



MINUTES OF THE BOARD OF COMMISSIONERS MEETING

LANSING BOARD OF WATER AND LIGHT

November 15, 2016

The Board of Commissioners met at the Lansing Board of Water and Light (BWL) Headquarters-REO Town Depot located at 1201 S. Washington Ave., Lansing, MI, at 5:30 p.m. on Tuesday, November 15, 2016.

Chairperson David Price called the meeting to order at 5:32 p.m.

Present: Commissioners Dennis M. Louney, Anthony McCloud, Tony Mullen, David Price, Tracy Thomas, and Sandra Zerkle. Non-Voting Commissioners present: Stuart Goodrich (Dehli Township), Bob Nelson (East Lansing) and Bill Long (Delta Township).

Absent: Commissioners Mark Alley, Ken Ross and Stuart Goodrich.

The Corporate Secretary declared a quorum.

Commissioner Tony Mullen led the Pledge of Allegiance.

SPECIAL CEREMONY CHECK PRESENTATION

A. BWL Chili Cook-Off Check Presentation

General Manager Peffley presented checks on behalf of the proceeds from the Chili Cook Off to:

Development Coordinator Veronica Klem of the Sparrow Foundation, \$5,000.00

Executive Director Justin Sheehan of Lansing Promise, \$5,000.00

Executive Director Erik Larson of Impression 5 Science Center, \$5,000.00

B. BWL 5K Check Presentation

General Manager Peffley presented a check on behalf of the proceeds from the BWL 5k to Executive Director Sarah Spradlin of the McLaren Greater Lansing Healthcare Foundation in the amount of \$4,542.65

General Manager Peffley informed the Commissioners that the BWL held a Golf Outing fundraising event that was spearheaded by BWL's Supervisor of Maintenance and Construction Tony Green. The recipients of the proceeds from that event were the Wounded Warriors Project, in the amount of \$15,250.00, and the MSU Woman's Basketball Program, in the amount of \$2,600.00.

APPROVAL OF MINUTES

Motion by Commissioner Mullen, Seconded by Commissioner McCloud, to approve the Regular Board Meeting minutes of September 27, 2016.

Action: Motion Carried

PUBLIC COMMENTS

None.

COMMUNICATIONS

Electronic Mail received from:

- a. Steve Rall re: Requesting the Commissioners to view a Natural Gas Documentary
Referred to Management and Received and Placed on File
- b. Cody James Forsythe re: Payment difficulties
Referred to Management and Received and Placed on File
- c. Erick White re: Customer Service
Referred to Management and Received and Placed on File

COMMITTEE REPORTS

**Board of Water & Light and Lansing City Council
Committee of the Whole
October 27, 2016
David Price, Chair
Judi Brown Clarke, President**

The Lansing Board of Water and Light Board of Commissioners, and Lansing City Council met at the Lansing Board of Water and Light (BWL) Headquarters - REO Town Depot, located at 1201 S. Washington Ave., Lansing, MI, at 5:30 p.m. on October 27, 2016.

The BWL Commissioners and Administration provided updates or information on:

- Timelines for the BWL Substation Project
- Future Rate Strategies
- And the Annual Audit Report for FY Ending June 30, 2016.

The next meeting of these two entities will be hosted by Lansing City Council.

Thank you and this concludes my report.

HUMAN RESOURCES COMMITTEE

**Meeting Minutes
November 8, 2016**

The Human Resources Committee of the Lansing Board of Water and Light (BWL) met at the BWL Headquarters-REO Town Depot located at 1201 S. Washington Ave., Lansing, MI, at 5:00 p.m. on Tuesday, November 8, 2016.

Human Resources (HR) Committee Chairperson Tony Mullen called the meeting to order and asked the Corporate Secretary to call the roll. The following members were present: Commissioners Tony Mullen, Anthony McCloud, Mark Alley and Sandra Zerkle. Also present: Commissioners David Price, Ken Ross, Dennis M. Louney (arrived at 5:02), and Tracy Thomas; and Non-Voting Commissioners William Long, Robert Nelson, and Stuart Goodrich.

Public Comments

None

Approval of Minutes

Motion by Commissioner McCloud, Seconded by Commissioner Zerkle, to approve the Human Resources Committee meeting minutes of June 21, 2016.

Action: Motion Carried.

Internal Auditor Salary Adjustment

HR Chair Mullen informed the Committee that due to subsequent information on a revised grade and salary structure adopted for non-bargaining employees, Internal Auditor Phil Perkins' salary requires an adjustment to meet the minimum amount for his current grade of Director Level 6.

Motion by Commissioner McCloud, Seconded by Commissioner Zerkle to forward the proposed Resolution to adjust Internal Auditor Perkins' salary grade with a retroactive effectiveness of July 1, 2016 to the full Board for consideration.

Action: Motion Carried.

Collective Bargaining Agreement - BWL and IBEW

Executive Director of Human Resources Michael Flowers presented and reviewed the proposed Tentative Bargaining Agreement which extends the Collective Agreement for four years. Mr. Flowers highlighted the changes to the terms and conditions which is in accordance with the direction and authority that was delegated to the Board's negotiating team by General Manager Peffley.

Motion by Commissioner Thomas, Seconded by Commissioner Zerkle to forward the proposed Resolution for the Final Tentative Bargaining Agreement dated and signed October 27, 2016 (reflecting the grammatical correction) to the full Board for consideration.

Action: Motion Carried.

Amendment to 401a Defined Contribution Plan and the 457 Deferred Compensation Plan

Executive Director of Human Resources Michael Flowers outlined proposed amendments to the 401A Defined Contribution Plan and the 457 Deferred Compensation Plan. The 401a will be amended such that the Employer Contributions for Bargaining Unit Employees is increased from 8.1% to 9.5% for Employees hired after January 1, 1997. The 457 Deferred Compensation Plan will be amended such that the limit of the Employer Match for Bargaining Unit Employees is increased from \$1,250 per year to \$1,500 per year.

Motion by Commissioner Thomas, Seconded by Commissioner Zerkle to forward Resolutions to the full Board for consideration of approving an amendment to the **401a** Defined Contribution Plan and the **457** Deferred Compensation Plan.

Action: Motion Carried.

PA 152 Employee Contribution to Medical Benefit Plan

Executive Director of Human Resources Michael Flowers presented the BWL's options regarding Public Act 152's requirements associated with capping the amount a public employer may pay for health care insurance. In conclusion the recommendation is that the Board exempts itself from the requirements of PA 152 of 2011 for all active employees' medical benefits, effective January 1, 2017 with a continuation of a 14% premium sharing contribution.

Motion by Commissioner Zerkle, Seconded by Commissioner McCloud to forward the proposed Resolution for the Amendment to the Contribution to the Medical Benefits Plans, to the full Board for consideration.

Action: Motion Carried.

Other

None

Public Comments

None

Adjourn

Motion by Commissioner McCloud, Seconded by Commissioner Zerkle, to adjourn the meeting.

Action: Motion Carried

Meeting adjourned at 5:36 p.m.

Respectfully Submitted,
Tony Mullen, Chair
Human Resources Committee

COMMITTEE OF THE WHOLE

Meeting Minutes

November 8, 2016

The Committee of the Whole of the Lansing Board of Water and Light (BWL) met at the BWL Headquarters-REO Town Depot located at 1201 S. Washington Ave., Lansing, MI, at 5:40 p.m. on Tuesday, November 8, 2016.

Committee of the Whole Chair Mark Alley called the meeting to order and asked the Corporate Secretary to call the roll.

Present: Commissioners Mark Alley, Dennis M. Louney, Anthony McCloud, Tony Mullen, David Price, Ken Ross, Tracy Thomas and Sandra Zerkle and Non-Voting Members: Stuart Goodrich (Delhi), William Long (Delta Township) and Robert Nelson (East Lansing).

The Corporate Secretary declared a quorum.

Public Comments

None

Approval of Minutes

Motion by Commissioner Price, Seconded by Commissioner Mullen to approve the Committee of the Whole meeting minutes of September 13, 2016.

Action: Motion Carried

Renewable Energy and Public Comment Review

Mr. Stojic, Executive Director of Planning and Development, provided an update of the BWL's renewable energy program and responded to comments that the Board has received over the past several months regarding the Integrated Resource Plan (IRP) process.

Mr. Stojic explained that the BWL's renewable energy program takes a long-term view, is based on sound economic, operational and planning considerations, and is designed to complement the balance of the BWL's system. According to Mr. Stojic, the BWL's renewable energy projects will constitute 20% or more of the BWL's retail sales by 2020, which is twice the State standard and conforms to the Citizen Advisory Committee (CAC) recommendation.

Mr. Stojic described the BWL's renewable energy acquisition strategy and discussed how the strategy allowed the BWL to take a long-term view of compliance, be selective in terms of projects, and take advantage of favorable cost trends. He noted that the BWL's renewable program is coupled with its environmental compliance planning and will exceed likely future environmental standards, as demonstrated by the IRP recommendation.

He explained that despite comments to the contrary during the September 27th Board meeting, many national and international organizations, including the U.S. Congress and the United Nation Framework Convention on Climate Change, include landfill gas as a renewable energy source and that the BWL was the recipient of an award from the U.S. EPA for its participation with Granger in taking advantage of landfill gas.

Mr. Stojic noted that the members of the IRP CAC invested 7 months in the IRP process and much effort needed to understand utility operations and planning, arcane regulations, and balanced conflicting goals to make a recommendation. He stated that there have been misleading and incorrect comments made regarding the process and responded to a number of the comments.

According to Mr. Stojic, comments made in previous public meetings asserting that the BWL controlled the IRP assumptions and modeling were incorrect. Mr. Stojic reviewed the public meetings and described the opportunity for individuals and groups to address the CAC, to raise questions, offer alternatives, and make

recommendations. He provided quotes to demonstrate the BWL staff's efforts to have the CAC members recognize and make assumptions and recommend modeling scenarios.

He also demonstrated that assertions that the BWL wrote the IRP report were wrong, that the Sierra Club's complaint that it did not have sufficient information to review the IRP was not true and that several accusations received in public meetings were misleading and untrue.

Mr. Stojic also compared the total emissions of the BWL's Erickson and Eckert plants with other Michigan coal plants and noted that the BWL's plants were among the lower emitting plants.

Finance Chair Ross stated that the information Mr. Stojic provided is good information and probably should be presented to the Commission on a fairly-regular schedule, at least annually, so the Commissioners can equip themselves with the knowledge of where the BWL stands on these issues.

Commissioner Zerkle agreed with Chair Ross's recommendation and further suggested that when the yearly update to the Energy Efficiency Program is given, something should be incorporated into the plan to keep the Commissioners updated on efficiency and clean air issues.

2017 Regular Board Meeting Dates

Committee of the Whole Chair Alley presented a proposed Resolution setting the BWL Board of Commissioners 2017 Regular Board Meeting Dates as directed by Section 1.1.2 of the BWL's Rules of Procedure.

Motion by Commissioner Ross, Seconded by Commissioner Price to forward the proposed 2017 Regular Board meetings dates Resolution to the full Board for consideration.

Action: Motion Carried

Cyber Update (Exempt Memo)

Pursuant to the Open Meetings Act Exemptions MCL 15.268 (h) and MCL 15.243 (y), the following motion was offered:

Motion by Commissioner Mark Alley, Seconded by Commissioner Price, to enter into Closed Session to discuss a security-sensitive Memorandum from General Manager Peffley.

