	\$	306.1	¢	273.9	4.6
Operating revenue Operating expenses	Φ	286.6	Ф	282.7	Þ	260.3	1.4
Nonoperating expense - Net	_	(10.9)		(15.8)		(8.7)	31.0
Change in Net Assets	\$	22.6	\$	7.6	\$	4.9	197.4

Operating revenues increased slightly over the prior year due to utility rate increases.

**Budget** - The BWL commissioners approved a \$279 million operating expense budget (excluding depreciation) for fiscal year 2012. Actual expenses (excluding depreciation) were \$255.7 million or 8.4 percent less than budget. The savings were mainly due to reduced fuel consumption, as a result of lower than expected sales, and continued efforts to control costs. The net capital improvement budget was \$156.5 million for fiscal year 2012 and actual net capital expenditures were \$112 million. The capital budget savings are primarily related to the timing of construction expenditures for the new combined-cycle cogeneration plant.

**Financing Activities** - During fiscal year 2012, Revenue Refunding Bonds, Series 2012A were issued to refund a portion of the Series 2002A Bonds resulting in reduced aggregate debt service of the BWL.

Other Significant Items - In July 2011, an accident occurred at the Wise Road Water Conditioning Plant resulting in extensive damages to the plant. Evaluations to determine the extent of repairs are still being completed although it is expected that insurance will pay the costs less the deductible. The plant continues to produce clean, treated water to the community as repairs are being completed.

## **Board of Water and Light - City of Lansing, Michigan**

#### Statement of Net Assets

	June 30			
	2012	2011		
Assets				
Current Assets				
Restricted cash and cash equivalents (Notes 4 and 11)	\$ 46,753,201	\$ 37,681,413		
Cash and cash equivalents (Notes 4 and 11)	45,322,246	47,234,603		
Investments (Notes I and II)	52,225,250	43,490,345		
Accounts receivable - Net (Note 1)	21,512,610	24,081,889		
Estimated unbilled accounts receivable (Note 1)	16,293,202	15,504,354		
Inventories (Note I)	27,142,799	23,892,975		
Other	1,275,100	1,327,067		
Total current assets	210,524,408	193,212,646		
Other Assets				
Deferred energy (cost) asset (Note 6)	4,178,287	1,184,086		
Deferred amortization of Central Utilities Complex				
(Note 6)	491,190	2,291,971		
Deferred environmental remediation (Note 6)	30,280,962	27,524,910		
Special deposit	12,625,000	3,625,000		
Other	1,469,706	(64,160)		
Total other assets	49,045,145	34,561,807		
Noncurrent Restricted Assets (Notes 4 and 11)	184,018,636	262,208,908		
Utility Plant (Note 1)				
Water	256,983,972	252,234,053		
Electric	652,680,296	642,246,270		
Steam	46,261,609	44,881,456		
Chilled water	32,733,046	32,733,046		
Common facilities	66,402,079	65,345,416		
Central Utilities Complex	76,079,000	76,079,000		
Total	1,131,140,002	1,113,519,241		
Less accumulated depreciation	622,808,682	592,317,195		
Net	508,331,320	521,202,046		
Construction in progress (Note 3)	99,598,629	13,062,074		
Total utility plant	607,929,949	534,264,120		
Total assets	\$ 1,051,518,138	\$ 1,024,247,481		

### Statement of Net Assets (Continued)

	June 30				
	2012	2011			
Liabilities and Net Ass	ets				
Current Liabilities					
Accounts payable	\$ 29,709,94	3 \$ 19,758,271			
Current portion of long-term debt (Note 5)	16,702,84	8 15,411,114			
Accrued payroll and related taxes	3,208,57	5 2,660,755			
Customer deposits	2,186,80	8 2,122,536			
Accrued compensated absences (Note 1)	3,797,58	7 3,860,961			
Accrued interest	9,498,06	7 4,221,905			
Total current liabilities	65,103,82	8 48,035,542			
Compensated Absences - Less current portion (Note 1)	7,196,79	7,591,266			
Other Long-term Liabilities					
Workers' compensation	2,000,00	0 2,300,000			
Environmental remediation liability (Note 9)	17,489,74	8 15,867,899			
Deferred revenue (Note 6)	2,863,53	I 3,083,802			
Other	2,744,64	2,699,134			
Total other long-term liabilities	25,097,92	3 23,950,835			
Long-term Debt - Less current portion (Note 5)	394,601,26	407,799,118			
Total liabilities	491,999,80	7 487,376,761			
Net Assets					
Invested in capital assets	393,258,83	7 373,801,018			
Restricted for debt service (Note 4)	34,138,83	5 37,143,191			
Unrestricted	132,120,65	9 125,926,511			
Total net assets	559,518,33	536,870,720			
Total liabilities and net assets	\$ 1,051,518,13	\$ 1,024,247,481			

# Board of Water and Light - City of Lansing, Michigan

### Statement of Revenues, Expenses, and Changes in Net Assets

	Year Ended June 30			
		2012		2011
Operating Revenues (Note 1)				
Water	\$	34,737,716	\$	31,586,012
Electric		270,007,402		259,665,261
Steam		10,038,038		9,744,637
Chilled water	_	5,271,400	_	5,116,727
Total operating revenues		320,054,556		306,112,637
Operating Expenses				
Production:				
Fuel, purchased power, and other operating expenses		160,372,503		149,371,642
Maintenance		18,803,348		26,577,351
Transmission and distribution:				
Operating expenses		6,681,002		6,431,356
Maintenance		8,799,994		7,490,376
Administrative and general		61,061,810		62,690,708
Depreciation and impairment (Note I)	_	30,854,100	_	30,098,723
Total operating expenses	_	286,572,757	_	282,660,156
Operating Income		33,481,799		23,452,481
Nonoperating Income (Expenses)				
Investment income		2,405,773		(33,380)
Other income		3,558,624		812,835
System capacity fee		9,220,495		9,258,007
Bonded debt interest expense		(6,966,835)		(7,388,739)
Amortization - Central Utilities Complex		(6,872,715)		(6,714,059)
Payment in lieu of taxes (Note 7)		(12,169,097)		(11,732,538)
Other interest expense	_	(10,433)	_	(10,721)
Total nonoperating expenses - Net	_	(10,834,188)	_	(15,808,595)
Net Income (Changes in Net Assets)		22,647,611		7,643,886
Net Assets - Beginning of year	_	536,870,720	_	529,226,834
Net Assets - End of year	\$	559,518,331	\$	536,870,720

### **Statement of Cash Flows**

	Year Ended June 30			
		2012		2011
Cash Flows from Operating Activities				
Cash from customers:				
Water	\$	35,119,841	\$	32,536,381
Electric		266,747,323		250,246,074
Steam		10,115,136		9,650,689
Chilled water	_	5,263,761	_	5,070,293
Total cash from customers		317,246,061		297,503,437
Cash paid to suppliers:				
Suppliers of coal, freight, and purchased power		(132,966,694)		(123,110,837)
Other suppliers	_	(72,298,583)	_	(77,803,963)
Total cash paid to suppliers		(205,265,277)		(200,914,800)
Cash paid to employees		(54,618,224)		(52,536,526)
Payment in lieu of taxes (Note 7)		(12,169,097)		(11,732,538)
Cash from customer deposits		64,272		(97,273)
Interest on customer deposits	_	(10,433)	_	(10,721)
Net cash provided by operating activities		45,247,302		32,211,579
Cash Flows from Capital and Related Financing Activities				
Proceeds from new borrowings		24,563,516		259,998,403
Planned, bonded, and annual construction		(109,591,859)		(37,021,064)
Principal payments on debt		(36,469,634)		(13,923,555)
System capacity fees		9,220,495		9,258,007
Interest on debt	_	(1,690,673)	_	(7,097,178)
Net cash (used in) provided by capital and				
related financing activities		(113,968,155)		211,214,613
Cash Flows from Noncapital Financing Activities				
Proceeds from the sale of emissions allowances		201		25,272
Proceeds from the Belle River Project and other	_	4,018,945	_	9,152,248
Net cash provided by noncapital financing activities		4,019,146		9,177,520
Cash Flows from Investing Activities				
Proceeds from the sale and maturity of investments		220,026,076		99,959,616
Interest received		7,239,013		269,649
Purchase of investments	_	(155,403,949)	_	(349,293,968)
Net cash provided by (used in) investing activities	_	71,861,140		(249,064,703)
Net Increase in Cash and Cash Equivalents		7,159,433		3,539,009
Cash and Cash Equivalents - Beginning of year	_	84,916,014		81,377,005
Cash and Cash Equivalents - End of year	\$	92,075,447	\$	84,916,014

# Board of Water and Light - City of Lansing, Michigan

### Statement of Cash Flows (Continued)

	Year Ended June 30			
	2012			2011
Balance Sheet Classifications				
Restricted cash and cash equivalents	\$	46,753,201	\$	37,681,413
Cash and cash equivalents	_	45,322,246		47,234,603
Cash and Cash Equivalents - End of year	\$	92,075,447	\$	84,916,016

#### Reconciliation of Operating Income to Net Cash from Operating Activities:

	Year Ended June 30			
		2012		2011
Operating income	\$	33,481,799	\$	23,452,481
Adjustments to reconcile operating income to net cash from operating				
activities:				
Payment in lieu of taxes (Note 7)		(12,169,097)		(11,732,538)
Depreciation		30,854,100		30,098,723
Sewerage collection fees		928,987		869,396
Interest on customer deposits		(10,433)		(10,721)
Decrease (increase) in assets:				
Accounts receivable (Note 1)		45,565		(1,073,708)
Unbilled accounts receivable (Note 1)		(788,848)		(2,003,051)
Inventories		(3,249,824)		(2,562,252)
Customer deposits		64,272		(97,273)
Special deposit		(9,000,000)		(3,625,000)
Other		(4,476,100)		(5,125,454)
Increase in liabilities:				
Accounts payable and other accrued expenses		10,436,118		4,069,044
Other and deferred costs	_	(869,237)	_	(48,068)
Total adjustments	_	11,765,503	_	8,759,098
Net cash provided by operating activities	\$	45,247,302	\$	32,211,579

### Pension Trust Funds - Statement of Net Assets

	June 30					
	2012			2011		
Assets						
Receivable - Investment interest receivable	\$	327,241	\$	149,131		
Investments at fair value:						
Money market collective trust fund		9,405,572		9,011,012		
U.S. government obligations		20,678,118		8,227,576		
Corporate bonds and notes		31,395,790		17,233,138		
Mutual funds		99,820,979		131,700,295		
Stable value		30,547,019		29,508,146		
Equities		118,096,777		122,654,629		
Alternative investments		598,049		826,816		
Self-directed brokerage account		685,767		701,335		
Participant notes receivable		3,703,073	_	3,709,670		
Total investments		314,931,144	_	323,572,617		
Net Assets	<u>\$ 315,258,385</u>			323,721,748		

# Board of Water and Light - City of Lansing, Michigan

# Pension Trust Funds - Statement of Changes in Net Assets

	Year Ended June 30				
	2012	2011			
Increases					
Investment income (loss):					
Net (depreciation) appreciation in fair					
value of investments	\$ (7,353,278)	\$ 54,166,894			
Interest and dividend income	5,606,900	4,982,161			
Net investment (loss) income	(1,746,378)	59,149,055			
Employer contributions	21,359,132	22,929,394			
Participant rollover contributions	1,128,725	2,710,113			
Other	294,139	421,830			
Total increases - Net of depreciation in					
fair value of investments	21,035,618	85,210,392			
Decreases					
Benefits paid to participants	29,309,265	27,270,030			
Loan defaults	115,180	116,656			
Participants' note and administrative fees	74,536	68,752			
Total decreases	29,498,981	27,455,438			
Net Change in Assets Held	(8,463,363)	57,754,954			
Assets Held in Trust for Pension Benefits					
Beginning of year	323,721,748	265,966,794			
End of year	\$ 315,258,385	\$ 323,721,748			

See Notes to Financial Statements. 11 See Notes to Financial Statements. 12

#### Notes to Financial Statements June 30, 2012 and 2011

#### **Note I - Significant Accounting Policies**

Reporting Entity - The Board of Water and Light (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.

Basis of Accounting - The BWL utilizes the accrual basis of accounting. In addition, the BWL follows the accounting and reporting requirements of the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 980 - Regulated Operations, which requires 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 ASC 980, but will continue to evaluate its applicability based on changes in the regulatory and competitive environment.

On July 1, 1994, the BWL adopted Governmental Accounting Standards Board (GASB) Statement No. 20, Accounting and Financial Reporting for Proprietary Funds and Other Governmental Entities that Use Proprietary Fund Accounting. Under this statement, the BWL elected to follow all Statement of Financial Accounting Standards (SFAS) statements issued after November 30, 1989 that do not conflict with GASB statements.

