



MINUTES OF THE BOARD OF COMMISSIONERS' MEETING

LANSING BOARD OF WATER AND LIGHT

September 23, 2014

The Board of Commissioners met at the BWL Headquarters – REO Town Depot located at 1201 S. Washington Ave., Lansing, MI at 5:30 p.m. on Tuesday, September 23, 2014.

Chairperson David Price called the meeting to order at 5:30 p.m.

Present: Commissioners Margaret Bossenbery, Dennis M. Louney, Anthony McCloud, Tony Mullen, David Price, Cynthia Ware, Sandra Zerkle, Tracy Thomas.

Absent: None

The Corporate Secretary declared a quorum present.

Commissioner Thomas led the Pledge of Allegiance.

APPROVAL OF MINUTES

Motion by Commission Thomas, seconded by Commissioner Zerkle to approve the Regular Board Meeting minutes of July 22, 2014.

Action: Carried Unanimously

PUBLIC COMMENTS

MEMBERS OF THE PUBLIC ARE WELCOME TO SPEAK TO THE BOARD ON ANY AGENDA SUBJECT. ANYONE WISHING TO COMMENT ON ANY MATTER NOT ON THE AGENDA MAY DO SO IMMEDIATELY PRIOR TO ADJOURNMENT.

Mr. Zamron of Lansing commented on the pay of the new emergency manager, the employee responsible for the water treatment plant, the turnout from the public and asked the board to put postage on the envelopes put in with the billings.

Anne Wiwoode, State Director for the Michigan Chapter of the Sierra Club, spoke about the proposed rate increase and said that she would like more information on the capital investment. She also stated that there should be more engagement in planning for the future on how expenditures are made, that investments in clean energy are paying off and saving money.

COMMUNICATIONS

- a. Thank you card from Joan Flynn of Warren, MI (Commissioner Bossenbery's mother) – Received and Placed on File
- b. Letter of appreciation from the Institute for Contemporary Art – Received and Place on File
- c. Letters submitted at the September 18, 2014 Proposed Rate Increase Public Hearing From:
 1. David Holtz of Lansing – Received and Placed on File and included in the Public Record for the Public Hearing
 2. Brad van Guilder representing the Sierra Club – Received and Placed on File and included in the Public Record for the Public Hearing
- d. Letter submitted on September 23, 2014 from Tim Daman, President of the Regional Chamber Received and Placed on File, copy provided to Commissioners at meeting.

COMMITTEE REPORTS

COMMITTEE OF THE WHOLE

August 19, 2014

The Committee of the Whole of the Lansing Board of Water and Light met at the BWL Headquarters-REO Town Depot located at 1201 S. Washington Ave., Lansing, MI, at 5:30 p.m. on Tuesday, August 19, 2014.

Committee of the Whole (COW) Chair Margaret Bossenbery called the meeting to order and asked the Corporate Secretary to call the roll.

Present: Commissioners Dennis M. Louney, Margaret Bossenbery, Tony Mullen, David Price, Cynthia Ward and Sandra Zerkle.

Absent: Commissioners Anthony McCloud and Tracy Thomas.

Public Comments

None

Approval of Minutes

Motion by Commissioner Price, Seconded by Commissioner McCloud to approve the Committee of the Whole meeting minutes of June 10, 2014.

Action: Motion Carried

Regional Customer Input

Committee of the Whole Chair Bossenbery asked if there were any representatives from our regional customers or municipalities that might be here and would like to address the Committee of the Whole. Chair Bossenbery stated that regional municipalities were invited to be a part of this meeting to address any concerns that they may have. She said municipalities will continue to be invited and this section of the agenda will continue to be an open item on the agenda. There were no representatives present.

CRT/MPS Update

General Manager Lark provided an update on the Community Review Team's (CRT) remaining recommendations. Mr. Lark stated that the green writing indicated the completed recommendations/tasks that have been implemented since the last update. (See Chart below)

Item #	Division	CRT Recommendation	BWL Division Response
1	Lead: Emergency Operations Director Support: Dave Bolan	Working jointly with local emergency planners and municipal governments, update the inventory of critical facilities, as part of a Regional Emergency Operations Plan.	Update the Critical Facilities Inventory for both electric and water services by August 31, 2014 Secure critical infrastructure agreements with local EOC's by September 30, 2014 within 90 days of Emergency Director hire update inventory and share with local EOC's no less frequently than annually by end of each calendar year
2	Lead: Emergency Operations Director Support: Dave Bolan and Calvin Jones	Assist all units of government representing its customer base with identifying Special Needs Facilities for power restoration efforts, including assisted care facilities, elder care facilities, water and sewer plants, food warehouses, Capital City airport and key industry.	See CRT #1 for completion dates to assist local governments in identifying Special Needs facilities
3	Lead: George Stojic	Undertake a program of technical assistance to critical facilities in its service area to determine the feasibility and net benefits of implementing a micro-grid at each such facility, using combined heat and power or renewable generation and storage.	Complete survey of critical facilities for combined heat and power opportunities and distributed generation by March 31, 2015 Provide technical assistance in determining the feasibility of implementation of projects, including purchase power agreements with likely candidates May 31, 2015 Expand distributed solar energy program by August 1, 2014, Completed Continue grid sectionalizing investments, Completed
4	Lead: George Stojic	Explore various options to participate financially in implementing micro grids at critical facilities where they are feasible and beneficial, including power purchase agreements, joint ventures, and Board ownership.	See CRT #3 for estimated completion dates
5		Recognize its role to assist Regional, City and Township Emergency Management in disaster response by implementing all of the following:	
b	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	Participate in all EM exercises sponsored by any units of government representing its customer base	Emergency Operations Director will survey local EOC's for scheduled EM exercises within 60 days of hire. Emergency Operations Director will schedule BWL participation in local EM exercises as an ongoing basis.