Roll Call Vote:

Yeas: Commissioners Mark Alley, Stuart Goodrich, William Long, Dennis M. Louney, Anthony McCloud, Tony Mullen, Robert Nelson, David Price, Ken Ross, Tracy Thomas, and Sandra Zerkle.

Nays: None.

Action: Motion Carried.

Committee of the Whole Chair Alley requested the following individuals to join him in the Closed Session meeting: General Manager Peffley and his Executive Staff, BWL's CIO Kim Ingram, all BWL Board Members, Corporate Secretary Griffin, Internal Auditor Perkins and Cyber Attorney Claudia Rast.

The Committee of the Whole went into closed session at 6:18 p.m.

The Committee of the Whole reconvened to open session at 7:19 p.m.

With the Departure of Committee of the Whole Chair Alley, Board Chair Price assumed the role of Chair of the Committee of the Whole.

Cyber Incident Report

General Manager Peffley reported out the following:

- The criminal cyber-attack against the BWL last spring resulted in \$2.4 million in costs that were largely covered by insurance.
- These costs were mostly used to pay for:
 - A cyber emergency response team
 - System, stabilization and restoration efforts, and
 - Enhanced cyber-security, personnel, and other improvements intended at reducing the chances of a future attack.
- Of the \$2.4 million in total costs,
 - We have filed an insurance claim for \$1.9 million
 - Includes \$2 million in covered losses less the cyber policy's \$100,000 deductible.
- This cost included a \$25,000 ransom paid to the criminals who launched the attack.
- We paid the ransom demanded by the cyber criminals so that we could unlock our administrative systems.
- Paying the ransom was distasteful and disgusting but sadly necessary, and it was the only action we could take to 'unlock' our system and free it from the ransom ware.
- We've learned in the course of this incident that we are victims, as cyber-threats have impacted many organizations.
- It's important to note that:
 - No electric or water utility services were interrupted, and
 - There was no evidence that customer or employee information was compromised.

Attorney Claudia Rast pointed out that a critical infrastructure entity is unusual as a public body because of the level of security and protection that is necessary and thus the necessity of the Closed Session. Attorney Rast stated there was a ransom-ware attack and measures have been taken to make the system more robust, tools have been implemented, processes have been secured and people are being trained accordingly. Ultimately, the integrity of the control system remained intact and it was mainly an administrative process that was impacted.

Chair Price stated that this subject will be on the Internal Auditor's Agenda on a Quarterly Basis and updates will be reported back to the Board. He stated that this issue is being taken seriously at the highest level of the organization.

Information Technology Communication Policy

General Manager Peffley Introduced CIO Kim Ingram who presented the proposed Resolution that accepts the updates to the Board of Water and Light's Communication Technology Policy. After a lengthy discussion regarding the proposed Policy and the updates Commissioner Ross recommended that "pornographic content" be included as part of the prohibited uses.

Motion by Commissioner Thomas, Seconded by Commissioner Mullen to forward the Resolution adoption of the “Communications Technologies Policy” of 2016 to the full Board for consideration (with the inclusion of “pornographic content” in the Prohibited Use Section of the Policy) thereby replacing the use of LBWL Communication Technologies Policy of 2007.

Action: Motion Carried

Other

None

Adjourn

Meeting adjourned at 7:28 p.m.

Respectfully Submitted
Mark Alley, Chair
David Price, Acting Chair
Committee of the Whole

**FINANCE COMMITTEE
Meeting Minutes
November 8, 2016**

The Finance Committee of the Board of Water and Light (BWL) met at the BWL Headquarters – REO Town Depot, located at 1201 S. Washington Ave., Lansing, MI, at 7:33 p.m. on Tuesday, November 8, 2016.

Finance Committee Chair Ken Ross called the meeting to order and asked that roll be taken.

Present: Commissioners Ken Ross, Dennis M. Louney and David Price. Also present: Commissioners Tony Mullen and Sandra Zerkle and Non-Voting Commissioners Stuart Goodrich, William Long, and Robert Nelson.

Absent: Commissioner Mark Alley

The Corporate Secretary declared a quorum.

Public Comments

None

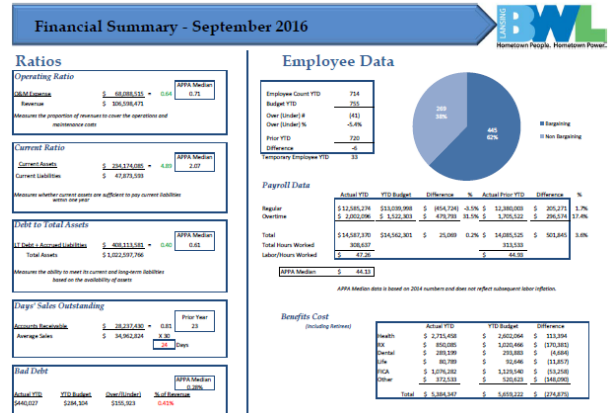
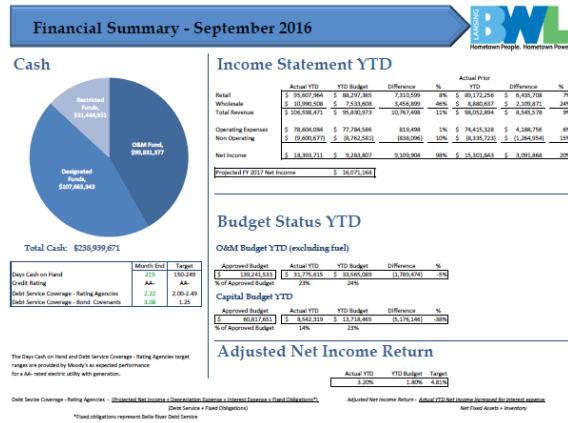
Approval of Minutes

Motion by Commissioner Price, Seconded by Commissioner Ross, to approve the Finance Committee meeting minutes of September 13, 2016.

Action: Motion Carried.

September YTD Financial Summary

Chief Financial Officer, Heather Shawa-DeCook presented the following:



Capital Project Exceedance

Finance Committee Chair Ross along with CFO Heather Shawa-DeCook introduced the Capital Project Exceedance resolution by briefly explaining that the project described in the resolution actually had an original budget in FY 2015 such that the reporting requirement would not have been triggered a reporting. However, due to an administrative error in the preparation of the FY 2016 budget, the change in estimated project cost of the project (radio upgrade) exceeds the reporting threshold. Although the reporting requirement was tripped primarily due to an administrative error, Ms. Shawa-DeCook and the rest of BWL management thought it appropriate to bring the exceedance forward in the form of the resolution seeking approval to complete the project.

Motion by Commissioner Price, Seconded by Commissioner Ross, to forward the Resolution for the Capital Exceedance Project radio upgrade (PG-40020-15) to the full Board for consideration.

Action: Motion Carried.

Revenue Bond

Chief Financial Officer, Heather Shawa-DeCook outlined the Fourteenth Supplemental Revenue Bond Resolution which authorizes:

- Present Value Savings by refunding all or part of the Series 2008A Bonds and Series 2011A Bonds through issuance of Refunding Bonds;
- Future Bond Reserve Requirement modified to be determined at time each series of Bonds is issued;
- Future Surety Bond requirement modified to equal the Bond rating;
- Appointment of Citigroup Global Markets Inc. as senior managing Underwriter;
- Chief Financial Officer to sell Refunding Bonds without further resolution;
- Other matters relative to issuance, sale and delivery of the Refunding Bonds.

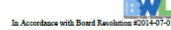
Motion by Commissioner Price, Seconded by Commissioner Ross, to forward a Resolution to the full Board which authorizes the Fourteenth Supplemental Revenue Bond.

Action: Motion Carried.

Internal Audit Open Management Response Quarterly Report

Chief Financial Officer Heather Shawa-DeCook presented management's responses to audits as follows:

STATUS OF MANAGEMENT RESPONSES TO AUDITS OCTOBER 2016



Updates in red

Issue #	Audit Name	Issue Description	Date	Responsible Area	Status
Open Issues:					
11	Record Retention	Internal Audit found that records on hand did not always correspond with the Record Retention Schedule, namely, a portion of P-9 forms and some asbestos bills of lading.	March 2016	Human Resources	P-9 forms are on file for all active employees. An appropriate retention schedule for the asbestos bills of lading was documented and updated as part of the overall review of the Record Retention Schedule. An updated schedule was approved by the BWL Committee of the Whole on 3/9/16. BWL did for State of Michigan approval on 4/14/16. State Administrative Board review is currently in process, with 1 of 2 preliminary approvals obtained to date. Final approval expected by 12/31/16.
13	Record Retention	The Internal Auditor determined that records on hand in departments did not always correspond with the Record Retention Schedule.	March 2016	Emergency Contact Management	Emergency Contact Management has reviewed the Record Retention Schedule with the appropriate departments and cataloged all proposed revisions. An updated schedule was approved by the BWL Committee of the Whole on 3/9/16. BWL did for State of Michigan approval on 4/14/16. State Administrative Board review is currently in process, with 1 of 2 preliminary approvals obtained to date. Final approval expected by 12/31/16.
17	Close the Books	The Internal Auditor recommended that consideration be given to the use of a general accounting manual.	August 2014	General Accounting	A General Accounting Procedures Manual is being developed, with expected completion by 12/31/16.
27	Management of Mobile Devices	The Internal Auditor recommended encrypting data on all remaining laptops and smart phones.	Sept 2015	Information Technology	IT has encrypted the laptops used by field personnel and established user guidelines. Guidelines require BitLocker to encrypt sensitive data on their own mobile devices. Currently underway are efforts for data classification. Software with remote management capabilities for mobile devices has been researched and approved to three products, one of which will be procured by 11/30/16 and installed by 1/31/17.
29	Management of Mobile Devices	Internal Audit recommended further consideration of procuring software with remote cleaning capabilities.	Sept 2015	Information Technology	Software with remote management capabilities for mobile devices has been researched and approved to three products, one of which will be procured by 11/30/16 and installed by 1/31/17.
33	Output Management System	The audit recommended more specific test criteria, testing performed by the skill possessing vendor, development of test scripts, and a narrative of test results.	Oct 2015	Information Technology	The next review test with our new vendor is scheduled for 11/1/16 with results expected to be available by 11/30/16. Completion expected by 12/31/16.