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 assets as operating and nonoperating.

### **Board of Water and Light - City of Lansing, Michigan**

#### Notes to Financial Statements June 30, 2012 and 2011

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#### Note I - Significant Accounting Policies (Continued)

**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** - 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		
	2012	2011	
Designated purpose:			
Coal inventory fluctuation	\$ 4,459,408	\$ 4,352,456	
Litigation, environmental, and uninsured losses	18,025,271	17,593,099	
Future water facilities	3,631,892	3,544,790	
Subtotal	26,116,571	25,490,345	
Special purpose - Future construction	26,108,679	18,000,000	
Total	\$ 52,225,250	\$ 43,490,345	

**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 2012 and 2011 are as follows:

### Notes to Financial Statements June 30, 2012 and 2011

#### **Note I - Significant Accounting Policies (Continued)**

	2012	2011
Customer receivables	\$ 16,658,506	\$ 16,404,073
Sewerage collections	2,138,180	1,939,710
Combined sewer overflow - City of Lansing	(766,639)	(286,493)
MPPA receivable	-	642,942
Miscellaneous	4,982,563	6,581,657
Less allowance for doubtful accounts	(1,500,000)	(1,200,000)
Net	\$ 21,512,610	\$ 24,081,889

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

	2012	2011
Coal Materials and supplies	\$ 14,839,867 12,302,932	\$ 12,629,329 11,263,646
Total	\$ 27,142,799	\$ 23,892,975

**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.

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 ASC 980. The resulting provisions for depreciation in 2012 and 2011, expressed as a percentage of the average depreciable cost of the related assets, are as follows:

### **Board of Water and Light - City of Lansing, Michigan**

### Notes to Financial Statements June 30, 2012 and 2011

#### Note I - Significant Accounting Policies (Continued)

		Average Rate (Percent		
	Life			
	(Years)	2012	2011	
Classification of utility plant:				
Water	4-100	1.9	1.9	
Electric	4-50	3.1	3.1	
Steam	5-50	1.8	2.0	
Chilled water	5-50	3.5	3.5	
Common facilities	4-50	6.0	5.6	
Central Utilities Complex	15	9.0	8.6	

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

The tables below reflect the capital asset activity of the utility plant categories for the years ended:

Capital Asset Activity for Year End June 30, 2012

	С	apital Assets							•	Capital Assets
		FY Start		Transfers		Acquisition Retirement		Retirement		FY End
Water	\$	252,234,053	\$	3,010	\$	10,664,970	\$	(5,918,061)	\$	256,983,972
Electric		642,246,270		323,974		12,273,851		(2,163,799)		652,680,296
Steam		44,881,456		-		1,561,796		(181,643)		46,261,609
Chilled		32,733,046		-		-		-		32,733,046
Comon		65,345,416		(326,984)		1,515,304		(131,657)		66,402,079
CUC		76,079,000								76,079,000
Total	\$	1,113,519,241	\$		\$	26,015,921	\$	(8,395,160)	\$	1,131,140,002

#### Accumulated Depreciation for Year End June 30, 2012

	Accum. Deprc. FY Start		Depreciation Transfer		Deprc. / Amort. for Year			Depreciation Retirement		Accum. Deprc. FY End	
Water	\$	(76,730,322)	\$	_	\$	(4,796,544)	\$	3,594,418	\$	(77,932,448)	
Electric		(402,396,844)		(310,644)		(20,193,284)		1,708,413		(421,192,359)	
Steam		(23,726,208)		-		(808,856)		3,763		(24,531,301)	
Chilled		(4,486,760)		-		(1,131,504)		-		(5,618,264)	
Common		(39,329,661)		310,644		(3,923,912)		127,952		(42,814,977)	
CUC	_	(45,647,400)	_		_	(5,071,933)	_		_	(50,719,333)	
Total	\$	(592,317,195)	\$		\$	(35,926,033)	\$	5,434,546	\$	(622,808,682)	

#### Notes to Financial Statements June 30, 2012 and 2011

#### Note I - Significant Accounting Policies (Continued)

Capital Asset Activity for Year End June 30, 2011

		Capital Assets						•	Capital Assets	
	FY Start		Transfers		Acquisition		Retirement		FY End	
Water	\$	245,140,560	\$ 190,086	\$	7,331,143	\$	(427,736)	\$	252,234,053	
Electric		620,083,405	(190,086)		27,688,872		(5,335,921)		642,246,270	
Steam		44,052,072	· - ′		1,688,210		(858,826)		44,881,456	
Chilled		32,654,117	25,428		53,501		- 1		32,733,046	
Comon		64,941,333	-		2,269,761		(1,865,678)		65,345,416	
CUC	_	76,079,000		_		_	<u> </u>	_	76,079,000	
Total	\$	1,082,950,487	\$ 25,428	\$	39,031,487	\$	(8,488,161)	\$	1,113,519,241	

Accumulated Depreciation for Year End June 30, 2011

	Accum. Deprc.					Deprc. / Amort.		Depreciation		Accum. Deprc.	
		FY Start	De	preciation		for Year	Retirement			FY End	
Water	\$	(72,231,640)	\$	(792)	\$	(4,799,370)	\$	301,480	\$	(76,730,322)	
Electric		(386,113,945)		792		(19,659,741)		3,376,050		(402,396,844)	
Steam		(23,037,683)		-		(886,673)		198,148		(23,726,208)	
Chilled		(3,356,185)		-		(1,130,575)		-		(4,486,760)	
Common		(37,505,931)		-		(3,622,364)		1,798,633		(39,329,662)	
CUC	_	(40,575,466)	_		_	(5,071,933)	_		_	(45,647,399)	
Total	\$	(562,820,850)	\$		\$	(35,170,656)	\$	5,674,311	\$	(592,317,195)	

**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 \$10,994,377 and \$11,452,227 as of June 30, 2012 and 2011, 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 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 ASC 980.

### **Board of Water and Light - City of Lansing, Michigan**

Notes to Financial Statements June 30, 2012 and 2011

#### Note I - Significant Accounting Policies (Continued)

Net Assets - Equity is classified as net assets and displayed in three components:

- Invested in Capital Assets (net of related debt) 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 assets with constraints placed on their use by revenue bond resolution
- Unrestricted All other net assets that do not meet the definition of "restricted" or "invested in capital assets, net of related debt"

**Unbilled Accounts Receivable and Revenue** - Unbilled accounts receivable at June 30, 2012 and 2011 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 \$6,921,159 and \$5,874,009 in 2012 and 2011, respectively, and are not eliminated in the statement of revenues, expenses, and changes in net assets.

Emissions Allowance - The Environmental Protection Agency has granted emission allowances to the BWL related to the emission of certain pollutants. No amounts are recorded at the date of the grant. The BWL estimates the allowances needed for future years. As appropriate, the BWL may purchase additional allowances or sell the estimated future excess allowances. The purchase and sale of allowances by emission type are accounted for separately and are not offset against transactions involving allowances of different emission types. Purchased allowances net of proceeds from the sale of related allowances are recorded as an asset and will be expensed during the applicable period. Proceeds from the sale of allowances are recognized as income at the time of sale.

#### Notes to Financial Statements June 30, 2012 and 2011

#### Note I - Significant Accounting Policies (Continued)

The BWL recognized a gain of \$201 and \$25,272 as of June 30, 2012 and 2011, respectively, from the sale of allowances and has recorded an intangible asset of \$0 as of June 30, 2012 and 2011, for purchased allowances related to future periods.

**Significant Customers** - The BWL has one customer which accounts for approximately 8 percent of the BWL's total revenue for the years ended June 30, 2012 and 2011.

**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.

#### **Note 2 - 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.

#### **Note 3 - Construction in Progress**

Construction in progress consists of projects for expansion or additions to the utility plant. The estimated additional cost to complete various projects is approximately \$25,029,000 and \$16,407,000 at June 30, 2012 and 2011, respectively, including commitments on existing construction contracts approximating \$9,391,000 and \$4,426,000 at June 30, 2012 and 2011, 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. Refer to Note 9 for these commitments.

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### **Board of Water and Light - City of Lansing, Michigan**

Notes to Financial Statements June 30, 2012 and 2011

#### Note 4 - Restricted Assets

Restricted assets are required under the 2002A, 2002B, 2003A, 2005A, 2008A, and 2011A 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, 2012			2012		2011	
Current:							
Operations and Maintenance Fund	\$	24,215,200	\$	69,981,998	\$	68,466,953	
Bond and Interest Redemption Fund	_	22,538,001	_	22,093,449		16,449,063	
Total current		46,753,201		92,075,447		84,916,016	
Noncurrent:							
2011 Bond and Interest Redemption		12,809,200		12,809,200		25,618,400	
2011A, 2008A, and 2001 Construction							
Fund		145,704,774		145,704,774		210,844,456	
Bond Reserve Fund	_	24,771,606	_	25,504,662	_	25,746,052	
Total noncurrent	_	183,285,580	_	184,018,636		262,208,908	
Total	\$	230,038,781	\$	276,094,083	\$	347,124,924	

### Notes to Financial Statements June 30, 2012 and 2011

#### Note 4 - Restricted Assets (Continued)

The carrying value in excess of the required value for the current portion is reported as cash and cash equivalents for the year ended June 30, 2012.

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.
- Bond and Interest Redemption Fund Restricted for payment of the current portion of bond principal and interest and the remaining capitalized interest on the 2002A, 2002B, 2003A, 2005A, 2008A, 2009A, 2011A, and 2012A Revenue Bonds.
- 2001A, 2008A, and 2011A Construction Fund Restricted for payment of costs of the bonded projects and costs of issuance of the bonds.
- Bond Reserve Fund Shall include sufficient funds to cover the maximum annual
  principal and interest requirements for the uninsured portion of the 2002A, 2002B,
  2003A, 2005A, 2008A, and 2011A 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.

# Board of Water and Light - City of Lansing, Michigan

Notes to Financial Statements June 30, 2012 and 2011

#### Note 5 - Long-term Debt

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

	2012	2011
Water Supply, Steam, Chilled Water, and Electric Utility System Revenue Bond, 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%	\$ 17,370,0	000 \$ -
Water Supply, Steam, Chilled Water, and Electric Utility System Revenue Bond, 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%	250,000,0	000 250,000,000
Water Supply, Steam, Chilled Water, and Electric Utility System Revenue Bond, Series 2009A, due in annual principal installments due serially through July 1, 2016, plus interest at a rate of $5.34\%$	33,360,0	000 40,005,000
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 $5.00\%$	40,000,0	000 40,000,000
Water Supply, Steam, and Electric Utility System Revenue Bonds, Series 2005A, due serially beginning July 1, 2011 and continuing through July 1, 2014, plus interest at rates ranging from 4.00% to 5.00%	10,835,0	000 12,325,000
Water Supply, Steam, and Electric Utility System Revenue Bonds, Series 2003A, due serially through July 1, 2026, plus interest at rates ranging from $4.00\%$ to $5.00\%$	26,645,0	000 27,075,000
Water Supply, Steam, and Electric Utility System Revenue Bonds, Series 2002A, due serially through July 1, 2018, plus interest at rates ranging from 3.50% to 5.00%	405,0	000 21,305,000
Water Supply, Steam, and Electric Utility System Revenue Refunding Bonds, Series 2002B, due serially through July 1, 2013, plus interest at rates ranging from 3.50% to 3.75%	4,725,0	000 6,930,000

#### Notes to Financial Statements June 30, 2012 and 2011

#### Note 5 - Long-term Debt (Continued)

	2012	2011
Water Supply, Steam, and Electric Utility System Revenue Bonds, Series 1999A, due serially through July 1, 2011, plus interest at a rate of $5.10\%$	\$ -	\$ 1,035,000
Promissory note, due to the City of Lansing in semi-annual installments through October 1, 2024, plus interest at a rate of $2.50\%$	11,588,321	12,088,000
Promissory note, due in monthly installments of \$25,177.37 including interest at 4.85%, with final payment on December 31, 2013	436,251	709,977
Township contract water service obligation with interest due semiannually at $6.00\%$ and portions of principal due annually, with final payment in May $2015$	110,000	145,000
Delta Township Drain Assessment due serially through January 15, 2025, plus interest at a rate of 5.25%	1,105,842	1,190,907
Granger III Corporation for ash hauling services due in monthly installments ranging from \$150,000 to \$250,000	7,533,652	5,109,856
Total	404,114,066	417,918,740
Less current portion	(16,702,848)	(15,411,114)
Plus (less) current portion of premium bonds	272,225	(37,898)
Plus unamortized premium	8,112,746	6,469,068
Deferred loss on refunding of bonds	(1,194,923)	(1,139,678)
Total long-term portion	\$ 394,601,266	\$ 407,799,118

The fair value of the long-term debt based on the quoted market prices for similar issues for debt of the same remaining maturities is estimated to be \$442,313,090 and \$440,152,071 at June 30, 2012 and 2011, respectively.