c	<p>Lead: Emergency Operations Director Support: All LBWL Managers</p>	<p>Assure that all operations employees receive basic NIMS training,</p> <p>at a minimum the two introductory courses: 1. FEMA IS-700, NIMS An Introduction; 2. IS-100.PW-B, Introduction to the Incident Command System (ICS 100) for Public Works;</p> <p>that all first-line supervisors take those courses, plus ICS-200, Basic ICS;</p> <p>that all senior management officials take those 3 courses, plus ICS-400, Advanced ICS.</p>	<p>The BWL currently has the following ICS trained employees: Introduction to Incident Command: 48 ICS 200 ICS for Single Resources and Initial Action Incidents: 29 ICS 300 Intermediate ICS for Expanding Incidents: 14 ICS 400 Advanced ICS: 13 IS G402 ICS for Executives/Senior Officials: 35 IS 700 National Incident Management System (NIMS) An Introduction: 26 IS: 800 National Response Framework, An Introduction: 1 2</p> <p>Training is continuing for the remaining employees and must be completed no later than the following dates: 1. All BWL operations employees will complete the FEMA IS-700 IS-100 PW-B and the ICS 100 courses by March 31, 2015 2. All Managers and First-line Supervisors will also take ICS 200 course by November 30, 2014. 3. All BWL Directors will take courses in (1) and (2) and ICS-400 by December 31, 2014.</p>
d	<p>Lead: Emergency Operations Director Support: Appropriate BWL Managers</p>	<p>2) Participate in After-Action Reviews with all units of government representing its customer base, not just post-exercise, but after every major outage, disaster and emergency</p>	<p>BWL's Emergency Operations Director will be tasked with participating and coordinating BWL participation with units of government in all after action reviews, including exercises, major outages, disasters and emergencies.</p>
e	<p>Lead: Emergency Operations Director Support: Dave Bolan, Dick Peffley, and Calvin Jones</p>	<p>Develop and maintain good working relationships with the first-responder community for all units of government representing its customer base</p>	<p>BWL's Emergency Operations Director and GRCSO staff will meet with first responders from throughout its service territory by the end of the third quarter FY15 to discuss emergency plans and responder roles. This recommendation will be an ongoing responsibility of the Emergency Operations Director.</p>
6	<p>Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley</p>	<p>Consolidate its multiple emergency response plans within the City and Regional plan, (see below) and then test that plan by scheduling a full staff coordinated "table top" exercise at a minimum of every 12 months.</p>	<p>Consolidation of BWL Emergency Plans within 120 days of Emergency Director hire. Coordination BWL plan with local or regional plans within 180 days of Emergency Director hire and on an ongoing basis as updates are adopted. Coordination of BWL's participation in City or regional exercises ongoing.</p>
7	<p>Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley</p>	<p>BWL Staff and upper management should participate in the exercises and receive training on these plans and regular refresher training. BWL staff with emergency responsibilities should be required to have training on these plans and their role and responsibilities and the role and responsibilities of others that will be involved with any emergency response.</p>	<p>Conduct emergency management training for all Managers and staff with emergency responsibilities, with initial training completed within 120 days of Emergency Director hire. Conduct and coordinate emergency training with other local or regional emergency exercises on an ongoing basis.</p>