Issue #	Audit Name	Issue Description	Date	Responsible Area	Status
34	Training & Development	Internal Audit supports plans for a new database for tracking training and use of standardized courses for periodic training course review and training of trainers, on an organization-wide basis.	Dec 2015	Organizational Training & Development	LMI was implemented in February 2016 and training on use of the same system begins immediately, continues to be in the process of being rolled out, as a slower pace than originally anticipated, due to delays in employees regaining the internet access required to access the system following the cyber incident. Completion, originally anticipated to be 6/30/16, is now expected by 12/31/16.
37	Hiring Process	Internal Audit has requested that an all-encompassing hiring policy be documented.	May 2016	Human Resources	An additional Board policy, one which addresses BWL hiring standards in their entirety, will be drafted by 12/31/16.
38	Hiring Process	Internal Auditor recommended updating a hiring checklist documenting rationale for selected hires, and storing job files in electronic form.	May 2016	Human Resources	Management will update the hiring checklist, document rationale for selected hires, and store job files electronically by 12/31/16.
42	Selected CIRT MSPIC-BWL Rationales	The Internal Auditor recommended annual updates to the Emergency Operations Plan.	May 2016	Emergency Management	There are 47 separate Emergency Operations Plans, all of which have either been updated during 2016 or are scheduled to be updated by 12/31/16. The intention is to continue to keep them updated, on an annual basis.
43	Selected CIRT MSPIC-BWL Rationales	The Internal Auditor recommended finally making the corrective actions resulting from automation exercises.	May 2016	Emergency Management	Final tracking of corrective actions resulting from an October 2016 automation exercise is underway.
E-1 N/A	IT Assessment (By External Auditor)	Baker-Tilly's management team officially agreed that all users of financial applications should have a unique ID and generic, shared, temporary and system accounts should be removed, if a system account cannot be removed, it should be disabled.	Sept 2016	Information Technology	Generic user IDs for financial applications will be disabled by 11/30/16. For any generic IDs which cannot be disabled by that date, an explanation will be documented, along with a remediation plan.
E-2 N/A	IT Assessment (By External Auditor)	It was noted that network and financial applications passwords settings need strengthening, including establishing requirements that passwords be changed every 90 days, be a minimum length of 8 characters, and include special characters. In addition, if prior passwords should be remembered and user accounts should be locked after 3-5 failed login attempts.	Sept 2016	Information Technology	Enhancement of network password settings was completed on 10/24/16. An evaluation of the feasibility and extent of enhancements to password settings for financial applications will be complete by 11/30/16.
E-3 N/A	IT Assessment (By External Auditor)	Management team indicated that user account access should be reviewed annually by management for appropriateness, following the least privilege principle, with documentation of reviews retained.	Sept 2016	Information Technology	An annual review has been added to IT's schedule, with the anticipated process and annual review date expected to be established by 1/1/17.

Status of Management Responses to Internal Audit - October 2016

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Issue #	Audit Name	Issue Description	Date	Responsible Area	Status
E-4 N/A	IT Assessment (By External Auditor)	Baker-Tilly recommended a cybertrack awareness program with surprise penetration testing.	Sept 2016	Emergency Management Information Technology	Employees have been scheduled to undergo annual online cybersecurity awareness training. In addition, a new monthly live training program has been developed, which IT employees began on 10/25/16 and which the remainder of employees are expected to begin on 12/1/16.
E-5 N/A	IT Assessment (By External Auditor)	Baker-Tilly noted that the Windows 2003 operating system on which the DP910 database runs needs upgrading.	Sept 2016	Information Technology	Project scoping for the Mainframe Upgrade is almost complete, with project completion expected by 3/31/17.

Closed Issues (since June 2016 report):

30	Management of Mobile Devices	Internal Audit recommended disabling data ports on mobile devices where necessary.	Sept 2015	Information Technology	A large portion of the laptop user community is currently using USB ports to connect many legitimate business-related devices (music, keyboards, printers, etc.). It has been determined that disabling these ports would be disruptive and they should, therefore, be left active. Antivirus software currently in use serves to mitigate the associated risk.
39	IT Change Management	Internal Audit recommended IT change management policy and procedures be documented.	May 2016	Information Technology	The IT change management process has been refined and a standard form and workflow developed. A Change Advisory Board is following ITIL guidelines.
41	IT Change Management	Internal Audit recommended specifically addressing emergency IT changes in the IT change management process.	May 2016	Information Technology	IT has defined what an emergency change is considered to be, documented a process flow, and developed a corresponding training plan and version guidelines.

Internal Audit Status Report

Internal Auditor Phil Perkins presented the following status report:



Overview

Internal Audit Status Report

Presented by:
Phil Perkins, Director of Internal Audit
Finance Committee Meeting
November 2016

- Current Audit Progress Report
- Remaining FY 2017 Audit Plan
- Other Items



Current Audit Progress Report

Engagements Completed in FY 17:

1. Surprise Cash Count #1.
2. Time Reporting Review #1.

Engagements in Progress:

1. Billing Audit (FY 16) – draft audit report issued for management responses; anticipate final report later this month.
2. Performance Evaluation/Compensation/Merit Pay Audit (FY 17) – fieldwork complete; draft audit report to be issued shortly.
3. Collections Audit (FY 17) – in progress, about 33% complete. Anticipate completion in January 2017.
4. Post-Cyber Incident Audit (FY 17) – just underway; anticipate completion in February 2017.
5. Training Audit Follow-up – just underway; anticipate completion in January 2017.



3

Remaining FY 2017 Audit Plan

Audits:

1. Payroll Management
2. New Service Order Management – Water
3. IT Help/Service Desk Management – to be deferred and replaced with another IT-related audit.
4. Follow-up – Hiring Process Audit

Other Engagements:

1. Vehicle Time Reporting Review
2. Surprise Cash Count #2
3. Time Reporting Review #2



4

Other Items

Internal Auditor Professional Development:

- On target to meet professional education requirements for certifications:
 - CPA
 - CIA
 - CISA
- Preparing for examination to attain Fundamentals of Cybersecurity certification.

Quality Assurance Improvement Program:

- An Internal Quality Review is being performed in preparation for the required 5-year External Peer Review.
- Anticipate the External Peer Review to occur in April or May 2017.



5

PA95 Low-Income Energy Assistance Fund

Chief Financial Officer Heather Shawa-DeCook outlined PA 95 - the Low Income Energy Assistance Fund and presented the following:



PA 95 Low - Income Energy Assistance Fund Commissioner Presentation November 4, 2016



Background

- **Public Act 95 establishes the legal method to secure funding to replace funds formerly collected by DTE and Consumers Energy exclusively**
 - Funding Factor not to exceed \$1 from each OPT IN utility determined by the State July 31
 - Applies to all utility classes limit one fee per address
 - Total Funds in the LIEAF shall not exceed \$50 Million
 - LIEAF \$ are distributed by Grant for the Michigan Energy Assistance Program RFP (every 2 years)
 - Opt In/Out decision annually on July 1
 - However grant cycle is a Two Year Period (7/1/16-7/1/18)
 - Winter Protection Season November 1 – April 15
 - Collection starts on Oct 1 and due to the state 30 days after end of month.



Background

- Staff presented in April 2015 pros/cons of opt in vs. opt out (Recommendation was to opt out)
- Only 6 of the 41 Michigan public utilities opt in
- BWL currently provides the following low income assistance:
 - Pennies for Power via CACS up to \$154,274 annually



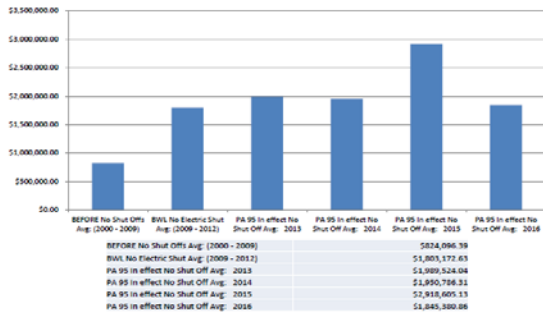
2016/17MEAP Grants

2016 grant money received / 2017 grant money received

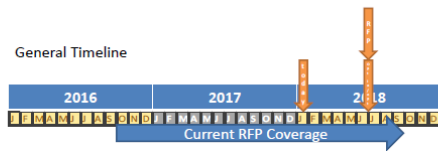
• Barry County United Way	\$195,054/201,000
• Consumers Energy Company	\$13,177,000/13,220,000
• DHHS – Bureau of Community Action and Economic Opportunity	\$7,000,000/\$0
• DTE Energy	\$17,000,000/17,000,000
• Flat River Outreach Ministries, Inc.	\$97,325/78,700
• Lighthouse Emergency Service	\$900,000/200,000
• Michigan Community Action Agency Association	\$9,000,000/9,000,000
• SEMCO Energy Gas Company	\$2,500,000/2,600,000



Bad Debt Averages



Michigan Energy Asst. Program Grant



- Current funds committed through Sept 2018
- New RFP Out in July 2018 good for 2 years
- BWL next opt in period July 2018



PROs/CONs From a Budget Perspective

If BWL Opt's Out	
PROs	
1.	Avoid \$16,000 billing change programing
2.	Avoid stand alone rate hearing and increase
3.	Will have to shut off customers during winter months Eliminate the risk of sending 5 out of the service territory (BWL MOU with the COL/St. Vincent's 100% BWL territory)
4.	
5.	PA 615 (2012) no amendment pending – extended as is through September 30, 2019
6.	Avoid need to hire FTE to write grants and administer program (Up to \$100k w/benefits)
CONs	
1.	MEAP funds available to BWL customers
2.	SER funds available to BWL customers (\$1,200 cap for deliverable fuels and \$850 for all other services) Note: Deliverable fuels is not BWL services. Household energy assistance is capped at \$3,000. Policy in ERM 301 applies and states that a SER should be denied when a client has already received MEAP funds.

2019)

- Cost impacts to BWL overhead impacting customer rate base
- BWL's policy to not shut off during Winter season
 - Public perception and risks still need to be addressed with additional protocols and guidelines. BWL would be required to shut off or risk becoming ineligible for PA 95
 - Our current collections focus assists low income customers with more flexible payment plans. Our medical alert/seniors are protected now from shut off
 - Position to control BWL financial exposure by managing these accounts once they become delinquent vs. collecting a sur-charge and paying into a statewide fund with no control over shut-offs and funding coming back to our service territory
 - Benchmarked with other municipalities supports not opting in (6 of 41 opt in)



Pennies for Power

- BWL funded program that encourages BWL Customers to "Round Up" their bill to the next whole dollar so those "extra" pennies are collected and distributed to BWL customers needing assistance to pay their BWL utility bill.
 - Approximately 5,000 customers currently participate contributing over \$54,000 in 2015. (Oct 2014 – Sept 2015)
 - Dollars are collected by the BWL and transferred to Capital Area Community Services, our community partner who administers the program on behalf of the BWL, monthly.
 - Funds are to be used exclusively for BWL Customer bills.
- Impact:
- \$54,274 Pennies for Power Funds to CACS
 - \$100,000 BWL Grant to CACS
 - Total BWL Funded Dollars to CACS \$154,274
 - Total dollars received from CACS during same period \$280,100

Commissioner Long provided a written summary of talking points including "Shut Off Policy for non-payment of bills", "Financial impact on BWL" and "Use of MEAP money received for customers other than BWL customers". Commissioner Long also highlighted some U.S. Census Economic Data.

Finance Chair Ross stated that there is a factual question about legal requirements of a notice vs. an actual shut off requirement and suggested that CFO Shawa-DeCook and General Counsel Ekren follow up with an

answer on the difference of opinions. He also stated that the reason this conversation is taking place now, disassociated from the actual future rate hearings, is because we want to do some self-education on what the issues are as well as have a better set of information going into an overall bigger rate making case in the future.

General Manager Peffley stated that he would be willing to review this matter and can be persuaded either way, providing that the shut off factor does not come into play. He would like to study the numbers as well as have Legal take a look at it.