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

### **Board of Water and Light - City of Lansing, Michigan**

Notes to Financial Statements June 30, 2012 and 2011

#### Note 5 - Long-term Debt (Continued)

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

		Principal		Interest		Total	
2013	\$	16,702,848	\$	20,914,790	\$	37,617,638	
2014		17,773,595		18,689,788		36,463,383	
2015		16,271,528		17,944,469		34,215,997	
2016		11,977,254		17,158,570		29,135,824	
2017		11,887,493		16,474,346		28,361,839	
2017-2021		44,432,169		77,052,153		121,484,322	
2022-2026		50,380,548		67,042,012		117,422,560	
2027-2031		61,183,631		54,169,217		115,352,848	
2032-2036		75,960,000		38,068,625		114,028,625	
2037-2042	_	97,545,000	_	16,571,500	_	114,116,500	
Total	\$	404,114,066	\$	344,085,470	\$	748,199,536	

Resolutions of the 1999A bonds and the uninsured portion of the 2002A, 2002B, 2003A, 2005A, 2008A, 2011A, and 2012A 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, 2012, the balance of this reserve account was \$25,504,662 (see Note 4). The reserve requirements for a portion of the 2002B bonds are satisfied by the purchase of a debt service reserve fund surety bond. 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.

During the fiscal year ended June 30, 2012, the BWL issued a \$17,370,000 Water Supply, Steam Chilled Water, and Electric Utility System Revenue Bond Series 2012A with an interest rate of 2.0 to 5.0 percent; the proceeds were issued for the purpose of refunding the 2002A revenue bonds.

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.

#### Notes to Financial Statements June 30, 2012 and 2011

#### Note 5 - Long-term Debt (Continued)

The BWL has defeased several bond issues in prior years. The proceeds of the new bonds were placed in an escrow deposit fund to provide for all future debt service payments on the old bonds. Accordingly, the escrow deposit fund assets and the liability for the defeased bonds are not included in the financial statements. The outstanding balance of all defeased liabilities is \$69,024,000 and \$59,349,000 at June 30, 2012 and 2011, respectively.

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 BWL may redeem certain outstanding Water Supply and Electric Utility System Revenue Bonds prior to maturity. The Series 2005A Bonds maturing in the years 2011 to 2014, inclusive, shall not be subject to redemption prior to maturity.

The Series 2003A Bonds maturing in the years 2004 to 2013, inclusive, shall not be subject to redemption prior to maturity. Series 2003A Bonds due on or after July I, 2014 to 2026, inclusive, shall be subject to redemption prior to maturity, at the option of the BWL, in such order of maturity as the BWL may determine, and by lot within any maturity, in whole or in part, on any date on or after July I, 2013, at par plus accrued interest to the date fixed for redemption.

The Series 2002A Bonds maturing in the years 2003 to 2012, inclusive, and the Series 2002B Bonds shall not be subject to redemption prior to maturity. Series 2002A Bonds due on or after July 1, 2013 shall be subject to redemption prior to maturity, at the option of BWL, in such order of maturity as the BWL may determine, and by lot within any maturity, in whole or in part, on any date on or after July 1, 2012, at par plus accrued interest to the date fixed for redemption.

### **Board of Water and Light - City of Lansing, Michigan**

Notes to Financial Statements June 30, 2012 and 2011

#### Note 5 - Long-term Debt (Continued)

The long-term debt activity for the year ended June 30, 2012 is as follows:

	Revenue	Other	
	Bonds	Notes	Total
Beginning balance	\$ 403,967,138	\$19,243,094	\$423,210,232
Additions Reductions	19,672,074 (33,108,517)	4,891,443 (3,361,117)	24,563,517 (36,469,634)
Ending balance	\$ 390,530,695	\$20,773,420	\$411,304,115
Due within one year	\$ 12,770,000	\$ 3,932,849	\$ 16,702,849

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 is \$725,243,712. During the current year, net revenues of the BWL were \$60,478,979 compared to the annual debt requirements of \$19,166,835.

#### Note 6 - Deferred 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 ASC 980. The BWL has recorded deferred amortization of \$491,190 and \$2,291,971 at June 30, 2012 and 2011, 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 deferred amortization balance represents the difference between calculated straight-line amortization expense and the reimbursement payments received from the customer at year end.

#### **Environmental Remediation**

During the year ended June 30, 2004, ASC 980 was used in accounting for expenses to be incurred and the estimated liability for environmental remediation of a landfill site operated by the BWL. As of June 30, 2012, \$13,848,000 in total costs has been deferred as a regulatory asset. An increase in the asset and liability was made during the year ended June 30, 2012 of \$1,725,000. As of June 30, 2012 and 2011, the amounts remaining to be recovered in rates were \$1,953,969 and \$1,681,835, respectively. The BWL reviews the adequacy of its rates to recover its cost of service on an annual basis.

#### Notes to Financial Statements June 30, 2012 and 2011

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

During the year ended June 30, 2006, an additional ASC 980 amount was approved by the Board of Commissioners to defer an additional \$8,400,000 for the estimated liability of an environmental remediation for a second landfill. An increase in the asset and liability was made during the years ended June 30, 2012 and 2011 of \$1,200,000 and \$11,700,000, respectively. The balance of the regulatory asset at June 30, 2012 and 2011 was \$23,400,000 and \$22,200,000, 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, ASC 980 was authorized by the Board of Commissioners to collect rates for all environmental remediation sites. The balance as of June 30, 2012 and 2011 that was added for additional sites was \$4,884,751 and \$5,795,401, respectively.

#### **Deferred Cost Adjustments**

During the year ended June 30, 2005, the Board of Commissioners approved the use of ASC 980 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 deferred asset of \$4,178,287 and \$1,184,086 at June 30, 2012 and 2011, 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.

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

During the year ended June 30, 2010, the Board of Commissioners approved the implementation of ASC 980 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 charges will affect the amount to be billed to electric customers. This resulted in deferred costs of \$(3,777,270) and \$(2,152,326) as of June 30, 2012 and 2011, respectively.

#### **Chiller Plant**

During the year ended June 30, 2010, the BWL chose to use ASC 980 to recognize the contribution in aid of construction (CIAC) from Christman Capital Development Company for the development of a new chilled water plant. This resulted in deferred revenue of \$2,863,531 and \$3,083,802 as of June 30, 2012 and June 30, 2011, respectively. The BWL will recognize this as revenue monthly over the life of the new chilled water plant to offset depreciation expense.

### **Board of Water and Light - City of Lansing, Michigan**

Notes to Financial Statements June 30, 2012 and 2011

#### Note 7 - Transactions with the City of Lansing, Michigan

Operations - The BWL recognized revenue of \$11,185,794 and \$8,708,982 in 2012 and 2011, respectively, for water, electric, and steam services provided to the City. The BWL incurred expenses for sewerage services purchased from the City of \$459,115 and \$432,427 in 2012 and 2011, respectively.

Additionally, the BWL bills and collects sewerage fees for the City. In connection with these services, the BWL received sewerage collection fees of \$1,014,581 and \$919,912 in 2012 and 2011, respectively, included in other income.

Payment in Lieu of Taxes - 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 and ending June 30, 2012, the formula to calculate the amount owed to the City for payment in lieu of taxes 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 \$12,169,097 in 2012 and \$11,771,013 in 2011 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").

#### **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, with the latest revision taking effect on July 1, 2010.

#### Notes to Financial Statements June 30, 2012 and 2011

#### 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 the Defined Contribution Plan was established for employees hired after December 31, 1996. Effective December 1, 1997, all active participants in the Defined Benefit Plan were required to make an irrevocable choice to either remain in the Defined Benefit Plan 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 the Defined Benefit Plan, which were rolled into their accounts in the new 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.

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 I 3007, Lansing, Michigan 4890 I - 3007.

A participant's interest is fully vested when the participant has been credited with seven years of vesting service. The Defined Benefit Plan provides for an annual benefit upon normal retirement equal to the total number of years of credited service multiplied by 1.8 percent of the highest annual pay during the last 10 years of service, paid in equal monthly installments.

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, 2012 and 2011.

Basis of Accounting - The Defined Benefit Plan's financial statements are prepared using the accrual method of accounting in accordance with Governmental Accounting Standards Board (GASB) Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans. Benefits are recognized when due and payable in accordance with the terms of the Defined Benefit Plan.

**Investment Valuation and Income Recognition** - The Defined Benefit Plan investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price. Investments that do not have an established market are reported at estimated fair values.

### **Board of Water and Light - City of Lansing, Michigan**

### Notes to Financial Statements June 30, 2012 and 2011

#### Note 8 - Retirement Plans (Continued)

**Funding Policy and Annual Pension Cost** - The BWL's funding policy provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are designed to accumulate sufficient assets to pay benefits when due. The normal cost and amortization payment for the years ended June 30, 2012, 2011, and 2010 were determined using an attained age projected unit credit actuarial funding method. No transition adjustments were required upon implementation of Governmental Accounting Standards Board Statement No. 27, Accounting for Pensions by State and Local Government Employers. Overfunded actuarial accrued liabilities were amortized as a level dollar reduction of contributions over a period of 15 years in 2012, 2011, and 2010.

**Regulatory Status** - The Defined Benefit 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.

The annual pension cost was determined as part of an actuarial valuation of the Defined Benefit Plan as of February 28, 2012, 2011, and 2010. Significant actuarial assumptions used in determining the annual pension cost include (a) rate of return on the investment of present and future assets of 7.5 percent in 2012, 2011, and 2010, compounded annually, (b) projected salary increases ranging from 5.0 to 11.0 percent in 2012, 2011, and 2010, compounded annually, depending on age, attributable to inflation, and (c) the assumption that benefits will not increase after retirement.

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 cost of living adjustments. 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.

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

#### Notes to Financial Statements June 30, 2012 and 2011

#### Note 8 - Retirement Plans (Continued)

The pension cost for the three most recent years is as follows:

	2012		2011	2010	
Annual pension cost	\$	-	\$ 85,652	\$ 2,109,167	
Percentage of APC contributed		100%	100%	100%	
Net pension obligation		-	-	-	

Employer contributions were made in accordance with contribution requirements determined by an actuarial valuation of the Defined Benefit Plan and consisted of the following:

	 2012	2011	2010	
Normal cost	\$ 477,418	\$ 360,763	\$ 411,434	
Amortization of the (overfunded)/				
underfunded actuarial accrued liability		(281,087)	1,550,582	
Total target contribution	477,418	79,676	1,962,016	
Interest Factor	1.0750	1.0750	1.0750	
Annual required contribution	\$ -	\$ 85,652	\$ 2,109,167	

Based on the overfunded status of the Defined Benefit Plan through June 30, 2009, no employer contributions were required.

**Three-year Trend Information** - Assets available at market, actuarial accrued liability - projected unit cost method (AAL), unfunded actuarial accrued liability (UAAL), and negative UAAL indicate a funding excess.

#### Schedule of Funding Progress (Unaudited - Required Information) (in thousands)

						UAAL as a
	Actuarial					Percentage
	Asset			Funded	Covered	of Covered
Valuation Date	Values	AAL	UAAL	Ratio	Payroll	Payroll
2/28/2009 2/28/2010 2/28/2011 2/28/2012	\$ 64,844 78,244 85,587 79,142	\$ 79,558 75,577 74,292 72,302	(2,667) (11,295)	81.51% 103.53% 115.20% 109.46%	\$ 3,089 2,660 2,398 2,101	476.3 (100.3) (471.0) (325.6)

AAL - Actuarial Accrued Liability (Projected Unit Credit Accrued Liability)

UAAL - Unfunded Actuarial Accrued Liability, negative UAAL indicates a funding excess

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### **Board of Water and Light - City of Lansing, Michigan**

Notes to Financial Statements June 30, 2012 and 2011

#### 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 I 3007, 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.

During the years ended June 30, 2012 and 2011, the BWL contributed \$5,504,602 and \$5,607,367, 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. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans.

#### Notes to Financial Statements June 30, 2012 and 2011

#### 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 exact normal retirement age while working for the BWL. There were 667 participants eligible to receive benefits at June 30, 2012 and 673 participants eligible at June 30, 2011.

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, 2012 and 2011, the cost to BWL of maintaining the Retiree Benefit Plan was \$15,854,530 and \$17,236,375, respectively, of which \$6,437,767 and \$8,063,558, respectively, was contributed to the VEBA trust and \$9,416,763 and \$9,172,817, 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.