After a lengthy discussion Finance Chair Ross concluded that this matter would be revisited (early next year) once management has had an opportunity to review information and feel comfortable that they able to come back and speak intelligently to the Committee on this matter.

Franchise Agreement – E. Lansing

Finance Chair Ross said this agenda item is an issue that was talked about earlier this year and the Board referred this matter to the Finance Committee. General Manager Peffley outlined the Resolution requesting that the BWL enter into a Franchise Agreement with the City of East Lansing. The Resolution is as follows:



General Manager Peffley stated that there is a concern that this fee could be illegal and that the BWL has been put on notice. Should the Board choose to go forward with the Franchise Fee the BWL would only be the collection agency for the City of E. Lansing. However, the BWL does not want to get in the middle of a law suit, therefore stipulations are being proposed for the commissioners to consider and have the Administration to negotiate on. The recommendations are:

1. East Lansing will need to provide the BWL a legal opinion confirming a franchise fee can be assessed;
2. BWL will need an Agreement with East Lansing to reimburse the BWL for all costs for defending against a third-party claim associated with a franchise fee;
3. East Lansing stated they will be requesting a franchise fee from Consumers Energy so the BWL requests that both agreements should start concurrently; and
4. BWL will require an opportunity to review the legal opinion confirming a franchise fee can be assessed before they will enter into the franchise agreement.

Motion by Commissioner Price, Seconded by Commissioner Ross, to give General Manager Peffley authority to move forward with negotiations and bring a final agreement back to the Finance Committee for consideration. Agreements on the terms are:

1. This would only effect the City of E. Lansing Residents
2. Would not become effective until Consumers Power terms become effective
3. City of E. Lansing must agree to indemnify the BWL from any cost associated with defending any potential franchise or payment
4. The BWL would like the opportunity to vet and review what legal opinion the City of E. Lansing submits.

Action: Motion Carried.

Other

None

Adjourn

On Motion by Commissioner Price, Seconded by Commissioner Louney, the meeting adjourned at 8:53 p.m.

Respectfully submitted
Ken Ross, Chair
Finance Committee



**LANSING BOARD OF WATER & LIGHT
PENSION FUND TRUSTEES ANNUAL MEETING
November 15, 2016**

The Pension Fund Trustees of the Lansing Board of Water & Light (BWL) met at the BWL Headquarters – REO Town Depot located at 1201 S. Washington Ave., Lansing, MI, at 5:00 p.m. on Tuesday, November 15, 2016. Chairperson David Price called the meeting to order and asked the Corporate Secretary to call the roll.

Present: Trustees Dennis M. Louney, Anthony McCloud, Tony Mullen, David Price and Tracy Thomas.

Absent: Trustees Mark Alley, Ken Ross and Sandra Zerkle

Public Comments

There were no public comments.

Approval of Minutes

Motion by Trustee Thomas and Seconded by Trustee McCloud to approve the Minutes from the November 17, 2015 Pension Fund Trustees' Annual Meeting.

Action: Motion Carried

General Manager Peffley introduced Chief Financial Officer Heather Shawa-DeCook who highlighted the Resolutions that were being considered for approval or acceptance.

The 1st Resolution, consistent with prior years, was to accept the audited financial statements in which all 3 pension plans have a clean unmodified opinion.

The 2nd and 3rd Resolutions were to acknowledge the Defined Benefit (DB) and VEBA Trust Plan Resolutions which were approved by the full Board in September. Resolutions 2 and 3 amended the DB and VEBA Trust documents, approved the new investment policy statements and created a Retirement Plan Committee. The Committee is comprised of the Chief Financial Officer, the Executive Director of Human Resources, and the Manager of Finance. The two Resolutions also delegated the authority described in the new investment policy statements to the newly formed Retirement Plan Committee.

FY 2016 Financial Information Relative to DB, DC and VEBA Plan and Proposed Resolution Adopting the Audited Financial Statements

Chief Financial Officer, Heather Shawa-DeCook provided an overview of the Board of Water & Light's different Pension Plans.

Ms. Shawa-DeCook provided information on the FY 2016 performance of the Defined Benefit Plan (DB), VEBA Trust Plan and Defined Contribution Plan (DC).

Defined Benefit Plan

Ms. Shawa-DeCook stated that Defined Benefit (DB) Plan currently has 400 participants, only 11 of those being active. As of the valuation date of February 29, 2016, the Plan had \$63.6 million in plan assets and \$62 million in plan liabilities. The BWL is currently over-funded by \$1.6 million. This results in a Funded Ratio of 102.6% - down roughly 13.2% from the prior year. For FY 2016, the BWL had \$47,000 in investment income, which equates to an 8.5% return. Ms. Shawa-DeCook stated that these results are reflective of the market.

In FY 2015, the BWL paid out \$1.7 million in investment income, equaling an approximately 2% return. For FY 2016 the BWL paid \$7.9 million in benefits; administrative fees were \$388,000.

Retirement Pension Plan – VEBA

Ms. Shawa-DeCook stated that the VEBA Trust, as of the actuarial valuation date of Feb 29, 2016, has 742 active participants and 713 retiree participants. The VEBA plan had \$145 million in plan assets and \$205 million in plan liabilities. The BWL was 70.8% funded; down just under 8% from the prior year. For FY 2016, the BWL had \$949,000 in investment income, equaling a 0.6% return. For the prior FY, the BWL had \$3.6 million in investment income, equating to a 2% return. The BWL paid out \$9.4 million in benefits, and administrative fees were \$832,000.

Ms. Shawa-DeCook stated that currently the BWL's VEBA Plan is projected to be fully funded within 10 years. However, she noted the projection is based on several key assumptions; one to point out was the Rate of Return on Investments over the long range averaging 7.5%. Also there were key assumptions on healthcare inflation rates and the mortality rates. Ms. Shawa-DeCook stated that the plan is expected to continue the trend of making steady progress towards becoming fully funded. She noted that there are some upcoming pronouncements over the next 2 fiscal years for the VEBA plan, for which the BWL is prepared for; the Gasby 74 will be effective June 30, 2017 and the Gasby 75 on June 30, 2018.

Defined Contribution (DC) Plan – 401A

Ms. Shawa-DeCook stated that the BWL currently has 915 participants in the DC Plan, of which 705 are active employees and 210 are retirees and beneficiaries. For FY 2016, the DC Plan had \$171 million in plan assets, a decrease of \$2 million from the prior year. As of FY 2016, the annual fees incurred by plan participants were approximately \$975,000, or 0.57% of assets. Approximately \$90,000 additional expenses were incurred by some plan participants.

For the DC FY 2016, the BWL had \$6.6 million in investment income, which equates to a 4% return.

For FY 2016, the BWL contributed \$5.7 million into the Plan. Retired Plan participants withdrew \$4 million in regular distributions, and an additional \$3.9 million was rolled out into other retirement plans.

Ms. Shawa-DeCook stated that employees are allowed to take out loans against the DC plan. Currently, the BWL has 371 loans outstanding, slightly less than 396 from last year. The average carrying value of the loan outstanding is approximately \$4.3 million. The average loan amount outstanding is approximately \$11,621.00. Overall loan usage has been trending down over the last 3 years.

ICMA, the BWL's DC provider, has in the past provided comparisons of the BWL's plan to a typical 401A plan and observed that the BWL's employees are more sophisticated in their investment approach: Employees rely less on stable value, they utilize investment advice more and they tend to invest in typical investments, such as specialty funds and guarantee minimum withdrawal benefit funds. To assist employees in making informed decisions about retirement savings goals, the BWL offers a robust education by providing employees opportunities to meet with ICMA on a weekly basis, as well as a user-friendly website with an array of online, digital and printed educational data.

Ms. Shawa-DeCook provided additional information:

- The Plan and Trust documents for all 3 plans are currently undergoing a review by internal and external legal counsel. The primary objective of this review is to make sure that corresponding Plan and Trust documents are clearly stated, properly aligned and in compliance with relevant law which has changed over time.
- The BWL's current agreement with ICMA for the Administration of the DC Plan expires in July of 2017; there will be a RFP Process as these services have not been bid out since 2008.

PROPOSED RESOLUTION

Acceptance of 2016 Audited Financial Statements For Defined Benefit Pensions Plan, Defined Contribution Pension Plan, And Retiree Benefit Plan (VEBA)

Motion by Trustee Thomas, Seconded by Trustee Mullen, to forward the Resolution to the full Board for consideration.

Action: Motion Carried

Acknowledgement of Amendment of Pension Plan Trust; and Delegation of Investment Authority Resolution

Motion by Trustee McCloud, Seconded by Trustee Mullen, to acknowledge the Amendment to the Pension Plan Trust and the Delegation of Investment Authority.

Action: Motion Carried

**Acknowledgement of Amendment of Retiree Medical Plan Trust;
and Delegation of Investment Authority Resolution**

Motion by Trustee Mullen, Seconded by Trustee Thomas, to acknowledge the Amendment to the Retiree Medical Plan Trust and the Delegation of Investment Authority.

Action: Motion Carried

Excused Absences

Motion by Trustee McCloud, Seconded by Trustee Thomas, to excuse Trustees Mark Alley, Ken Ross and Sandra Zerkle from tonight's meeting.

Action: Motion Carried

Adjourn

There being no further business, the Pension Fund Trustees meeting adjourned at 5:18 p.m.

MANAGER'S RECOMMENDATIONS

General Manager Peffley recommended that the Board approve the Capital Budget Correction and Exceedance Approval before the Board that evening.

UNFINISHED BUSINESS

There was no Unfinished Business.

NEW BUSINESS

There was no New Business.

RESOLUTIONS

RESOLUTION 2016-11-01

**Capital Project Budget Correction and Exceedance Approval:
Project PG-40020-15 Radio Upgrades**

WHEREAS, Lansing Board of Water & Light's (BWL) Policy 15-02, entitled Capital Project Exceedance Approval requires BWL Board of Commission approval for specific capital projects that are expected to exceed their previously approved budget by both 15% and \$200,000 prior to completion of the project; and

WHEREAS, the original approved budget for the Capital Project PG-40020-15 Radio Upgrades project in FY2015 was \$653,447; and

WHEREAS, the FY2016 approved budget incorrectly provided a budget of \$533,000; and

WHEREAS, the projected final total cost for the project is \$793,000; and

WHEREAS, BWL staff and management reviewed the project cost in detail, which includes but is not limited to the correction of prior fiscal year input error, rationale and circumstances for the increased budget projection; and

WHEREAS, BWL staff and management recommends that the Capital Project PG-40020-15 Radio Upgrades be completed despite the projected increased cost; and

WHEREAS, BWL staff and management recommends that the Finance committee review and approve with a recommendation of support to the BWL Board of Commissioners at the November 15, 2016 full board meeting.

Motion by Commissioner Mullen, Seconded by Commissioner Thomas, to approve the Capital Project Correction and Exceedance for Radio Upgrades.

Action: Motion Carried.

RESOLUTION 2016-11-02

Salary Adjustment for the Charter Position of Internal Auditor

Whereas; Due to subsequent information on a revised grade and salary structure adopted for non-bargaining employees at the Lansing Board of Water and Light;

Whereas; The minimum salary for the Internal Auditor at his current grade of Director Level 6 is \$139,700;

Whereas; The (aforementioned) salary is greater than the amount approved by Resolution #2016-07-04 on July 26, 2016; and

Whereas; An adjustment is needed to bring the Internal Auditor's salary up to the minimum identified for his pay grade and director level.

Now therefore be it resolved the base pay for Internal Auditor Phil Perkins Director Level 6 for fiscal year 2016-2017 is \$139,700.

Motion by Commissioner Mullen, Seconded by Commissioner Thomas to approve the Resolution to adjust the Internal Auditor's salary.

Action: Motion Carried.

RESOLUTION 2016-11-03

**Collective Bargaining Agreement between the Lansing Board of Water & Light
And the International Brotherhood of Electrical Workers, AFL-CIO, Local 352**

WHEREAS, on October 18, 2016 the Lansing Board of Water & Light and IBEW Local 352 entered into a Tentative Agreement to extend the Collective Bargaining Agreement for four years; and

WHEREAS, the terms and conditions of the Tentative Agreement are in accordance with the direction and authority that was delegated to the Board's negotiating team by the General Manger; and

WHEREAS, the Tentative Agreement was submitted by the IBEW Local 352 negotiating team to the IBEW membership for its approval and was ratified on October 27, 2016.

RESOLVED, that the Board of Commissioners approve the "Final Tentative Agreement" (dated and signed October 27, 2016).

Motion by Commissioner Price, Seconded by Commissioner McCloud, to approve the resolution for Collective Bargaining Agreement between the Lansing Board of Water & Light and the International Brotherhood of Electrical Workers, AFL-CIO, Local 352.

Action: Motion Carried.

The official finalized Contract Agreement is on file in the office of the Corporate Secretary and the Lansing Board of Water & Light's Human Resources intranet site.

RESOLUTION 2016-11-04

Amendment to 401a Defined Contribution Plan

RESOLVED, that the Board of Commissioners hereby amends the Lansing Board of Water & Light 401a Defined Contribution Plan #106696 such that the Employer Contributions for Bargaining Unit Employees is increased from 8.1% to 9.5%, for those Bargaining Unit Employees hired after January 1, 1997.

FURTHER RESOLVED, all other provisions of the 401a Defined Contribution Plan #106696 shall remain in full force and effect.

FURTHER RESOLVED, that the General Manager and Corporate Secretary are hereby authorized to execute the applicable Adoption Agreement or Plan Document that accurately captures the above noted change in Employer Contributions.

Motion by Commissioner Mullen, Seconded by Commissioner Thomas, to approve the amendment to 401a Defined Contribution Plan #106696.

Action: Motion Carried.

RESOLUTION 2016-11-05

Amendment to 457 Deferred Compensation Plan

RESOLVED, that the Board of Commissioners hereby amends the Lansing Board of Water & Light 457 Deferred Compensation Plan #300435 such that the limit of the Employer Match for Bargaining Unit Employees is increased from \$1,250 per year to \$1,500 per year.

FURTHER RESOLVED, all other provisions of the 457 Deferred Compensation Plan #300435 shall remain in full force and effect.

FURTHER RESOLVED, that the General Manager and Corporate Secretary are hereby authorized to execute the applicable Adoption Agreement or Plan Document that accurately captures the above noted change in the Employer Match.

Motion by Commissioner Mullen, Seconded by Commissioner Thomas, to approve the amendment to 457 Deferred Compensation Plan #300435.

Action: Motion Carried.

RESOLUTION 2016-11-06

Amend Employee Contribution to Medical Benefit Plans

WHEREAS, Governor Rick Snyder, on September 27, 2011, signed legislation known as the “Public Funded Health Insurance Contribution Act”, Public Act 152 of 2011 limiting the amount public employers may pay for government employee medical benefits, and;

WHEREAS, Public Act 152 of 2011 took effect January 1, 2012 and applies to all public employers including the Lansing Board of Water & Light, and;

WHEREAS, Public Act 152 of 2011 created a “hard cap” for medical benefit plan years beginning January 1, 2012, such that a public employer may not pay more than the statutory caps for medical benefit plans, and;

WHEREAS, by a majority vote of its governing body, a public employer may opt-out of the hard cap and into an 80% cap option where the public employer may not pay more than 80% of the total annual costs of all the medical benefit plans for its employees, and;

Whereas, by a 2/3 vote of its governing body each year, a local unit of government may exempt itself from the requirements of Public Act 152 of 2011 for the next year, and;

WHEREAS, the Board of Commissioners met on July 24th 2012 and passed a resolution (#2012-07-01) to exempt itself from the requirements of Public Act 152 of 2011 and implemented a 10% premium sharing, and;

WHEREAS, the Board of Commissioners met on July 23rd 2013 and passed a resolution (#2013-07-02) to exempt itself from the requirements of Public Act 152 of 2011 and implemented a 12% premium sharing, and;

WHEREAS, the Board of Commissioners met on September 2014 and passed a resolution (#2014-09-03) to exempt itself from the requirements of Public Act 152 of 2011 and kept the 12% premium sharing, and;

WHEREAS, the Board of Commissioners met on July 2015 and passed a resolution (#2015-07-28) to exempt itself from the requirements of Public Act 152 of 2011 and kept the 12% premium sharing through December 31, 2015, and;

WHEREAS, the Board of Commissioners met on November 2015 and passed a resolution (#2015-11-17) to exempt itself from the requirements of Public Act 152 of 2011 and kept the 12% premium sharing through December 31, 2016 for Union employees and implement a 14% premium sharing for Non-Union employees effective July 1, 2016, and;

RESOLVE that the Board by at least 2/3 vote desires to exempt itself from the requirements of Public Act of 2011 for the upcoming benefit plan year, effective January 1, 2017 through December 31, 2017.

FURTHER RESOLVE that the Board desires to continue the 14% premium sharing for all active employees for medical benefits effective January 1, 2017.

Motion by Commissioner Mullen, Seconded by Commissioner McCloud, to approve the Amended Employee Contribution to Medical Benefit Plans.

YEAS: Commissioners Dennis M. Louney, Anthony McCloud, Tony Mullen, David Price, Tracy Thomas and Sandra Zerkle

NAYS: None

ABSTAIN: None

Action: Motion Carried.

RESOLUTION 2016-11-07

2017 Regular Board Meeting Schedule

In accordance with the Lansing Board of Water & Light's Rules of Administrative Procedure, a schedule of dates, places, and times for each regular meeting of the Board of Commissioners for the calendar year shall be adopted in November.

RESOLVED, that regular meetings of the Lansing Board of Water & Light's Board of Commissioners are hereby set for calendar year 2017 as follows, unless otherwise notified or as a result of date conflicts with rescheduled City Council meetings:

2017

Lansing Board of Water & Light Board of Commissioners
Regular Board Meeting Schedule

Tuesday	January 24
Tuesday	March 28
Tuesday	May 23
Tuesday	July 25
Tuesday	September 26
Tuesday	November 14

Meetings will be held in the Lansing Board of Water & Light REO Town Depot located at 1201 S. Washington Ave., Lansing, MI at 5:30 p.m.

RESOLVED FURTHER, that a notice of the meeting schedule shall be published in the Lansing City Pulse the week of January 1, 2017.

Motion by Commissioner Thomas, Seconded by Trustee Mullen, to approve the 2017 Regular Board Meeting Schedule.

Action: Motion Carried.

RESOLUTION 2016-11-08
Information Technology Communication Policy

RESOLVED, that the Board of Commissioners hereby adopts the 2016 Communications Technologies Policy as recommended by Staff.

FURTHER RESOLVED, that the current Policy titled "Use of LBWL Communication Technologies" from 2007 is no longer operative and is thus replaced with the above referenced Communications Technologies Policy recommended by Staff.

Motion by Commissioner Mullen, Seconded by Commissioner Thomas, to adopt the 2016 Communications Technologies Policy.

Action: Motion Carried.

RESOLUTION 2016-11-09
Fourteenth Supplemental Revenue Bond Resolution

A RESOLUTION TO AUTHORIZE:

- Present Value Savings by refunding all or part of the Series 2008A Bonds and Series 2011A Bonds through issuance of Refunding Bonds;
- Future Bond Reserve Requirement modified to be determined at time each series of Bonds is issued;
- Future Surety Bond requirement modified to equal the Bond rating;
- Appointment of Citigroup Global Markets Inc. as senior managing Underwriter;
- Chief Financial Officer to sell Refunding Bonds without further resolution;
- Other matters relative to issuance, sale and delivery of the Refunding Bonds.

WHEREAS, from time to time the City of Lansing, acting by and through the Lansing Board of Water and Light, has issued revenue bonds payable from revenues of the water supply, steam, chilled water and electric utility system (the "System") under the provisions of Act 94, Public Acts of Michigan, 1933, as amended, and a Bond Resolution adopted by the Board and amended and restated on October 24, 1989 and further amended and supplemented from time to time (the "Bond Resolution"); and

WHEREAS, all terms not defined herein shall have the meanings set forth in the Bond Resolution; and

WHEREAS, under the terms of the Tenth Supplemental Revenue Bond Resolution adopted January 29, 2008, the Board issued the Water Supply, Steam, Chilled Water and Electric Utility System Revenue Bonds, Series 2008A dated April 23, 2008 (the "Series 2008A Bonds"); and

WHEREAS, under the terms of the Eleventh Supplemental Revenue Bond Resolution adopted May 10, 2011, the Board issued the Utility System Revenue Bonds, Series 2011A dated June 15, 2011 (the "Series 2011A Bonds"); and

WHEREAS, the Board's Financial Advisor, Public Financial Management (the "Financial Advisor"), has advised the Board that it may be able to accomplish a net savings of debt service costs by refunding all or a portion of the outstanding Series 2008A Bonds and the Series 2011A Bonds (collectively, the "Prior Bonds")

through the issuance of revenue refunding bonds in an aggregate principal amount of not-to-exceed \$325,000,000 (the "Refunding Bonds"); and

WHEREAS, Section 18(b) of the Bond Resolution authorizes the issuance of Additional Bonds of equal standing and priority of lien with the outstanding Bonds for the purposes of 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; and

WHEREAS, in order to take advantage of the most favorable market for sale of the Refunding Bonds and purchase of securities to be escrowed for payment of the Prior Bonds to be refunded, the Board wishes to authorize the Chief Financial Officer to sell the Refunding Bonds at negotiated sale without further resolution of the Board; and

WHEREAS, the conditions and requirements of the Bond Resolution for the issuance of Additional Bonds of equal standing and priority of lien with outstanding bonds have been met for the issuance of the proposed Refunding Bonds.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. Definitions. All terms not defined herein shall have the meanings set forth in the Bond Resolution, and whenever used in this Bond Resolution, except when otherwise indicated by the context, the following terms shall have the following meanings:

- (a) "Additional Bonds" means any Additional Bonds of equal standing with the Bonds which are issued pursuant to Section 18(a) of the Bond Resolution as amended by Section 13 of the Tenth Supplemental Revenue Bond Resolution.
- (b) "Bond Resolution" means the Bond Resolution adopted by the Board on September 26, 1989, as amended and restated on October 24, 1989, and supplemented by the First Supplemental Revenue Bond Resolution adopted by the Board on October 26, 1993, the Second Supplemental Revenue Bond Resolution adopted by the Board on January 11, 1994, the Third Supplemental Revenue Bond Resolution adopted on September 2, 1999, the Fourth Supplemental Revenue Bond Resolution adopted October 26, 1999 and amended on August 12, 2008 and June 9, 2009, the Fifth Supplemental Bond Resolution adopted by the Board April 24, 2001, the Sixth Supplemental Revenue Bond Resolution adopted by the Board on July 23, 2002, the Seventh Supplemental Bond Resolution adopted by the Board on July 23, 2002, the Eighth Supplemental Revenue Bond Resolution adopted on August 12, 2003, the Ninth Supplemental Revenue Bond Resolution adopted on July 26, 2005, the Tenth Supplemental Revenue Bond Resolution adopted on January 29, 2008, the Eleventh Supplemental Revenue Bond Resolution adopted on May 10, 2011, the Twelfth Supplemental Revenue Bond Resolution adopted on January 24, 2012, the Thirteenth Supplemental Revenue Bond Resolution adopted by the Board on January 22, 2013, this Fourteenth Supplemental Revenue Bond Resolution, and any other resolution which amends or supplements the Bond Resolution.
- (c) "Bonds" means the Series 2008A Bonds, the Series 2011A Bonds, the Series 2012A Bonds, the Series 2013A Bonds, the Refunding Bonds, and any Additional Bonds of equal standing hereafter issued.
- (d) "Chief Financial Officer" means the Board's Chief Financial Officer.