### **Board of Water and Light - City of Lansing, Michigan**

### Notes to Financial Statements June 30, 2012 and 2011

#### Note 8 - Retirement Plans (Continued)

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

**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 Plan's annual other postemployement benefit (OPEB) cost is calculated based on the annual required contribution (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.

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.

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

#### Notes to Financial Statements June 30, 2012 and 2011

#### Note 8 - Retirement Plans (Continued)

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 are approximately 6.86 percent and 6.43 percent for the years ended June 30, 2012 and 2011, respectively.

Contribution trend information is as follows (in thousands):

			Percentage of						
		Annual OPEB							
Fiscal Year	Ar	Annual OPEB		nnual OPEB	Cost	Net OPEB			
Ended		Cost		ontributed	Contributed	Obligation			
6/30/2009	\$	18,132	\$	17,866	99%	\$	(123)		
6/30/2010		21,291		21,318	100%		(150)		
6/30/2011		17,300		17,236	100%		(86)		
6/30/2012		15,774		15,854	101%		(166)		

**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 salary increases ranging from 5.0 percent to 11.0 percent, depending on age, and (c) amortization method level dollar over a 30-year period.

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

				L	Infunded	
			Actuarial	A	Actuarial	
	A	ctuarial	Accrued	1	Accrued	Funded
Valuation Date	Ass	set Value	Liability		Liability	Ratio
2/28/2009	\$	45,320	\$256,888	\$	211,568	17.64%
2/28/2010		76,117	252,143		176,026	30.19%
2/28/2011		100,604	260,097		159,493	38.68%
2/28/2012		110,029	245,418		135,389	44.83%

### **Board of Water and Light - City of Lansing, Michigan**

Notes to Financial Statements June 30, 2012 and 2011

#### Note 8 - Retirement Plans (Continued)

#### **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 I of each year, during the month of January. The BWL also will match employee contributions after employees contribute \$1,000 at a rate of 75 percent until they reach the maximum of an additional \$500 in contributions.

#### **Note 9 - Commitments and Contingencies**

At June 30, 2012 and 2011, the BWL has two unused 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 post closure monitoring and maintenance of a landfill site operated by the BWL.

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 post closure cost of the landfills and has recorded the liability of \$13,668,732 and \$15,823,930 for the years ended June 30, 2012 and 2011, respectively. Certain remediation activities have commenced and are in progress. The landfill sites are no longer receiving waste products. Landfill closure and post closure requirements are associated with the Michigan Department of Environmental Quality. Annual post closure 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 ASC 980 (see Note I), the BWL recorded a corresponding regulatory asset (see Note 6).

The BWL previously announced a program to upgrade existing lead pipes throughout the BWL service area. The program is scheduled to be complete in four years at an estimated remaining cost of \$13,021,000.

The BWL has obtained financing to build a new combined-cycle cogeneration facility. This project is scheduled to be completed in 2013. The project has an estimated cost to complete of \$127,245,000, including commitments on this project of \$112,338,000. This project is being refunded through the 2011A Bond.

#### Notes to Financial Statements June 30, 2012 and 2011

#### Note 9 - Commitments and Contingencies (Continued)

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 I), 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, 2012 and 2011 in regard to specific pending legal cases.

The BWL has entered into contracts to purchase coal totaling approximately \$2,676,470 through December 31, 2012. 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 \$55,029,000 through December 2013.

The BWL has entered into agreements for other operating activities totaling \$436,251 through December 31, 2013.

#### **Note 10 - Power Supply Purchase**

In 1983, the BWL entered into 35-year power supply and project support contracts with the Michigan Public Power Agency (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 Unit #1 (Belle River), which became operational in August 1984.

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.

### **Board of Water and Light - City of Lansing, Michigan**

#### Notes to Financial Statements June 30, 2012 and 2011

#### Note 10 - Power Supply Purchase (Continued)

	Estimated					
		Debt		Fixed		Total
Year		Service		Operating		Required
2013	\$	17,676,507	\$	9,930,888	\$	27,607,395
2014		17,676,656		10,228,815		27,905,471
2015		17,675,374		10,535,680		28,211,054
2016		17,675,628		10,851,750		28,527,378
2017		17,676,913		11,177,303		28,854,216
2018		8,838,770		11,512,621	_	20,351,391
Total	\$	97,219,848	\$	64,237,057	\$	161,456,905

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 2012 and 2011 of \$54,328,215 and \$46,231,343, 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.

During the year ended June 30, 2005, the BWL submitted a five-year termination notice of its participation in the MPPA Power Pool Project, terminating, as of December 31, 2010, the BWL's contractual obligation to buy and sell power within the Pool. The termination notice does not extinguish the BWL's membership in MPPA and causes no change in BWL's contractual obligations to MPPA related to Belle River.

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 from these contracts is estimated at \$140.000.000.

#### Notes to Financial Statements June 30, 2012 and 2011

#### Note I I - 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.

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 AI by Standard and Poor's and PI 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:

#### Risks at June 30, 2012

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. As a result of increases in FDIC insurance coverage from December 31, 2010 to December 31, 2012, deposits held in noninterest-bearing accounts will be fully insured regardless of the amount. Therefore there were no bank deposits that were uninsured and uncollateralized at year end. The BWL evaluates each financial institution with which it deposits funds and only those institutions meeting minimum established criteria are used as depositories.

### **Board of Water and Light - City of Lansing, Michigan**

Notes to Financial Statements June 30, 2012 and 2011

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

**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 year end, 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	\$	183,793,502	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 maturity of five years unless matched to a specific cash flow. At year end, the average maturities of investments are as follows:

Less than					
Fair Value	l Year	I-5 Years	6-10 years		
\$ 107,085,979	\$ 107,085,979	\$ -			
182,398,866 18,959,067	114,553,274 18,959,067	66,669,264	1,176,328		
	\$ 107,085,979 182,398,866	Fair Value 1 Year \$ 107,085,979 \$ 107,085,979 182,398,866 114,553,274	Fair Value         I Year         I -5 Years           \$ 107,085,979         \$ 107,085,979         \$ -           182,398,866         114,553,274         66,669,264		

#### **Interest Rate Risk - Pension Trust Funds**

		Weighted Average
Investment	 Fair Value	Maturity (in years)
U.S. government or agency bond	\$ 20,678,118	15.56
Money market trust funds	7,679,738	Less than I year
Corporate bonds	31,395,790	17.81

### Notes to Financial Statements June 30, 2012 and 2011

#### Note II - 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 year-end, 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	\$ 107,085,979	AAA	S&P
Commercial paper	2,409,400	A-2	S&P
	2,409,398	A-2	S&P
	3,008,164	A-2	S&P
	3,019,462	A-I	S&P
	3,515,917	A-I	S&P
	1,582,987	A-I	S&P
	1,017,365	A-I	S&P
	1,996,374	A-I	S&P

**Concentration of Credit Risk** - As of year-end, no more than 5 percent of the BWL's investments are invested in any one commercial paper issue.

# Board of Water and Light - City of Lansing, Michigan

Notes to Financial Statements June 30, 2012 and 2011

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

#### **Credit Risk - Pension Trust Funds**

			Rating
Investment	Fair Value	Rating	Organization
Mutual funds	\$ 99,820,979	Not Rated	Not Rated
Government or agency bond	20,678,118	Not Rated	Not Rated
Stable value	30,547,019	AA	S&P
Corporate bonds	8,342,733	Not Rated	Not Rated
Corporate bonds	4,359,923	AAA	S&P
Corporate bonds	1,619,506	AA+	S&P
Corporate bonds	501,749	AA	S&P
Corporate bonds	759,123	AA-	S&P
Corporate bonds	2,170,200	A+	S&P
Corporate bonds	2,061,195	Α	S&P
Corporate bonds	3,221,293	Α-	S&P
Corporate bonds	883,213	BBB+	S&P
Corporate bonds	2,040,299	BBB	S&P
Corporate bonds	1,313,563	BBB-	S&P
Corporate bonds	429,907	BB+	S&P
Corporate bonds	616,538	BB	S&P
Corporate bonds	443,940	BB-	S&P
Corporate bonds	297,103	B+	S&P
Corporate bonds	665,458	В	S&P
Corporate bonds	264,927	B-	S&P
Corporate bonds	-	CCC+	S&P
Corporate bonds	1,276,968	CCC	S&P
Corporate bonds	128,150	CC	S&P

**Foreign Currency Risk** - The BWL holds no investments in foreign entities, currency, or debt.

#### Notes to Financial Statements June 30, 2012 and 2011

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

#### Risks at June 30, 2011

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 year end, the BWL had \$6,163,455 of bank deposits that were uninsured and uncollateralized. As a result of increases in FDIC insurance coverage from December 31, 2010 to December 31, 2012, deposits held in noninterest-bearing accounts will be fully insured regardless of the amount. 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 year end, 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	\$	235,872,902	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 maturity of five years unless matched to a specific cash flow. At year end, the average maturities of investments are as follows:

	Less than				
	Fair Value	1-5 Years			
Pooled investment funds (if not 2a-7) U.S. government or agency	\$ 99,885,323	\$ 99,885,323	\$ -		
bond or note	236,290,375	82,633,960	153,656,415		
Commercial paper	20,035,622	20,035,622	-		

### **Board of Water and Light - City of Lansing, Michigan**

Notes to Financial Statements June 30, 2012 and 2011

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

#### Interest Rate Risk - Pension Trust Funds

			Weighted Average
Investment	<u>I</u>	Fair Value	Maturity (in years)
U.S. government or agency bond	\$	8,227,576	24.67
Money Market Trust Funds		7,351,389	Less than I year
Corporate bonds		17,233,138	18.41

**Credit Risk** - State law limits investments in commercial paper to the top two ratings issued by nationally recognized statistical rating organizations. As of year-end, 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	\$ 99,885,323	AAA	S&P
Commercial paper	2,296,377	A2/P2	S&P
	2,296,215	A2/P2	S&P
	2,999,760	AI/PI	S&P
	1,012,260	AI/PI	S&P
	3,501,529	AI/PI	S&P
	2,939,231	AI/P2	S&P
	4,990,250	AI/PI	S&P

**Concentration of Credit Risk** - As of year-end, no more than 5 percent of the BWL's investments are invested in any one commercial paper issue.

#### Notes to Financial Statements June 30, 2012 and 2011

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

#### Credit Risk - Pension Trust Funds

		Rating
Fair Value	Rating	Organization
\$131,700,294	Not Rated	Not Rated
8,227,576	Not Rated	Not Rated
29,508,146	AA	S&P
1,380,711	Not Rated	Not Rated
4,300,250	AAA	S&P
601,634	AA+	S&P
414,977	AA	S&P
664,477	AA-	S&P
2,274,050	A+	S&P
1,169,866	Α	S&P
291,893	A-	S&P
467,087	BBB+	S&P
1,211,021	BBB	S&P
713,880	BBB-	S&P
685,366	BB+	S&P
407,801	BB	S&P
298,976	BB-	S&P
388,269	B+	S&P
435,229	В	S&P
675,676	B-	S&P
-	CCC+	S&P
851,975	CCC	S&P
-	CC	S&P
	\$131,700,294 8,227,576 29,508,146 1,380,711 4,300,250 601,634 414,977 664,477 2,274,050 1,169,866 291,893 467,087 1,211,021 713,880 685,366 407,801 298,976 388,269 435,229 675,676	\$131,700,294  8,227,576  29,508,146  1,380,711  Not Rated  4,300,250  AAA  601,634  AA+  414,977  AA-  2,274,050  A+  1,169,866  A  291,893  A-  467,087  BBB+  1,211,021  BBB  713,880  BBB- 685,366  BB+  407,801  BB  298,976  BB- 388,269  B+ 435,229  B 675,676  B-  CCC+  851,975  CCC

Foreign Currency Risk - The BWL holds no investments in foreign entities, currency, or debt.

### **Board of Water and Light - City of Lansing, Michigan**

Notes to Financial Statements June 30, 2012 and 2011

# Note 12 - 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 1999A, Series 2002A and B, 2003A, 2005A, 2008A, and 2011A 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, 2012 and 2011. 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 13 - 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 June 30, 2012 and 2011

#### Note 14 - Wise Road Reconstruction Project

In July of 2011, the Wise Road water treatment plant was damaged by a chemical spill. The piping and electrical systems were damaged beyond repair. The estimate to replace the damaged equipment is approximately \$30 million; substantially all will be recouped from our insurance carrier. The reconstruction project is expected to be completed by January 1, 2014. To date \$10,791,571 in funds are committed of which \$5,656,428 have been expended. Management expects to spend another \$4 million by the end of the calendar year with the balance of the estimate to be expended in 2013.