- (e) “Escrow Agreement” means, for purposes of this Fourteenth Supplemental Revenue Bond Resolution, the Escrow Agreement described in this Resolution to provide for payment of principal of and interest on the Prior Bonds being refunded.
- (f) “Escrow Fund” means, for purposes of this Fourteenth Supplemental Revenue Bond Resolution, the Escrow Fund or Funds established pursuant to the Escrow Agreement to hold the cash and investments necessary provide for payment of principal of and interest on the Prior Bonds being refunded.
- (g) “Prior Bonds” means, for purposes of this Fourteenth Supplemental Revenue Bond Resolution, the Series 2008A Bonds and Series 2011A Bonds.
- (h) “Refunding Bonds” means, for purposes of this Fourteenth Supplemental Revenue Bond Resolution, the refunding bonds issued pursuant to this Fourteenth Supplemental Revenue Bond Resolution to be designated as the “Utility System Revenue Refunding Bonds, Series 2017A” or such other series designation as shall reflect the date of sale or delivery of the Refunding Bonds.
- (i) “Series 2008-2013 Bonds” means the Series 2008A Bonds, the Series 2011A Bonds, the Series 2012A Bonds, and the Series 2013A Bonds.
- (j) “Series 2008A Bonds” means the Water Supply, Steam, Chilled Water and Electric Utility System Revenue Bonds, Series 2008A.
- (k) “Series 2011A Bonds” means the Utility System Revenue Bonds, Series 2011A.
- (l) “Series 2012A Bonds” means the Utility System Revenue Refunding Bonds, Series 2012A.
- (m) “Series 2013A Bonds” means the Utility System Revenue Refunding Bonds, Series 2013A.
- (n) “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.

Section 2. Conditions Permitting Issuance of Additional Bonds. Pursuant to Section 18(b) of the Bond Resolution, the Board hereby determines that the Refunding Bonds shall be issued as Additional Bonds for the purpose of refunding all or a portion of the Prior Bonds and paying costs of issuance of the Refunding Bonds, only 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.

The Board hereby determines that the Board is not in default in making its required payments to the Operation and Maintenance Fund or the Redemption Fund.

Section 3. Refunding of Prior Bonds; Refunding Bonds Authorized; Applicable Law. If refunding all or a portion of the Prior Bonds will accomplish the required debt service savings, then the City, acting by and through the Board, shall borrow the sum of not-to-exceed Three Hundred Twenty-Five Million Dollars (\$325,000,000) as finally determined upon the sale thereof, and issue the Refunding Bonds therefor for the purpose of paying costs of refunding all or a portion of the Prior Bonds, including the payment of the costs of legal, financial, bond insurance (if any), underwriter’s discount, and other expenses incident thereto and

incident to the issuance and sale of the Refunding Bonds. The Refunding Bonds shall be payable solely out of the Net Revenues of the System. City Council shall not be requested to pledge the full faith and credit of the City for payment of the Refunding Bonds. The Refunding Bonds shall be sold and the proceeds applied in accordance with the provisions of Act 94.

Section 4. Refunding Bond Details. The Refunding Bonds shall be designated as the "UTILITY SYSTEM REVENUE REFUNDING BONDS, SERIES 2017A" or such other series designation as determined at the time of sale by the Chief Financial Officer to reflect the date of sale or delivery of the Refunding Bonds. The Refunding Bonds shall be issued as fully registered bonds registered in the denomination of \$5,000 or integral multiples thereof and shall be numbered in consecutive order of registration or authentication from 1 upwards. The Refunding Bonds shall be dated as of the date of delivery thereof or such other date as determined at the time of sale of the Refunding Bonds, shall mature as serial bonds or term bonds on such dates as shall be determined at the time of sale of the Refunding Bonds.

The Refunding Bonds shall be subject to optional and mandatory redemption prior to maturity at the times and prices finally determined at the time of sale of the Refunding Bonds, or shall not be subject to redemption prior to maturity, as finally determined at the time of sale of the Refunding Bonds

The Refunding Bonds shall bear interest at a rate or rates to be determined on sale thereof, payable on July 1, 2017, or such other date as provided at the time of sale of the Refunding Bonds, and semi-annually thereafter on January 1st and July 1st of each year.

The Refunding Bonds shall be executed by the manual or facsimile signature of the Chairperson and the Corporate Secretary of the Board. No Refunding Bond shall be valid until authenticated by an authorized representative of the Transfer Agent. The Refunding Bonds shall be delivered to the Transfer Agent for authentication and be delivered by the Transfer Agent to the purchaser in accordance with instructions from the Chief Financial Officer upon payment of the purchase price for the Refunding Bonds.

Section 5. Registration and Transfer. U.S. Bank National Association, Lansing, Michigan is hereby appointed to act as bond registrar, paying agent and transfer agent (the "Transfer Agent") for the Refunding Bonds. The Chief Financial Officer is hereby authorized to execute one or more agreements with the Transfer Agent on behalf of the Board. The Board reserves the right to replace the Transfer Agent at any time, provided written notice of such replacement is given to the registered owners of record of bonds not less than sixty (60) days prior to an interest payment date. Principal of and interest on the Refunding Bonds shall be payable by check or draft mailed by the Transfer Agent to the registered owner at the registered address as shown on the registration books of the Board maintained by the Transfer Agent. Interest shall be payable to the person or entity who or which is the registered owner of record as of the fifteenth (15th) day of the month prior to the payment date for each interest payment. The date of determination of the registered owner for purposes of payment of interest as provided in this paragraph may be changed by the Board to conform to market practice in the future.

The Refunding Bonds may be issued in book-entry-only form through The Depository Trust Company in New York, New York ("DTC"), and the Chief Financial Officer is authorized to execute such custodial or other agreement with DTC as may be necessary to accomplish the issuance of the Refunding Bonds in book-entry-only form and to make such changes in the form of the Refunding Bonds within the parameters of this resolution as may be required to accomplish the foregoing. Notwithstanding the foregoing, if the Refunding Bonds are held in book-entry-only form by DTC, payment of principal of and interest on the Refunding Bonds shall be made in the manner prescribed by DTC.

The Refunding Bonds may be transferred upon the books required to be kept by the Transfer Agent pursuant to this section by the person or entity in whose name it is registered, in person or by the registered owner's duly authorized attorney, upon surrender of the bond for cancellation, accompanied by delivery of a duly executed written instrument of transfer in a form approved by the Transfer Agent. Whenever any bond shall be surrendered for transfer, the Board shall execute and the Transfer Agent shall authenticate and deliver a new bond of the same series in like aggregate principal amount, maturity and interest rate. The Transfer Agent shall require the payment by the bondholder requesting the transfer of any tax or other governmental charge required to be paid with respect to the transfer. Notwithstanding the foregoing, if Bonds are held by DTC in book-entry-only form, the transfer of Bonds shall be made in the manner prescribed by DTC.

Section 6. Deposit to Bond Reserve Account. On or prior to the date of delivery of the Refunding Bonds, the Board shall deposit into the Bond Reserve Account any amount necessary to cause the amount on deposit in the Bond Reserve Account to be equal to the Reserve Requirement.

Section 7. Refunding Bond Proceeds. From the proceeds of sale of the Refunding Bonds there first shall be immediately deposited in the Redemption Fund an amount equal to the accrued interest and premium, if any, received on delivery of the Refunding Bonds, and the Board may take credit for the amount so deposited against the amount required to be deposited in the Redemption Fund for payment of the next maturing interest on the Refunding Bonds. Notwithstanding the foregoing, at the discretion of the Chief Financial Officer, all or a portion of any premium received upon delivery of the Refunding Bonds may be deposited in the Bond Reserve Account or the Escrow Fund or Funds in consultation with Bond Counsel.

There shall next be deposited in the Bond Reserve Account an amount, if any, designated at the time of sale of the Refunding Bonds as necessary to cause the amount on deposit in the Bond Reserve Account to be equal to the Reserve Requirement.

There shall next be deposited in the Escrow Fund or Funds from the proceeds of sale of the Refunding Bonds cash and investments in Government Obligations or Municipal Obligations not redeemable at the option of the issuer. U.S. Bank National Association, Lansing, Michigan is hereby appointed to act as Escrow Agent under the Escrow Agreement. The Escrow Agent shall hold the Escrow Fund or Funds in trust pursuant to the Escrow Agreement which shall irrevocably direct the Escrow Agent to take all necessary steps to call the Prior Bonds being refunded for redemption as specified in the Escrow Agreement. The Chief Financial Officer is hereby authorized to execute and deliver the Escrow Agreement, to transfer any moneys as they may deem necessary from the Redemption Fund, or other fund or account of the Board, to the Escrow Fund or Funds, and to purchase, or cause to be purchased, escrow securities consisting of Government Obligations, including, but not limited to, United States Treasury Obligations – State and Local Government Series (SLGS), or Municipal Obligations, for deposit in the Escrow Fund or Funds. The Chief Financial Officer is directed to deposit to the Escrow Fund or Funds, from Refunding Bond proceeds and other moneys as necessary, an amount which, together with investment proceeds to be received thereon, will be sufficient, without reinvestment, to pay the principal of and interest on the Prior Bonds being refunded as they become due or upon call for redemption.

The remaining proceeds of the Refunding Bonds shall be deposited in a fund which may be established in the Escrow Agreement to pay costs of issuance of the Refunding Bonds and the costs of refunding the Prior Bonds. Any moneys remaining after payment of costs of issuance and costs of refunding the Prior Bonds being refunded shall be transferred to the Redemption Fund and used to pay interest on the Refunding Bonds.

Section 8. Amendment of Definitions of Government Obligations and Municipal Obligations. After payment or defeasance in full of the Outstanding Series 2008-2013 Bonds, the definitions of "Government

Obligations” and “Municipal Obligations” in Section 1 of the Bond Resolution as amended and restated on October 24, 1989 are amended (amendments are shown by strikethrough or underline) to provide:

(r) “Government Obligations” means (i) direct obligations of (including obligations issued or held in book entry form on the books of) the United States of America, (ii) obligations the payment on which is guaranteed by the United States of America including, but not limited to, stripped interest components of obligations issued by the Resolution Funding Corporation (REFCORP) and non-callable, non-prepayable debt obligations of the United States Agency for International Development (US AID), which pay principal and interest at least three (3) business days prior to any respective escrow requirement dates, or (iii) non-callable, senior debt obligations of any government-sponsored enterprise or federal agency, corporation, or instrumentality of the United States of America created by an act of congress including, but not limited to, the Federal Home Loan Banks, Freddie Mac, Federal Farm Credit Banks Funding Corporation, and Fannie Mae;

(v) “Municipal Obligation” means any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state (i) which are not callable at the option of the obligor prior to maturity or as to which irrevocable notice has been given by the obligor to call on the date specified in the notice, and (ii) which are fully secured as to principal and interest and redemption premium, if any, by a fund consisting only of cash or Government Obligations, which fund may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the specified redemption date or dates pursuant to such irrevocable instructions, as appropriate, and (iii) which fund is sufficient, as verified by an independent certified public accountant, to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this definition of Municipal Obligation on the maturity date or dates thereof or on the redemption date or dates specified in the irrevocable instructions referred to in subclause (i) of this definition of Municipal Obligation, as appropriate, and (iv) which are rated, based on the escrow, in the highest rating category of either two of the following three ratings agencies: Standard & Poor’s Corporation, Fitch Ratings, and Moody’s Investors Service, Inc. or any successors thereto;

Section 9. Amendment of Reserve Requirement. After payment or defeasance in full of the Outstanding Series 2008-2013 Bonds, Section 11B of the Bond Resolution as amended and restated on October 24, 1989 is amended (amendments are shown by strikethrough or underline) to provide:

B. BOND AND INTEREST REDEMPTION FUND: There shall be established and maintained a fund designated BOND AND INTEREST REDEMPTION FUND, the moneys on deposit therein from time to time to be used solely, except for required deposits to the Rebate Fund, for the purpose of paying the principal of, redemption premium, if any, and interest on the Bonds.

After provision for the Operation and Maintenance Fund, there shall be set aside on or before the first day of each month, commencing December 1, 1989, in the Redemption Fund a sum proportionately sufficient to provide for the payment when due of the current principal of and interest on the Bonds, less any amount in the Redemption Fund representing accrued interest on the Bonds. Commencing December 1, 1989, The amount set aside each month for interest on the Bonds shall be 1/7 of the interest on the Bonds due July 1, 1990, and commencing July 1, 1990, and thereafter The amount set aside each month for interest on the Bonds shall be 1/6 of the interest on the Bonds next coming due.

The amount set aside each month for principal, commencing December 1, 1989, shall be 1/7 of the amount of principal due on the Bonds on July 1, 1990, and commencing July 1, 1990, and

thereafter The amount set aside each month for principal of the Current Interest Bonds shall be 1/12 of the total amount of the principal of the Bonds due on the next July 1 and 1/12 of the maturing amount of Capital Appreciation Bonds due one year or less from the 1st day of such month. If there is any deficiency in the amount previously set aside, that deficiency shall be added to the requirements for the next succeeding month.

There shall be established a separate account in the Redemption Fund to be known as the BOND RESERVE ACCOUNT. On the date of delivery of any Additional Bonds issued pursuant to Section 18(a) or (c) of this Bond Resolution, the Board shall transfer to the Bond Reserve Account from the proceeds of the Additional Bonds or any other available source the lesser of (a) 10% of the proceeds of the Additional Bonds and (b) the maximum Aggregate Debt Service Requirement on the Additional Bonds for the then current and any subsequent operating year and commencing on the 1st day of the month following delivery of the Additional Bonds and on the 1st day of each month thereafter until the amount in the Bond Reserve Account equals the Reserve Requirement, 1/12 of the difference between the amount deposited on the delivery of the Additional Bonds and the Reserve Requirement.

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

The Board may satisfy the Reserve Requirement by a letter of credit, a surety bond, or an insurance policy if the provider or issuer thereof shall be rated by any nationally recognized bond rating agency as high or higher than the Bonds at the time of purchase of the letter of credit, a surety bond, or an insurance policy.

If at any time the amount in the Bond Reserve Account exceeds the Reserve Requirement, the excess may be transferred to such fund or account as the Board may direct.

The Supplemental Resolution authorizing Additional Bonds may either (i) provide that the Additional Bonds are equally and ratably secured by the Bond Reserve Account funded according to the Reserve Requirement, or (ii) provide for the creation of a separate bond reserve account securing that series of Additional Bonds and a different reserve requirement, or state that no bond reserve account is required.

Section 10. Bond Form. The Refunding Bonds shall be in substantially the following form with such revisions, additions and deletions as the Board may deem advisable or necessary to comply with the final terms of the Refunding Bonds established upon sale thereof:

BOND NO.

R-

UNITED STATES OF AMERICA
STATE OF MICHIGAN
COUNTIES OF INGHAM AND EATON

CITY OF LANSING
LANSING BOARD OF WATER AND LIGHT

UTILITY SYSTEM REVENUE REFUNDING BOND, SERIES 2017A

Interest Rate Date of Maturity Date of Original Issue CUSIP

Registered Owner: Cede & Co.

Principal Amount:

The City of Lansing, Counties of Ingham and Eaton, State of Michigan (the “City”), acting through the governing body of the Lansing Board of Water and Light (the “Board”), acknowledges itself to owe and for value received hereby promises to pay to the Registered Owner specified above, or registered assigns, only from the Net Revenues of the System as hereinafter provided, the Principal Amount specified above, in lawful money of the United States of America, on the Date of Maturity specified above, [unless prepaid prior thereto as hereinafter provided,] with interest thereon (computed on the basis of a 360-day year of twelve 30-day months) from the Date of Original Issue specified above or such later date to which interest has been paid, until paid, at the Interest Rate per annum specified above, first payable on [interest payment date] and semiannually thereafter. Principal of this bond is payable at the designated corporate trust office of [transfer agent], or such other transfer agent as the Board may hereafter designate by notice mailed to the registered owner of record not less than sixty (60) days prior to any interest payment date (the “Transfer Agent”). Interest on this bond is payable by check or draft mailed by the Transfer Agent to the person or entity who or which is as of the fifteenth (15th) day of the month prior to each interest payment date, the registered owner of record at the registered address. The Net Revenues of the System are irrevocably pledged for the prompt payment of principal and interest on this bond. The “System” is defined as the water supply and electric utility systems including the steam heat and chilled water distribution systems. The “Net Revenues” are the revenues received by the Board from the operations of the System after provision has been made for reasonable and necessary expenses of operation, maintenance and administration of the System. A statutory lien on the Net Revenues of the System has been created to secure the payment of the principal of and interest on this bond, when due; however, the pledge of Net Revenues and the statutory lien are on a parity with the pledge of Net Revenues and statutory lien in favor of the [Water Supply, Steam, Chilled Water and Electric Utility System Revenue Bonds, Series 2008A], Utility System Revenue Bonds, Series 2011A, Utility System Revenue Refunding Bonds, Series 2012A, and Utility System Revenue Refunding Bonds, Series 2013A.

This bond is one of a series of bonds of even Date of Original Issue aggregating the principal sum of \$[principal amount]. This bond is issued for the purpose of refunding certain outstanding bonds pursuant to a Bond Resolution adopted by the Board on October 24, 1989, as amended and supplemented from time to time, including by a Fourteenth Supplemental Revenue Bond Resolution adopted by the Board on [date of resolution] (collectively, the “Bond Resolution”). This bond is issued under and in full compliance with the Constitution and statutes of the State of Michigan, including specifically Act 94, Public Acts of Michigan, 1933, as amended (“Act 94”).

For a complete statement of the revenues from which and the conditions under which this bond is payable, a statement of the conditions under which additional bonds of equal standing as to the Net Revenues may hereafter be issued, and the general covenants and provisions pursuant to which this bond is issued, reference is made to the Bond Resolution. Reference is hereby made to the Bond Resolution and any and all supplements thereto and modifications and amendments thereof, if any, and to Act 94, for a more complete description of the pledges and covenants securing the bonds of this issue, the nature, extent and manner of enforcement of such pledges, the rights and remedies of the registered owners of the bonds of this issue with respect thereto and the terms and conditions upon which the bonds of this issue are issued and may be issued thereunder. To the extent and in the manner permitted by the terms of the Bond Resolution, the provisions of the Bond Resolution or any resolution or agreement amendatory thereof or supplemental thereto, may be modified or amended by the Board, except in specified cases, only with the written consent of the registered owners of at least fifty-one percent (51%) of the principal amount of the bonds of the System then outstanding.

Bonds of this issue [maturing in the years [date], inclusive,] shall not be subject to redemption prior to maturity.

[Insert optional and mandatory redemption provisions if applicable]

This bond is transferable only upon the books of the Board kept for that purpose at the office of the Transfer Agent by the registered owner hereof in person, or by the registered owner's attorney duly authorized in writing, upon the surrender of this bond together with a written instrument of transfer satisfactory to the Transfer Agent duly authorized in writing and thereupon a new registered bond or bonds in the same aggregate principal amount and of the same maturity shall be issued to the transferee in exchange therefor as provided in the Bond Resolution, and upon the payment of the charges, if any, therein prescribed. [The Transfer Agent shall not be required (i) to issue, register the transfer of, or exchange any bond during a period beginning at the opening of business 15 days before the day of the mailing of a notice of redemption of bonds selected for redemption under the Bond Resolution and ending at the close of business on the date of that mailing, or (ii) to register the transfer of or exchange any bond so selected for redemption in whole or in part, except the unredeemed portion of bonds being redeemed in part.]

THIS BOND IS A SELF-LIQUIDATING BOND AND IS NOT A GENERAL OBLIGATION OF THE CITY AND DOES NOT CONSTITUTE AN INDEBTEDNESS OF THE CITY WITHIN ANY CONSTITUTIONAL, STATUTORY OR CHARTER LIMITATION, AND IS PAYABLE BOTH AS TO PRINCIPAL AND INTEREST SOLELY FROM THE NET REVENUES OF THE SYSTEM AND CERTAIN FUNDS AND ACCOUNTS ESTABLISHED UNDER THE BOND RESOLUTION. THE PRINCIPAL OF AND INTEREST ON THIS BOND ARE SECURED BY THE STATUTORY LIEN HEREINBEFORE DESCRIBED.

The Board has covenanted and agreed, and covenants and agrees, to fix and maintain at all times while any bonds payable from the Net Revenues of the System shall be outstanding, such rates for service furnished by the System as shall be sufficient to provide for payment of the principal of and interest on the bonds of this issue and any other bonds payable from the Net Revenues as and when the same shall become due and payable, to provide for the payment of expenses of administration and operation and such expenses for maintenance of the System as are necessary to preserve the same in good repair and working order, and to provide for such other expenditures and funds for the System as are required by the Bond Resolution.

It is hereby certified and recited that all acts, conditions and things required by law to be done precedent to and in the issuance of this bond and the series of bonds of which this is one have been done and performed in regular and due time and form as required by law.

This bond is not valid or obligatory for any purpose until the Transfer Agent's Certificate of Authentication on this bond has been executed by the Transfer Agent.