#### Note 15 - Upcoming Pronouncements

In December 2010, the Governmental Accounting Standards Board (GASB) issued Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements. This statement incorporates into GASB literature certain accounting and financial reporting guidance issued on or before November 30, 1989 that is included in FASB statements and interpretations, APB opinions, and accounting research bulletins of the AICPA Committee on Accounting Procedure. The BWL is currently evaluating the impact this standard will have on the financial statements when adopted during the BWL's 2013 fiscal year.

In June 2011, the GASB issued Statement No. 63, Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position. The statement will be effective for the BWL's fiscal year ending June 30, 2013. The statement incorporates deferred outflows of resources and deferred inflows of resources, as defined by GASB Concepts Statement No. 4, into the definitions of the required components of the residual measure of net position, formerly net assets. This statement also provides a new statement of net position format to report all assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position.

In June 2012, the GASB issued two new pension standards, GASB Statement No. 67, Financial Reporting for Pension Plans, and 68, Accounting and Financial Reporting for Pensions. These new standards significantly revise the current accounting and reporting for pensions, both from an employer perspective as well as from a plan perspective. Employers providing defined benefit obligations to its employees must now, under these new standards, recognize their unfunded pension benefit obligation as a liability for the first time, and to more comprehensively and comparably measure the annual costs of pension benefits. This net pension liability that will be recorded will be computed differently than the current unfunded actuarial accrued liability, using specific parameters set forth by the GASB. The Statement also enhances accountability and transparency through revised and expanded note disclosures and required supplementary information (RSI). Statement No. 67 is required to be adopted for the 2014 fiscal year and Statement No. 68 one year later.

**Additional Information** 

### Income Available for Revenue Bond Debt Retirement

	Year Ended June 30				
		2012		2011	
Income - Before capital contributions per statement of revenues, expenses, and changes in net assets	\$	22.647.611	\$	7.643.886	
of revenues, expenses, and changes in flet assets	Ψ	22,017,011	Ψ	7,013,000	
Adjustments to Income					
Depreciation and impairment		30,854,100		30,098,723	
Interest on long-term debt:					
Notes		10,433		10,721	
Revenue bonds	_	6,966,835		7,388,739	
Total additional income	_	37,831,368		37,498,183	
Income Available for Revenue Bonds and Interest					
Redemption	\$	60,478,979	\$	45,142,069	
Debt Retirement Pertaining to Revenue Bonds					
Principal	\$	12,200,000	\$	11,570,000	
Interest	_	6,966,835	_	7,388,739	
Total	<u>\$</u>	19,166,835	\$	18,958,739	
Percent Coverage of Revenue Bonds and Interest					
Requirements		316		238	

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# Board of Water and Light - City of Lansing, Michigan

	Com	bined	Eliminations			
	2012	2011	2012	2011		
Operating Revenues						
Water	\$ 34,737,716	\$ 31,586,012	\$ -	\$ -		
Electric:						
Retail	238,653,420	229,087,434	-	-		
Sales for resale	31,353,982	30,577,827	-	-		
Steam	10,038,038	9,744,637	-	-		
Chilled water	5,271,400	5,116,727				
Total operating revenues	320,054,556	306,112,637	-	-		
Operating Expenses						
Production:						
Fuel, purchased power, and						
other operating expenses	160,372,503	149,371,642	-	-		
Maintenance	18,803,348	26,577,351	-	-		
Transmission and distribution:						
Operating expenses	6,681,002	6,431,356	-	-		
Maintenance	8,799,994	7,490,376	-	-		
Administrative and general	61,061,810	62,690,708	-	-		
Depreciation and impairment	30,854,100	30,098,723				
Total operating expenses	286,572,757	282,660,156				
Operating Income	33,481,799	23,452,481	-	-		
Nonoperating Income (Expenses)						
Investment income	2,405,773	(33,380)	-	-		
Other income	3,558,624	812,835	-	-		
System capacity fees	9,220,495	9,258,007	-	-		
Bonded debt interest expense	(6,966,835)	(7,388,739)	-	-		
Amortization - Central Utilities Complex	(6,872,715)	(6,714,059)	-	-		
Payment in lieu of taxes	(12,169,097)	(11,732,538)	-	-		
Other interest expense	(10,433)	(10,721)				
Total nonoperating expense	(10,834,188)	(15,808,595)				
Net Income	\$ 22,647,611	\$ 7,643,886	<u> </u>	<u> </u>		

### Detail of Statement of Revenues and Expenses Year Ended June 30, 2012 and 2011

_	Wa	ter	Elec	tric	Ste	am	Chilled	Water
_	2012	2011	2012	2011	2012	2011	2012	2011
\$	34,737,716	\$ 31,586,012	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	-	-	238,653,420	229,087,434	-	-	-	-
	-	-	31,353,982	30,577,827	-	-	-	-
	-				10,038,038	9,744,637	5,271,400	5,116,727
	34,737,716	31,586,012	270,007,402	259,665,261	10,038,038	9,744,637	5,271,400	5,116,727
	8,608,884	7,572,593	144,437,793	134,743,574	5,682,416	5,580,598	1,643,410	1,474,877
	2,909,242	2,480,768	14,599,069	22,941,450	1,041,653	1,010,205	253,384	144,928
						.==		
	1,282,858	1,330,587	5,228,339	4,925,663	169,805	175,106	-	-
	2,235,119	2,322,015	6,114,373	4,738,849	423,014	416,231	27,488	13,281
	9,048,619	10,027,831	49,655,778	49,839,146	1,918,189	2,457,585	439,224	366,146
-	5,979,603	5,891,512	22,562,935	21,847,287	970,521	1,035,915	1,341,041	1,324,009
_	30,064,325	29,625,306	242,598,287	239,035,969	10,205,598	10,675,640	3,704,547	3,323,241
	4,673,391	1,960,706	27,409,115	20,629,292	(167,560)	(931,003)	1,566,853	1,793,486
	369,944	34,238	1,709,467	(20,745)	240,349	49,480	86,013	(96,353)
	1,049,885	873,670	554,982	364,792	1,726,216	(649,717)	227,541	224,090
	807,715	811,001	7,710,178	7,741,546	702,602	705,460	-	-
	(2,600,665)	(2,656,273)	(2,645,478)	(3,356,718)	(89,429)	307,571	(1,631,263)	(1,683,319)
	(602,050)	(588,152)	(5,746,964)	(5,614,296)	(523,701)	(511,611)	-	-
	(1,336,411)	(1,218,752)	(10,267,579)	(9,961,241)	(354,151)	(351,207)	(210,956)	(201,338)
	155	27,357	(10,582)	(38,057)	(6)	(21)		
_	(2,311,427)	(2,716,911)	(8,695,976)	(10,884,719)	1,701,880	(450,045)	(1,528,665)	(1,756,920)
<u>\$</u>	2,361,964	\$ (756,205)	\$ 18,713,139	\$ 9,744,573	\$ 1,534,320	<u>\$ (1,381,048)</u>	\$ 38,188	\$ 36,566

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# Board of Water and Light - City of Lansing, Michigan

## Detail of Statement of Changes in Net Assets

		Combined		Water		Electric		Steam	Ch	illed Water
<b>Net Assets</b> - June 30, 2010	\$	529,226,834	\$	90,841,816	\$	443,002,313	\$	(3,859,747)	\$	(757,548)
Income (loss) before contributions		7,643,886	_	(756,205)	_	9,744,571	_	(1,381,047)	_	36,567
Net Assets - July 1, 2011		536,870,720		90,085,611		452,746,884		(5,240,794)		(720,981)
Income before contributions	-	22,647,611	_	2,361,964	_	18,713,139	_	1,534,321	_	38,187
<b>Net Assets</b> - June 30, 2012	\$ 5	59,518,331	\$	92,447,575	\$	471,460,023	\$	(3,706,473)	\$	(682,794)

### Pension Trust Funds - Detail of Statement of Net Assets

	June 30, 2012								
	Defined			efined Benefit					
	Contribution Plan			Plan		VEBA		Total	
Assets									
Receivable - Investment interest receivable	\$	-	\$	132,512	\$	194,729	\$	327,241	
Investments at fair value:									
Money market collective trust fund		-		2,739,466		6,666,106		9,405,572	
U.S. government obligations		-		7,954,894		12,723,224		20,678,118	
Corporate bonds and notes		-		12,793,539		18,602,251		31,395,790	
Mutual funds		97,085,185		1,127,599		1,608,195		99,820,979	
Stable value		30,547,019		-		-		30,547,019	
Equities		-		48,573,963		69,522,814		118,096,777	
Alternative investments		-		245,024		353,025		598,049	
Self-directed brokerage account		685,767		-		-		685,767	
Participant notes receivable	_	3,703,073	_		_			3,703,073	
Total investments		132,021,044	_	73,434,485	_	109,475,615	_	314,931,144	
Net Assets	\$	132,021,044	\$	73,566,997	\$	109,670,344	\$	315,258,385	

	June 30, 2011								
	Defined			efined Benefit					
	Co	ntribution Plan		Plan		VEBA		Total	
Assets									
Receivable - Investment interest receivable	\$	-	\$	71,171	\$	77,960	\$	149,131	
Investments at fair value:									
Money market collective trust fund		-		2,786,848		6,224,164		9,011,012	
U.S. government obligations		-		3,865,597		4,361,979		8,227,576	
Corporate bonds and notes		-		8,157,858		9,075,280		17,233,138	
Mutual funds		102,476,112		11,550,723		17,673,460		131,700,295	
Stable value		29,508,146		-		-		29,508,146	
Equities		-		56,145,436		66,509,193		122,654,629	
Alternative investments		-		363,525		463,291		826,816	
Self-directed brokerage account		701,335		-		-		701,335	
Participant notes receivable	_	3,709,670	_		_	-	_	3,709,670	
Total investments		136,395,263		82,869,987	_	104,307,367		323,572,617	
Net Assets	\$	136,395,263	\$	82,941,158	\$	104,385,327	\$	323,721,748	

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# Board of Water and Light - City of Lansing, Michigan

### Pension Trust Funds - Detail of Statement of Changes in Net Assets Year Ended June 30, 2012

	Defined	Defined		
	Contribution Plan	Benefit Plan	VEBA	Total
Increases				
Investment income (loss):				
Net depreciation in fair value				
of investments	\$ (1,832,257)			
Interest and dividend income	2,352,962	1,380,854	1,873,084	5,606,900
Net investment income (loss)	520,705	(1,114,333)	(1,152,750)	(1,746,378)
Employer contributions	5,504,602	-	15,854,530	21,359,132
Participant rollover contributions	1,128,725	-	-	1,128,725
Other	294,139			294,139
Total increases - Net of				
depreciation in fair value				
of investments	7,448,171	(1,114,333)	14,701,780	21,035,618
Decreases				
Benefits paid to participants	11,632,674	8,259,828	9,416,763	29,309,265
Loan defaults	115,180	-	-	115,180
Participants' note and administrative fees	74,536			74,536
Total decreases	11,822,390	8,259,828	9,416,763	29,498,981
Net Change in Assets Held	(4,374,219)	(9,374,161)	5,285,017	(8,463,363)
Assets Held in Trust for Pension Benefits				
Beginning of year	136,395,263	82,941,158	104,385,327	323,721,748
End of year	\$ 132,021,044	\$ 73,566,997	\$ 109,670,344	\$ 315,258,385

#### Board of Water and Light - City of Lansing, Michigan

#### Pension Trust Funds - Detail of Statement of Changes in Net Assets (Continued) Year Ended June 30, 2011

	Defined	Defined		
	Contribution Plan	Benefit Plan	VEBA	Total
Increases				
Investment income:				
Net appreciation in fair value				
of investments	\$ 20,313,200	\$ 16,373,304	\$ 17,480,390	\$ 54,166,894
Interest and dividend income	2,398,454	1,171,396	1,412,311	4,982,161
Total investment income	22,711,654	17,544,700	18,892,701	59,149,055
Employer contributions	5,607,367	85,652	17,236,375	22,929,394
Participant rollover contributions	2,710,113	-	-	2,710,113
Other	421,830			421,830
Total increases - Net of				
depreciation in fair value				
of investments	31,450,964	17,630,352	36,129,076	85,210,392
Decreases				
Benefits paid to participants	10,130,324	7,966,889	9,172,817	27,270,030
Loan defaults	116,656	-	-	116,656
Participants' note and administrative fees	68,752			68,752
Total decreases	10,315,732	7,966,889	9,172,817	27,455,438
Net Change in Assets Held	21,135,232	9,663,463	26,956,259	57,754,954
Assets Held in Trust for Pension Benefits				
Beginning of year	115,260,031	73,277,695	77,429,068	265,966,794
End of year	\$ 136,395,263	\$ 82,941,158	\$ 104,385,327	\$ 323,721,748



#### SELECTED FINANCIAL INFORMATION

This Appendix contains excerpts from the BWL's annual financial reports for the fiscal years ended June 30, 2010, 2011 and 2012. 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 reports of the BWL for the same fiscal years are available <a href="https://www.michigan.gov/treasury">www.michigan.gov/treasury</a>. Select Local Government Services and then Local Unit Audit Reports.