IN WITNESS WHEREOF, the City, acting through the Board, has caused this bond to be signed in its name by the Chairperson and Corporate Secretary of the Board, and a facsimile of the City's corporate seal to be printed hereon, all as of the Date of Original Issue.

LANSING BOARD OF WATER AND LIGHT

By David Price
Chairperson

(City Seal)

Countersigned:

By M. Denise Griffin

Its: Corporate Secretary

[INSERT STANDARD FORMS OF CERTIFICATE
OF AUTHENTICATION AND ASSIGNMENT]

Section 11. Tax Covenant. The Board shall not invest, reinvest or accumulate any moneys deemed to be proceeds of the Refunding Bonds and Prior Bonds pursuant to the Internal Revenue Code of 1986, as amended in such a manner as to cause the Refunding Bonds or Prior Bonds to be "arbitrage bonds" within the meaning of the Internal Revenue Code. The Board hereby covenants that, to the extent permitted by law, it will 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 Refunding Bonds and Prior Bonds from gross income for federal income tax purposes, including but not limited to, actions relating to the rebate of arbitrage earnings, if applicable, 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 Board on the date of delivery of the Refunding Bonds

Section 12. Financial Advisor. The Board hereby requests that Public Financial Management serve the Board as Financial Advisor for the Refunding Bonds.

Section 13. Bond Counsel. The Board hereby requests that Miller, Canfield, Paddock and Stone, P.L.C., Lansing, Michigan, continue to serve the Board as bond counsel for the Refunding Bonds. The Board acknowledges that Miller, Canfield, Paddock and Stone, P.L.C. has represented from time to time, and currently represents, Citigroup Global Markets, Inc. and various underwriters, financial institutions, and other potential participants in the bond financing process, in matters not related to the issuance and sale of the Refunding Bonds.

Section 14. Negotiated Sale of Bonds; Appointment of Senior Managing Underwriter. Based on the advice of the Financial Advisor, it is hereby determined to be in the best interest of the Board to sell the Refunding Bonds by negotiated sale in order to enable the Board to select and adjust terms for the Refunding Bonds, to enter the market on short notice at a point in time which appears to be most advantageous, and thereby possibly obtain a lower rate of interest on the Refunding Bonds, to achieve sale efficiencies so as to reduce the cost of issuance and interest expense, and to take advantage of the most favorable market for purchase of securities to be escrowed for payment of the Prior Bonds to be refunded.

Based on the advice of the Financial Advisor, the Board hereby names Citigroup Global Markets, Inc. as senior managing underwriter for the Refunding Bonds. The Board reserves the right to name additional co-managers and/or to develop a selling group, and the Chief Financial Officer is authorized to name additional co-managers and/or to develop a selling group in consultation with the Financial Advisor. By adoption of this resolution the Board assumes no obligations or liability to the underwriter for any loss or damage that may result to the underwriter from the adoption of this resolution, and all costs and expenses incurred by the underwriter in preparing for sale of the Refunding Bonds shall be paid from the proceeds of the Refunding Bonds, if the Refunding Bonds are issued, except as may be otherwise provided in the Bond Purchase Agreement for Refunding Bonds.

Section 15. Bond Ratings and Bond Insurance. The Chief Financial Officer is hereby authorized to apply for bond ratings from such municipal bond rating agencies as deemed appropriate, in consultation with the Financial Advisor. If the Financial Advisor recommends that the Board consider purchase of municipal bond insurance, then the Chief Financial Officer is hereby authorized to negotiate with insurers regarding acquisition of municipal bond insurance, and, in consultation with the Financial Advisor, to select an insurer and determine which bonds, if any, shall be insured, and the Chief Financial Officer is hereby authorized to execute an agreement with the insurer relating to procedures for paying debt service on the insured bonds and notifying the insurer of any need to draw on the insurance and other matters.

Section 16. Official Statement. The Chief Financial Officer is authorized to approve circulation of a Preliminary Official Statement describing the Refunding Bonds and, after sale of the Refunding Bonds, to prepare, execute and deliver a final Official Statement.

Section 17. Continuing Disclosure. The Chief Financial Officer is hereby authorized to execute and deliver, prior to delivery of the Refunding Bonds, a written continuing disclosure undertaking as necessary in order to enable the underwriter or bond purchaser to comply with the requirements of Securities and Exchange Commission Rule 15c2-12. The continuing disclosure undertaking shall be in substantially the form which she shall, in consultation with bond counsel, determine to be appropriate.

Section 18. Sale of Refunding Bonds. The Chief Financial Officer is authorized, in consultation with the Financial Advisor, to accept an offer to purchase the Refunding Bonds without further resolution of this Board, 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. This authorization includes, but is not limited to, determination of original principal amount of the Refunding Bonds; the prices at which the Refunding Bonds are sold; the date of the Refunding Bonds; the schedule of principal maturities and whether the Refunding Bonds shall mature serially or as term bonds; provisions for early redemption, if any, including mandatory redemption of term bonds, if any; the interest rates and payment dates of the Refunding Bonds; and application of the proceeds of the Refunding Bonds. Approval of the matters delegated to the Chief Financial Officer under this resolution may be evidenced by her execution of the Bond Purchase Agreement for the Refunding Bonds or other offer to purchase the Refunding Bonds, or a certificate of award of sale, or the Official Statement.

The Refunding Bonds shall not be sold unless there shall be net present value savings equaling not less than 5.00% of the Prior Bonds being refunded after payment of costs of issuance of the Refunding Bonds and costs of refunding the Prior Bonds being refunded. The maximum interest rate of any maturity of the Refunding Bonds shall not exceed 5.50%. The first maturity of principal on the Refunding Bonds shall occur no earlier than July 1, 2017, and the final date of maturity shall occur no later than July 1, 2041. In making such determinations the Chief Financial Officer is authorized to rely upon data and computer runs provided by the Financial Advisor.

Section 19. Verification Agent. The Chief Financial Officer is hereby authorized, at her discretion, to select an independent certified public accountant to serve as verification agent to verify that the securities and cash to be deposited to the Escrow Fund or Funds will be sufficient to provide, at the times and in the amounts required, sufficient moneys to pay the principal of and interest on the Prior Bonds being refunded as they become due or upon call for redemption.

Section 20. Other Actions. In the event that the Chief Financial Officer is not available at the time that it becomes necessary to take actions directed or authorized under this resolution, then a person designated by the Chief Financial Officer or the General Manager is authorized to take the actions delegated to the Chief Financial Officer by this resolution. The officers, administrators, agents and attorneys of the Board are authorized and directed to take all other actions necessary and convenient to facilitate issuance, sale and delivery of the Refunding Bonds, and to execute and deliver all other agreements, documents and certificates and to take all other actions necessary or convenient in accordance with this resolution, and to pay costs of issuance including but not limited to rating agency fees, bond insurance premiums, transfer agent fees, escrow agent fees, verification agent fees, financial advisor fees, bond counsel fees, costs of printing the preliminary and final official statements, and any other costs necessary to accomplish sale and delivery of the Refunding Bonds.

Section 21. Applicability of the Outstanding Bond Resolutions. Except to the extent supplemented or otherwise provided in this resolution, all of the provisions and covenants provided in the Bond Resolution shall apply to the Refunding Bonds issued pursuant to provisions of this resolution, such provisions of the Bond Resolution being made applicable to the Refunding Bonds.

Section 22. Conflicting Resolutions. All resolutions and parts of resolutions insofar as they conflict with the provisions of this resolution are hereby rescinded.

Section 23. Severability and Paragraph Headings. If any section, paragraph, clause or provision of this resolution shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this resolution. The paragraph headings in this resolution are furnished for convenience of reference only and shall not be considered to be part of this resolution.

Section 24. Publication and Recordation. In accordance with the provisions of Section 6 of Act 94, this resolution shall be published once in full in the Lansing State Journal, a newspaper of general circulation in the City qualified under State law to publish legal notices, promptly after its adoption, and shall be recorded in the minutes of the Board and such recording authenticated by the signatures of the Chairperson and Corporate Secretary of the Board.

Section 25. Effective Date. This resolution is hereby determined to be immediately necessary for the preservation of the public peace, property, health and safety of the City and the users of the System. In accordance with the provisions of Section 6 of Act 94, this resolution shall become effective immediately upon its adoption.

We hereby certify that the foregoing is a true and complete copy of a resolution duly adopted by the Board of Commissioners of the Lansing Board of Water and Light at a Regular meeting held on Tuesday, November 15, 2016, at 5:30 p.m., Eastern Time, and that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with the Open Meetings Act, being Act 267, Public Acts of Michigan, 1976, and that the minutes of said meeting were kept and will be or have been made available as required by said Act 267.

We further certify that the following Commissioners were present at said meeting: Louney, McCloud, Mullen, Price, Thomas and Zerkle and that the following Commissioners were absent Alley and Ross.

We further certify that Commissioner Price moved adoption of said resolution, and that said motion was supported by Commissioner Thomas.

We further certify that the following Commissioners voted for adoption of said resolution Louney, McCloud, Mullen, Price, Thomas and Zerkle and that the following Commissioners voted against adoption of said resolution: None.

We further certify that said resolution has been recorded in the Resolution Book and that such recording has been authenticated by the signature of the Chairperson and Corporate Secretary.



Chairperson



Corporate Secretary

RESOLUTION 2016-11-10

Acceptance of 2016 Audited Financial Statements for Defined Benefit Pension Plan, Defined Contribution Pension Plan, and Retiree Benefit Plan (Veba)

Resolved, that the Corporate Secretary receive and place on file the Defined Benefit, Defined Contribution, and Retiree Benefit Pension reports presented during the Pension Trustee Meeting.

Motion by Commissioner Mullen, Seconded by Trustee Thomas, to approve the Resolution for the Acceptance of the 2016 Audited Financial Statements for Defined Benefit Pension Plan, Defined Contribution Pension Plan, and Retiree Benefit Plan (VEBA).

Action: Motion Carried.

MANAGER'S REMARKS

General Manager Peffley stated that Silver Bells in the City is coming up on Friday, November 18th. With warmer than normal weather expected, he hopes to exceed the previous record turnout of 150,000. He stated that at noon on Friday, the BWL toy mill, supporting U.S. Marine Corps. Toys for Tots will have 10 local high school bands competing to see who can raise the most unwrapped new toys to be put in the mill.

COMMISSIONERS' REMARKS

Chair Price stated that as part of Silver Bells in the City, the bagpipe band that he plays in will be performing from 7:15 to 8:00 inside City Hall. Highland dancers will also be performing.

MOTION OF EXCUSED ABSENCE

Motion by Commissioner McCloud, Seconded by Commissioner Thomas, to excuse Commissioners Alley, Ross and Goodrich from this meeting.

Action: Motion Carried.

PUBLIC COMMENTS

Anne Woiwode, Conservation Chair, Sierra Club Michigan, spoke to the Board regarding the adoption of its Strategic Plan and the process for the implementation of that plan. She stated her concerns regarding the process for the Eckert Plant retirement.

ADJOURNMENT

Chair Price adjourned the meeting at 5:58 p.m.

M. Denise Griffin, Corporate Secretary

Preliminary Minutes filed (electronically) with Lansing City Clerk: November 21, 2016

Official Minutes filed (electronically) with Lansing City Clerk: 01-27-17