#### City of Lansing Board of Water and Light Statement of Net Assets Fiscal Years Ended June 30, 2010, 2011 and 2012

				June 30		
<u>Assets</u>		2010		<u>2011</u>		2012
Current Assets:						
Restricted cash and cash equivalents	\$	38,547,547	\$	37,681,413	\$	46,753,201
Cash and cash equivalents		42,829,458		47,234,603		45,322,246
Investments		25,078,325		43,490,345		52,225,250
Accounts receivable		31,394,564		24,081,889		21,512,610
Estimated unbilled accounts receivable		13,501,303		15,504,354		16,293,202
Inventories		21,330,723		23,892,975		27,142,799
Other		1,587,166	_	1,327,067		1,275,100
Total Current Assets		174,269,086		193,212,646		210,524,408
Other assets:						
Long-term receivable		0		0		0
Deferred energy cost		(5,217,753)		1,184,086		4,178,287
Deferred amortization of Central Utilities Complex		3,934,097		2,291,971		491,190
Deferred environmental remediation		21,715,072		27,524,910		30,280,962
Special deposit		0	)	3,625,000		12,625,000
GM steam service termination fees		0		0		0
GM steam service termination fees - Allowance		0		0		0
Other		952,126		(64,160)		1,469,706
Total Other Assets		21,383,542		34,561,807		49,045,145
Noncurrent restricted assets		31,589,605		262,208,908		184,018,636
Utility Plant:						
Water		245,140,560		252,234,053		256,983,972
Electric		620,083,406		642,246,270		652,680,296
Steam		44,052,072		44,881,456		46,261,609
Chilled Water		32,654,117		32,733,046		32,733,046
Common facilities		64,941,333		65,345,416		66,402,079
Central Utilities Complex		76,079,000	_	76,079,000		76,079,000
Total	1	,082,950,488		1,113,519,241		1,131,140,002
Less accumulated depreciation		562,820,851		592,317,195		622,808,682
Total		520,129,637		521,202,046		508,331,320
Construction in progress		12,284,075		13,062,074		99,598,629
Total utility plant		532,413,712		534,264,120		607,929,949
Total assets		<u>\$759,655,945</u>	. <u>\</u>	51,024,247,481	<u>\$</u>	51,051,518,138

Source: Lansing Board of Water and Light

#### City of Lansing Board of Water and Light Statement of Net Assets (Cont.) Fiscal Years Ended June 30, 2010, 2011 and 2012

			June 30	
<u>Liabilities and Net Assets</u>	-	2010	2011	2012
Current Liabilities:				
Accounts payable	\$	15,725,701	\$ 19,758,271	\$ 29,709,943
Current portion of long-term debt		12,472,372	15,411,114	16,702,848
Accrued payroll and related taxes		2,824,053	2,660,755	3,208,575
Customer deposits		2,219,809	2,122,536	2,186,808
Accrued compensated absences		3,661,189	3,860,961	3,797,587
Accrued interest		3,930,344	4,221,905	9,498,067
Total Current Liabilities		40,833,468	48,035,542	65,103,828
Compensated absences—Less current portion		7,244,259	7,591,266	7,196,790
Other Long-term liabilities:				
Workers' compensation		2,300,000	2,300,000	2,000,000
Environmental remediation liabilities		9,210,361	15,867,899	17,489,748
Deferred steam service termination fees		0	0	0
Arbitrage rebate requirements		0	0	0
Deferred revenue		3,304,074	3,083,802	2,863,531
Other		2,873,937	2,699,134	2,744,644
Total Other Long-term Liabilities		17,688,372	23,950,835	25,097,923
Long-term Debt—Less current portion		164,663,012	407,799,118	394,601,266
Total Liabilities		230,429,111	487,376,761	491,999,807
Net Assets				
Invested in capital assets		373,089,891	373,763,957	393,258,837
Restricted for debt service		39,853,217	37,180,252	34,138,835
Unrestricted		116,283,726	125,926,511	132,120,659
Total Net Assets	_	529,226,834	536,870,720	559,518,331
Total Liabilities and Net Assets		\$759,655 <u>,</u> 945	\$1,024,247,481	\$ 1,051,518,138

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, 2010, 2011 and 2012

	June 30
Operating Revenues	<u>2010</u> <u>2011</u> <u>2012</u>
Water	\$ 28,843,792 \$ 31,586,012 \$ 34,737,716
Electric	231,810,593 259,665,261 270,007,402
Steam	8,445,549 9,744,637 10,038,038
Chilled Water	4,773,042 5,116,727 5,271,400
Total Operating Revenues	273,872,976 306,112,637 320,054,556
Operating Expenses	
Production:	
Fuel, purchased power and other operating expenses.	140,396,919 149,371,642 160,372,50
Maintenance	16,614,892 26,577,351 18,803,34
Transmission and distribution:	
Operating expenses	6,438,471 6,431,356 6,681,002
Maintenance	6,943,539 7,490,376 8,799,99
Administrative and general	60,271,297 62,690,708 61,061,81
Depreciation and impairment	<u>29,664,302</u> <u>30,098,723</u> <u>30,854,10</u>
Total Operating Expenses	<u>260,329,420</u> <u>282,660,156</u> <u>286,572,75</u>
Operating Income (Loss)	13,543,556 23,452,481 33,481,79
Nonoperating Income (Expenses)	
Investment income	\$ 1,521,483 \$ (33,380) \$ 2,405,773
Other income	5,196,043 812,835 3,558,624
System capacity fee	9,220,856 9.258,007 9,220,49
Bonded debt interest expense	(8,093,536) (7,388,739) (6,966,835
Amortization—Central Utilities Complex	(5,926,370) $(6,714,059)$ $(6,872,715)$
Payment in lieu of taxes	(10,523,512) $(11,732,538)$ $(12,169,097)$
Other interest expense	(10,633) (10,721) (10,433)
Total Nonoperating (expenses) income	(8,615,669) (15,808,595) (10,834,188
Net Income (Changes in Net Assets)	4,927,887 7,643,886 22,647,61
Net Assets—Beginning of year	<u>524,298,947</u> <u>529,226,834</u> <u>536,870,72</u>
Net Assets—End of year	<u>\$529,226,834</u> <u>\$536,870,720</u> <u>\$559,518,33</u>

Source: Lansing Board of Water and Light



## AMENDED AND RESTATED BOND RESOLUTION CONSOLIDATED VERSION



## 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.

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 D in consolidated form by noting (in italic font) any sections or subsections which have been amended and inserting the amended text after the original text. Language regarding 1989 bond and project details has been omitted unless it is brief. Notes on amended language and 1989 bond details which have been omitted appear in italic font.

#### 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.
  - (1) "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.
- (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;
- (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.
- (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:

- (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).

Section 1 Subsection (ff) as it appeared in 1989:

(ff) "Reserve Requirement" means the lesser of (a) the maximum Aggregate Debt Service Requirement for the then current and any subsequent operating year and (b) ten percent (10%) of the aggregate proceeds of all Additional Bonds plus the maximum Aggregate Debt Service Requirement on the Series 1989A Bonds and the Series 1989B Bonds for the then current and any subsequent operating year.

Section 11 of the Tenth Supplemental Revenue Bond Resolution (adopted January 29, 2008):

Reserve Requirement. Until payment or defeasance in full of the Outstanding Senior Lien Bonds (refers to the Outstanding portion of: the Water Supply, Steam and Electric Utility System Revenue Bonds, Series 2002A ("Series 2002A Bonds"), the Water Supply, Steam and Electric Utility System Revenue Refunding Bonds, Series 2002B ("Series 2002B Bonds"), the Water Supply, Steam and Electric Utility System Revenue Refunding Bonds, Series 2003A ("Series 2003A Bonds"), and the Water Supply, Steam and Electric Utility System Revenue Refunding Bonds, Series 2005A ("Series 2005A Bonds"), the City must comply with the Reserve Requirement as defined in Section 1 of the Bond Resolution as amended and restated on October 24, 1989, which is the lesser of (a) the maximum Aggregate Debt Service Requirement for the then current and any subsequent operating year and (b) ten percent of the aggregate proceeds of all Outstanding Bonds. After payment or defeasance in full of the Outstanding Senior Lien Bonds, "Reserve Requirement" shall mean the lesser of (i) the maximum 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" as it appears in Section 1 Subsection (kk) as adopted on October 24, 1989:

(kk) "System" means the complete facilities of the City for the supply and distribution of water and the generation and distribution of electricity, steam 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 and heat and all additions, extensions and improvements thereto existing or hereafter acquired by the City.

The definition of "System" in Section 1 Subsection (k) of the Eleventh Supplemental Revenue Bond Resolution (adopted *May 10, 2011*):

- (k) "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.
- (ll) "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 5 of the Second Supplemental Revenue Bond Resolution (adopted January 11, 1994) and by Section 12 of the Tenth Supplemental Revenue Bond Resolution (adopted January 29, 2008).

Section 9 as it appeared in 1989:

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 120% of the Aggregate Debt Service Requirement for the forthcoming twelve (12) month period plus such amount as is necessary to comply with all covenants in this Bond Resolution and to pay all charges and liens whatsoever payable out of Net Revenues in such period.

Section 9 as amended by Section 5 of the Second Supplemental Revenue Bond Resolution (adopted January 11, 1994):

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 to at least 150% of the Aggregate Debt Service Requirement for the forthcoming twelve (12) month period plus such amount as is necessary to comply with all covenants in this Bond Resolution and to pay all charges and liens whatsoever payable out of Net Revenues in such period.

Section 9 as amended by Section 12 of the Tenth Supplemental Revenue Bond Resolution (adopted January 29, 2008):

Section 9. <u>Rate Covenant</u>. After payment or defeasance in full of the Outstanding Senior Lien Bonds (*refers to the Series 2002A Bonds, Series 2002B Bonds, Series 2003A Bonds, and Series 2005A Bonds*), 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.

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.

C. <u>JUNIOR LIEN BOND AND INTEREST REDEMPTION FUND</u>: 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. <u>Rebate Fund</u>. 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. <u>Investments</u>. 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.

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 1989A Bonds and the Series 1989B Bonds, but only for the following purposes and under the following terms and conditions:

Section 18(a) was amended by Section 6 of the Second Supplemental Revenue Bond Resolution (adopted January 11, 1994) and by Section 13 of the Tenth Supplemental Revenue Bond Resolution (adopted January 29, 2008).

Section 18(a) as it appeared in 1989:

(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 average 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 Consulting Engineer 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 Consulting Engineer 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.

Section 18(a) as amended by Section 6 of the Second Supplemental Revenue Bond Resolution (adopted January 11, 1994):

(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 average 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 fifty (150%) 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 Consulting Engineer 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 Consulting Engineer 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.

Section 18(a) as amended by Section 13 of the Tenth Supplemental Revenue Bond Resolution (adopted January 29, 2008):

Until payment or defeasance in full of the Outstanding Senior Lien Bonds (refers to the Series 2002A Bonds, Series 2002B Bonds, Series 2003A Bonds, and Series 2005A Bonds), the City must comply with the additional bonds test imposed by Section 6 of the Second Supplemental Revenue Bond Resolution adopted January 11, 1994. Section 18(a) of the Bond Resolution, as previously amended by Section 6 of the Second Supplemental Revenue Bond Resolution, is amended to provide:

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.

The remainder of Section 18 has not been modified or amended.

- (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: (1) 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]

Adopted and signed on the 24<sup>th</sup> day of October, 1989.

Phillip E. Hassler Chairman Mary E. Sova Secretary

#### PROVISIONS OF SUPPLEMENTAL RESOLUTIONS WHICH APPLY TO INSURED BONDS

#### Series 2003A Bonds insured by Financial Security Assurance, Inc.

The Eighth Supplemental Revenue Bond Resolution (adopted August 12, 2003) contains the following provisions which apply to the Water Supply, Steam and Electric Utility System Revenue Refunding Bonds, Series 2003A which are insured by Financial Security Assurance, Inc.

Section 14. <u>The Insurance Policy</u>. The provisions of this Section 14 shall apply if the Insurer provides an Insurance Policy with respect to any Series 2003A Bond and such Insurance Policy is in full force and effect:

- (a) <u>Insurer Consent to Deposit of Bond Reserve Account Guaranty</u>. The prior written consent of the Insurer shall be a condition precedent to the deposit of any Bond Reserve Account Guaranty or other credit instrument provided in lieu of a cash deposit into the Bond Reserve Account. Such consent shall not be required if (i) the Bond Reserve Account Guaranty is to be provided by an existing insurer of the Board's outstanding Bonds; and (ii) the provision of the Bond Reserve Account Guaranty will not result in a downgrade of the ratings on the Board's outstanding Bonds.
- (b) <u>Insurer as Owner</u>. The Insurer shall be deemed to be the sole holder or Bondholder (Registered Owner) of the Insured Bonds for the purpose of exercising any voting right or privilege or giving any consent or direction or taking any other action that the holders of the Insured Bonds are entitled to take pursuant to the Bond Resolution pertaining to defaults and remedies.
- (c) <u>Insurer as Third-Party Beneficiary</u>. To the extent the Bond Resolution confers upon or gives or grants to the Insurer any right, remedy or claim under or by reason of the Bond Resolution, the Insurer is hereby explicitly recognized as being a third-party beneficiary hereunder and may enforce any such right, remedy, or claim conferred, given or granted hereunder.
- (d) <u>Insurer Consent to Modifications or Amendments</u>. No modification or amendment to the Bond Resolution may become effective except upon obtaining the prior written consent of the Insurer. Copies of any modification or amendment to the Bond Resolution shall be sent to Standard & Poor's Credit Market Services and Moody's Investors Service, Inc. at least 10 days prior to the effective date thereof. The consent requirement contained in this subsection shall not apply to supplemental resolutions adopted by the Board with respect to the issuance of Additional Bonds hereunder.
- (e) <u>Insurer's Contractual Rights</u>. The rights granted to the Insurer under the Bond Resolution to request, consent to or direct any action are rights granted to the Insurer in consideration of its issuance of the Insurance Policy. Any exercise by the Insurer of such rights is merely an exercise of the Insurer's contractual rights and shall not be construed or deemed to be taken for the benefit or on behalf of the holders of the Insured Bonds nor does such action evidence any position of the Insurer, positive or negative, as to whether consent by the holders of the Insured Bonds is required in addition to consent of the Insurer.
- (f) <u>Defeasance</u>. Only (1) cash, (2) non-callable direct obligations of the United States of America ("Treasuries"), (3) evidences of ownership of proportionate interests in future interest and principal payments on Treasuries held by a bank or trust company as custodian, under which the owner of the investment is the real party in interest and has the right to proceed directly and individually against the obligor and the underlying Treasuries are not available to any person claiming through the custodian or to whom the custodian may be obligated, (4) pre-refunded municipal obligations rated "AAA" and "Aaa" by S&P and Moody's, respectively or (5) securities eligible for "AAA" defeasance under then existing criteria of S & P or any combination thereof, shall be authorized to be, used to effect defeasance of the Insured Bonds, unless the Insurer otherwise approves.
  - To accomplish defeasance of the Insured Bonds, the Board shall cause to be delivered (i) a report of an independent firm of nationally recognized certified public accountants or such other accountant as shall be acceptable to the Insurer ("Accountant") verifying the sufficiency of the escrow established to pay the Insured Bonds in full on the maturity or redemption date ("Verification"), (ii) an Escrow Deposit Agreement (which shall be acceptable in form and substance to the Insurer), and (iii) an opinion of nationally recognized bond counsel to the effect that the Insured Bonds to be defeased are no longer "Outstanding" under the Bond Resolution; each Verification and defeasance opinion shall be acceptable in form and substance, and addressed, to the Board, the Transfer Agent and the Insurer. The Insurer shall be provided with final drafts of the above-referenced documentation not less than five business days prior to the funding of the escrow.
- (g) Insured Bonds Outstanding. Insured Bonds shall be deemed "Outstanding" under the Bond Resolution unless and until they are in fact paid and retired or the above defeasance criteria are met.

Amounts paid by the Insurer under the Insurance Policy shall not be deemed paid for purposes of the Bond Resolution and shall remain Outstanding and continue to be due and owing until paid by the Board in accordance with the Bond Resolution. The Bond Resolution shall not be discharged unless all amounts due or to become due to the Insurer have been paid in full or duly provided for.

- (h) <u>Reimbursement of Insurer</u>. The Board shall pay or reimburse the Insurer any and all charges, fees, costs and expenses which the Insurer may reasonably pay or incur in connection with (i) the administration, enforcement, defense or preservation of any rights or security in the Bond Resolution; (ii) the pursuit of any remedies under the Bond Resolution or otherwise afforded by law or equity, (iii) any amendment, waiver or other action with respect to, or related to, the Bond Resolution whether or not executed or completed, (iv) the violation by the Board of any law, rule or regulation, or any judgment, order or decree applicable to it or (v) any litigation or other dispute in connection with the Bond Resolution or the transactions contemplated thereby, other than amounts resulting from the failure of the. Insurer to honor its obligations under the Insurance Policy.
- (i) <u>Payment of Insurer</u>. The Insurer shall be entitled to pay principal or interest on the Insured Bonds that shall become Due for Payment but shall be unpaid by reason of Nonpayment by the Board (as such terms are defined in the Insurance Policy) and any amounts due on the Insured Bonds in accordance with the Bond Resolution, whether or not the Insurer has received a Notice of Nonpayment (as such terms are defined in the Insurance Policy) or a claim upon the Insurance Policy.
- (j) Notice to Insurer. The notice address of the Insurer is: Financial Security Assurance Inc., 350 Park Avenue, New York, New York 10022-6022, Attention: Managing Director Surveillance, Re: Policy No. [insert number], Telephone: (212) 826-0100; Telecopier: (212) 339-3556. In each case in which notice or other communication refers to an Event of Default, then a copy of such notice or. other communication shall also be sent to the attention of the General Counsel and shall be marked to indicate "URGENT MATERIAL ENCLOSED."
- (k) <u>Information to be Given to Insurer</u>. The Insurer shall be provided with the following information:
  - (i) Annual audited financial statements within 150 days after the end of the Board's fiscal year (together with a certification of the Board that it is not aware of any default or Event of Default under the Bond Resolution), and the Board's annual budget within 30 days after the approval thereof together with such other information, data or reports as the Insurer shall reasonably request from time to time;
  - (ii) Notice of any draw upon the Bond Reserve Account within two Business Days after knowledge thereof other than (i) withdrawals of amounts in excess of the Reserve Requirement and (ii) withdrawals in connection with a refunding of Insured Bonds;
  - (iii) Notice of any default known to the Transfer Agent within five Business Days after knowledge thereof;
  - (iv) Prior notice of the advance refunding or redemption of any of the Insured Bonds, including the principal amount, maturities and CUSIP numbers thereof;
  - (v) Notice of the resignation or removal of the Transfer Agent, Paying Agent and Bond Registrar and the appointment of, and acceptance of duties by, any successor thereto;
  - (vi) Notice of the commencement of any proceeding by or against the Board or the City commenced under the United States Bankruptcy Code or any other applicable bankruptcy, insolvency, receivership, rehabilitation or similar law (an "Insolvency Proceeding");
  - (vii) Notice of the making of any claim in connection with any Insolvency Proceeding seeking the avoidance as a preferential transfer of any payment of principal of, or interest on, the Insured Bonds;
  - (viii) A full original transcript of all proceedings relating to the execution of any amendment or supplement to the Bond Resolution; and
  - (ix) All reports, notices and correspondence to be delivered to Registered Owners under the terms of the Bond Resolution.
- (1) <u>Restriction on Additional Bonds</u>. Notwithstanding satisfaction of other conditions to the issuance of Additional Bonds contained in the Bond Resolution, no such issuance may occur (i) should any Event of Default (or any event which, once all notice or grace periods have passed, would constitute an Event of Default) have occurred and be continuing unless such default shall be cured upon such issuance and (ii) unless the Bond Reserve Account is fully funded at its requirement (including the new issue) upon the issuance of such Additional Bonds, in either case, unless otherwise permitted by the Insurer.
- (m) <u>Transfer Agent Considerations</u>. In determining whether any amendment, consent or other action to be taken, or any failure to act, under the Bond Resolution would adversely affect the security for the Insured Bonds or the

- rights of the holders of Insured Bonds, the Transfer Agent shall consider the effect of any such amendment, consent, action or inaction as if there were no Insurance Policy.
- (n) <u>Non-Impairment</u>. No contract shall be entered into nor any action taken by which the rights of the Insurer or security for or sources of payment of the Insured Bonds may be impaired or prejudiced in any material respect except upon obtaining the prior written consent of the Insurer.
- (o) <u>Refunding Bonds</u>. If the proceeds of the Insured Bonds are used to refund Outstanding Bonds of the Board, there shall be delivered an opinion of Bond Counsel addressed to the Insurer (or a reliance letter relating thereto) or a certificate of discharge of the trustee for the Refunded Bonds to the effect that, upon the making of the required deposit to the escrow, the Refunded Bonds will be defeased. If the Insured Bonds are refunded, at least three business days prior to the proposed date for delivery of the Policy with respect to the refunding bonds, the Insurer shall receive (i) a verification letter, of which the Insurer shall be an addressee, by an independent firm of certified public accountants which is either nationally recognized or otherwise acceptable to the Insurer, of the adequacy of the escrow established to provide for the payment of the Insured Bonds in accordance with the terms and provisions of the Escrow Deposit Agreement, and (ii) the form of an opinion of Bond Counsel addressed to the Insurer (or a reliance letter relating thereto) to the effect that the Escrow Deposit Agreement is a valid and binding obligation of the parties thereto enforceable in accordance with its terms (such Escrow Deposit Agreement to provide that it may be amended only with the Insurer's consent). An executed copy of each of such opinion and reliance letter, if applicable, shall be forwarded to the Insurer prior to delivery of the Insured Bonds.

#### Series 2005A Bonds insured by MBIA Insurance Corporation

The Ninth Supplemental Revenue Bond Resolution (adopted July 26, 2005) contains the following provisions which apply to the outstanding Water Supply, Steam and Electric Utility System Revenue Refunding Bonds, Series 2005A which are insured by MBIA Insurance Corporation.

- Section 13. <u>The Insurance Policy</u>. This Section 13 shall apply with respect to Insured Bonds in the event an Insurance Policy insures the principal of and interest on all or a portion of the Series 2005A Bonds, but only during such time as the Insurer is not in default under the terms and conditions of the Insurance Policy to be issued by the Insurer at the time of the issuance and delivery of the Insured Bonds, and the Insurance Policy is in full force and effect:
  - (a) (i) The Insurer shall be deemed to be and recognized as the Registered Owners of the Insured Bonds (A) at all times for the purposes of the adoption of a supplemental resolution amending, changing or modifying the Bond Resolution or this supplemental resolution or the initiation by Registered Owners of any action, or the removal of the Transfer Agent or the appointment of a successor Transfer Agent, which under the Bond Resolution, may require the written approval or consent of the Registered Owners of all or a portion of the Series 2005A Bonds (including the Insured Bonds) at the time Outstanding under the Bond Resolution or can be initiated upon the written request of the Registered Owners of not less than all or a portion of the Series 2005A Bonds (including the Insured Bonds) Outstanding under the Bond Resolution, (B) following an Event of Default for all other purposes, and (C) for the purposes of exercising all other rights and privileges available to a Registered Owner of an Insured Bond.
  - (ii) In the event a payment can be accelerated, no action by any. Registered Owner of an Insured Bond to accelerate the payment of principal of and interest on the Insured Bonds or to pursue any other remedy with respect to the. Insured Bonds shall be of any effect unless the Registered Owner obtains the written consent of the Insurer to such acceleration or the Insurer shall direct such acceleration or remedy.
  - (iii) In the event and to the extent that the principal and/or interest due on the Insured Bonds shall be paid by the Insurer pursuant to the Insurance Policy, the Insured Bonds shall remain Outstanding for all purposes under the Bond Resolution, not be defeased or otherwise satisfied and not be considered paid by the City and the pledge of the funds and accounts under the Bond Resolution and all covenants, agreements and other obligations of the City to the Registered Owners of the Insured Bonds shall continue to exist.
  - (iv) The Board shall provide written notice to the Insurer in the event the Transfer Agent resigns or is removed or if a successor is appointed. The Insurer shall have the right to consent to the appointment of any successor Transfer Agent.
  - (v) The Insurer shall receive from the Board on an annual basis, copies of the Board's audited financial statements and annual budgets.
  - (vi) The Transfer Agent shall furnish to the Insurer a copy of any notice to be given to any Registered Owner of an Insured Bond or the Transfer Agent under the Bond Resolution. All notices required to be given to the Insurer under the Bond Resolution shall be in writing and shall be sent by registered or certified mail addressed to MBIA Insurance Corporation, 113 King Street, Armonk, New York 10504, Attention: Insured Portfolio Management.

- (vii) Notwithstanding any other provision of the Bond Resolution, the right of the Insurer to consent to and to approve certain actions as provided in this Ninth Supplemental Revenue Bond Resolution shall be null and void if the Insurer is in default under the terms and conditions of the Insurance Policy issued by the Insurer or if such Insurance Policy has been cancelled or is not otherwise in effect.
- (viii) The Board shall obtain the Insurer's consent prior to adoption of a supplemental resolution or the issuance of additional bonds under the Bond Resolution if the adoption of the supplemental resolution or the issuance of such Additional Bonds is for a purpose other than (i) a refunding to obtain savings; or (ii) the issuance of additional bonds which are in accordance with any additional bonds test or additional bonds requirement contained in the Bond Resolution.
- (ix) In connection with the issuance of Additional Bonds, the Board shall deliver to the Insurer a copy of the disclosure document, if any, circulated with respect to such Additional Bonds.
- (x) Copies of any amendments made to the resolutions or documents entered into in connection with the issuance of the Insured Bonds which are consented to by the Insurer shall be sent to Standard & Poor's Corporation.
- (xi) The Board agrees to reimburse the Insurer immediately and unconditionally upon demand, to the extent permitted by law, for all reasonable expenses, including attorneys' fees and expenses, incurred by the Insurer in connection with (A) the enforcement by the Insurer of the Board's obligations, or the preservation or defense of any rights of the Insurer, under the Bond Resolution and any other document executed in connection with the issuance of the Insured Bonds, and (B) any consent, amendment, waiver or other action with respect to the Bond Resolution or any related document, whether or not granted or approved, together with interest on all such expenses from and including the date incurred to the date of payment at Citibank's Prime Rate plus 3% or the maximum interest rate permitted by law, whichever is less. In addition, the Insurer reserves the right to charge a fee in connection with its review of all such consent, amendment or waiver, whether or not granted or approved.
- (xii) The Board agrees not to use the Insurer's name in any public document including, without limitation, a press release or presentation announcement or forum without the Insurer's prior consent; provided however, such prohibition on the use of the Insurer's name shall not relate to the use of the Insurer's standard approved form of disclosure in public documents issued in connection with the current Insured Bonds to be issued in accordance with the terms of the Insurer's insurance commitment; and provided further such prohibition shall not apply to the use of the Insurer's name in order to comply with public notice, public meeting or public reporting or disclosure requirements.
- (xiii) The Board shall not enter into any agreement nor shall it consent to or participate in any arrangement pursuant to which Insured Bonds are tendered or purchased for any purpose other than the redemption and cancellation or legal defeasance of such Insured Bonds without the prior written consent of the Insurer.
- (b) (i) In the event that on the second business day, and again on the business day prior to the payment date of principal or interest on the Insured Bonds, the Transfer Agent has not received sufficient amounts in the funds established in the Bond Resolution to pay all principal and interest coming due on the Insured Bonds on the second following, or following, as the case may be, business day, the Transfer Agent shall immediately notify the Insurer or its designee by telephone or telegraph, confirmed in writing by registered or certified mail, of the amount of the deficiency.
- (ii) If the deficiency is made up in whole or in part prior to or on the interest payment date or principal payment date, the Transfer Agent shall so notify the Insurer or its designee.
- (iii) In addition, if the Transfer Agent has written notice from any Registered Owner that any of the Registered Owners have been required to disgorge payments of principal or interest on the Insured Bonds to the City or to the trustee in bankruptcy for creditors or others pursuant to a final judgment by a court of competent jurisdiction that such payment constitutes a voidable preference to such Registered Owners within the meaning of any applicable bankruptcy laws, then the Transfer Agent shall notify the Insurer or its designee of such fact by telephone or telegraphic notice, confirmed in writing by registered or certified mail.
- (iv) The Transfer Agent is hereby irrevocably designated, appointed, directed and authorized to act as attorney-in-fact for Registered Owners of the Insured Bonds as follows:
  - (A) if and to the extent there is a deficiency in amounts required to pay interest on the Insured Bonds, the Transfer Agent shall (I) execute and deliver to U.S Bank Trust National Association, or its successors under the Insurance Policy (the "Insurance Paying Agent"), in form satisfactory to the Insurance Paying Agent, an instrument appointing the Insurer as agent for such Registered Owners in any legal proceeding related to the payment of such interest and an assignment to the Insurer of the claims for interest to which such deficiency relates and which are paid by the Insurer, (II) receive as designee of the respective Registered Owners (and not as Transfer Agent) in accordance with the tenor of the Insurance Policy payment from the Insurance Paying Agent with respect to the claims for interest so assigned, and (III) disburse the same to such respective Registered Owners; and

- (B) if and to the extent of a deficiency in amounts required to pay principal of the Insured Bonds, the Transfer Agent shall (I) execute and deliver to the Insurance Paying Agent, in form satisfactory to the Insurance Paying Agent, an instrument appointing the Insurer as agent for such Registered Owner in any legal proceeding relating to the payment of such principal and an assignment to the Insurer of any of the Insured Bonds surrendered to the Insurance Paying Agent of so much of the principal amount thereof as has not previously been paid or for which moneys are not held by the Transfer Agent and available for such payment (but such assignment shall be delivered only if payment from the Insurance Paying Agent is received), (II) receive as designee of the respective Registered Owners (and not as Transfer. Agent) in accordance with the tenor of the Insurance Policy payment therefor from the Insurance Paying Agent and (III) disburse the same to such Registered Owners.
- (v) Payments with respect to claims for interest on and principal of Insured Bonds disbursed by the Transfer Agent from proceeds of the Insurance Policy shall not be considered to discharge the obligation of the City with respect to such Insured Bonds, and the Insurer shall become the owner of such unpaid Insured Bonds and claims for interest in accordance with the tenor of the assignment made to it under the provisions of this subsection or otherwise.
- (vi) Irrespective of whether any such assignment is executed and delivered, the City through its Board and the Transfer Agent hereby agree for the benefit of the Insurer that:
  - (A) they recognize that to the extent the Insurer makes payments, directly or indirectly (as by paying through the Transfer Agent), on account of principal of or interest on the Insured Bonds, the Insurer will be subrogated to the rights of such Registered Owners to receive the amount of such principal and interest from the City,, with interest thereon as provided and solely from the sources stated in the Bond Resolution and the Insured Bonds; and
  - (B) they will accordingly pay to the Insurer the amount of such principal and interest (including principal and interest recovered under subparagraph (ii) of the first paragraph of the Insurance Policy, which principal and interest shall be deemed past due and not to have been paid), with interest thereon as provided in the Bond Resolution, but only from the sources and in the manner provided herein and in the Bond Resolution for the payment of principal of and interest on the Insured Bonds to Registered Owners, and will otherwise treat the Insurer as the owner of such rights to the amount of such principal and interest.
- (c) (i) In the event the Board refunds all or a portion of the Insured Bonds, the Board shall, unless waived in writing by the Insurer, provide the Insurer: (i) a final debt service schedule within three business days from the sale date of the refunding bonds; (ii) at least 10 days in advance of the closing, drafts of a verification report by an independent certified public accounting firm of the sufficiency of the escrow to timely pay the refunded bonds, an escrow securities purchase agreement or state and local government subscription form or open market securities confirmation, and an escrow deposit agreement; (iii) at least 5 business days prior to the closing, a draft opinion of bond counsel, to the effect that the refunding bonds are being issued in compliance with state law and that interest on the refunding bonds is tax-exempt; (iv) at least 5 business days prior to the closing, a draft opinion of bond counsel to the effect that the refunded bonds have been defeased. The Insurer must give its oral approval of the form of the verification report, escrow securities order and escrow agreement.
- (ii) In the event Insured Bonds are defeased in accordance with Section 5 of the Bond Resolution, the Board shall utilize only the following investments or securities to effectuate the defeasance, but only to the extent such investments or securities constitute Sufficient Government Obligations or Sufficient Municipal Obligations as defined in the Bond Resolution:
  - (A) Cash;
  - (B) U.S. Treasury Certificates, Notes and Bonds (including State and Local Government Series -- "SLGs");
  - (C) Direct obligations of the Treasury which have been stripped by the Treasury itself, CATS, TIGRS and similar securities;
  - (D) Resolution Funding Corp. (REFCORP) Only the interest component of REFCORP strips which have been stripped by request to the Federal Reserve Bank of New York in book-entry form are acceptable;
  - (E) Pre-refunded municipal bonds rated "Aaa" by Moody's and "AAA" by S&P. If, however, the issue is only rated by S&P (i.e., there is no Moody's rating) then the pre-refunded bonds must have been pre-refunded with cash, direct U.S. or U.S. guaranteed obligations, or AAA rated pre-refunded municipals to satisfy this condition;
  - (F) Obligations issued by the following agencies which are backed by the full faith and credit of the U.S:
    - (1) <u>U.S. Export-Import Bank</u> (Eximbank) Direct obligations or fully guaranteed certificates of beneficial ownership
    - (2) Farmers Home Administration (FmHA) Certificates of beneficial ownership
    - (3) Federal Financing Bank

(4) General Services Administration

Participation certificates

(5) <u>U.S. Maritime Administration</u>

Guaranteed Title XI financing

(6) <u>U.S Department of Housing and Urban Development</u> (HUD)

Project Notes

**Local Authority Bonds** 

New Communities Debentures — U.S. government guaranteed debentures U.S. Public Housing Notes and Bonds — U.S. government guaranteed public housing notes and bonds

(d) The Insurer shall be provided with an opinion of counsel acceptable to the Insurer that the Insured Bonds have been legally defeased and that the escrow agreement establishing such defeasance operates to legally defease the Insured Bonds within the meaning of the Bond Resolution and this Ninth Supplemental Revenue Bond Resolution relating to the Insured Bonds. In addition, the Insurer will be entitled to receive (i) 15 business days notice of any advance refunding of the Insured Bonds and (ii) an accountant's report with respect to the sufficiency of the amounts deposited in escrow to defease the Insured Bonds.

FORM OF APPROVING OPINION



Founded in 1852 by Sidney Davy Miller



Miller, Canfield, Paddock and Stone, P.L.C.

One Michigan Avenue, Suite 900 Lansing, Michigan 48933 TEL (517) 487-2070 FAX (517) 374-6304 www.millercanfield.com

April 17, 2013

#### MICHIGAN: Ann Arbor Detroit • Grand Rapids Kalamazoo • Lansing • Troy

FLORIDA: Tampa
ILLINOIS: Chicago
NEW YORK: New York
OHIO: Cincinnati

CANADA: Toronto • Windsor
CHINA: Shanghai
MEXICO: Monterrey
POLAND: Gdynia
Warsaw • Wrocław

#### DRAFT FORM OF APPROVING OPINION

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 \$21,085,000, designated UTILITY SYSTEM REVENUE REFUNDING BONDS, SERIES 2013A (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 April 17, 2013, 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

#### MILLER, CANFIELD, PADDOCK AND STONE, P.L.C.

Lansing Board of Water and Light

-2-

April 17, 2013

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 the Water Supply, Steam and Electric Utility System Revenue Refunding Bonds, Series 2002B, the Water Supply, Steam and Electric Utility System Revenue Refunding Bonds, Series 2003A, the Water Supply, Steam and Electric Utility System Revenue Refunding Bonds, Series 2005A, Water Supply, Steam, Chilled Water and Electric Utility System Revenue Bonds, Series 2014A, and the Utility System Revenue Bonds, Series 2011A, and the Utility System Revenue Refunding Bonds, Series 2012A (together the "Outstanding Senior Lien Bonds"). The Issuer has reserved the right to issue additional bonds of equal standing with the Bonds and the Outstanding Senior Lien 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 Senior Lien 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 Senior Lien 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.

#### MILLER, CANFIELD, PADDOCK AND STONE, P.L.C.

Lansing Board of Water and Light

-3-

April 17, 2013

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.

By:

William J. Danhof



FORM OF CONTINUING DISCLOSURE UNDERTAKING



#### LANSING BOARD OF WATER AND LIGHT UTILITY SYSTEM REVENUE REFUNDING BONDS, SERIES 2013A

#### **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 2013A (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, 2013, 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 By \_\_\_\_\_ Its: Assistant General Manager and Chief Financial Officer

Dated: \_\_\_\_\_\_, 2013

# 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:

#### **Steam Generation:**

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.

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#### 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.

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## \$21,085,000

### LANSING BOARD OF WATER AND LIGHT CITY OF LANSING, MICHIGAN UTILITY SYSTEM REVENUE REFUNDING BONDS, SERIES 2013A

#### Financial Advisor:

Robert W. Baird & Co. 1001 Bay Street Traverse City, Michigan 49684 (231) 933-8447