8	<p>Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley</p>	<p>Together with the communities in the greater Lansing area (not just the BWL service area), undertake a regional planning effort to be better prepared and coordinated and assure that emergency communication protocols are agreed to and followed. The mayors and township supervisors of our communities must lead and encourage this effort and provide the necessary resources. This planning effort should be done in coordination with the State Police EMHSD District 1 Coordinator.</p>	<p>Assist and participate with local officials and others on a regional planning effort, coordinating as appropriate with the State Police EMHSD District 1 Coordinator. Coordinate BWL's emergency plans with local EOC's and participate with local EOC's in regional planning and training on ongoing basis.</p>
9	<p>Lead: Emergency Operations Director Support: Dave Bolan, Gennie Eva, Dick Peffley, Bruce Cook, and Nick Burwell</p>	<p>Include Business Continuity Planning in its development of a comprehensive Emergency Operations Plan.</p>	<p>Coordinate development of a business continuity plan as part of the BWL's EOP within 270 days of Emergency Director hire.</p>
10	<p>Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley</p>	<p>CRT: Develop a comprehensive EOP, in coordination with the City EM officials, that is an Annex to the City EOP, consistent with MCL 30.410 (1) (a)</p>	<p>Consolidate BWL's emergency plans into a single BWL EOP within 120 days of Emergency Director hire per CRT#6 above. Coordinating the BWL plan with local or regional plans within 180 days of Emergency Director hire and on an ongoing basis as updates are adopted.</p>
11	<p>Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley</p>	<p>Working jointly with the City of Lansing and other regional governments, develop a regional EOP which includes a process for siting, supporting and sustaining a regional EOC.</p>	<p>Please see response to CRT # 10</p>
12	<p>Lead: Emergency Operations Director Support: Dave Bolan, Gennie Eva, and Dick Peffley</p>	<p>Develop, in coordination with the governments representing its customer base, an Energy Annex to a Regional Emergency Operations Plan.</p>	<p>Coordinate the BWL Emergency Plan with local governments and a Regional Emergency Operations plan; coordinate the BWL plan with local units of government by within 180 days of Emergency Director hire.</p>
13	<p>Lead: Bob Perialas Support: Emergency Operations Director and Dan Barnes</p>	<p>Collaborate with Lansing Emergency Management, Lansing Police Department's Neighborhood Watch, Lansing Neighborhood Council, East Lansing neighborhood associations and similar groups in all townships in the development of a program supporting block level emergency response plans. This effort would build upon the well-developed social infrastructure of Lansing's 186 organized neighborhood groups and prepare them to play an important role in planning for, responding to, and recovering from extreme weather events.</p>	<p>Identify and establish contact with community groups and organizations, June 1 Completed Consolidate BWL resources and services to provide organizations, November 30, 2014 Provide resources, adopt as practices and procedures Encourage and participate community coalition, adopt as practices and procedures</p>

15	Lead: Emergency Manger Support: Calvin Jones and Stephen Serkaian	Require all communications staff and senior leadership to undergo certified NIMS communications training in order to understand best communications practices during crisis situations, with associated training events and tabletop exercises to ensure coordination of communications functions with regional governments.	Provide BWL communication, GRCS staff, and leadership with NIMS training. Annual update training for communications staff on ongoing basis. BWL's communications staff and leadership team will participate in local and regional emergency exercises on an ongoing basis.
16	Lead: Stephen Serkaian Support: Emergency Operations Director	Further refine the March 2014 plan. The plan must contain greater detail on how to address the need for timely and accurate information; customer information must be consistently explained in a way that effectively meets customer expectations; and the plan must assure the provision of information sufficient to allow the public to make informed decisions on how they may best respond. There is a considerable body of studies on this subject that should be drawn upon in the development of such a plan. Once this plan is completed the BWL management and employees must be trained on, periodically exercise, and follow the plan. PSC: #8, develop communications plan	Review and determine if updates to crisis communications plans are needed by August 31, 2014. The Crisis Communications plan will be updated on an as-needed basis, with complete review and update performed annually at a minimum.
17	Lead: Emergency Operations Director Support: Stephen Serkaian	The crisis communications plan must be an annex to the Emergency Operations Plan and should be guided by a qualified communications professional certified through the NIMS protocols.	Consolidating BWL emergency plans including crisis communications plan as an annex. Provide emergency communications staff with NIMS training by November 1, 2014, and at least one staff member will complete training for qualification through NIMS protocols.
18		Consider amendment of the City Charter to clarify the powers of the Mayor and to provide the Mayor executive authority over the BWL during disasters or emergencies	City of Lansing
19	Lead: Emergency Operations Director	Emergency Management Director, working with all other member communities, including Ingham, Clinton and Eaton Counties, create a regional emergency operations plan (EOP).	The BWL will participate in encouraging and developing a regional emergency operations plan.
20	Lead: Emergency Operations Director	Work with BWL Operations and Senior Leadership to integrate their BESOC and Crisis Command Center, using the NIMS framework, with the City EOC.	The BWL stands ready to cooperate with the City Emergency Director to fulfill this recommendation.
21		Consider fully integrating BWL employees into the City EM structure.	City of Lansing

22	Lead: Emergency Operations Director	Recommend appropriate emergency management training for BWL leadership, including Commissioners, on how best to build in resilience and ensure full response capability to storms that are increasing in severity and frequency. PSC: #13, expand training and exercise programs to Board members	Training will be scheduled for BWL leadership and Commissioners by end of fiscal year 2015. NIMS and ICS training will be offered to Commissioners as well as training on resiliency.
23	Lead: Emergency Operations Director	Sponsor or encourage a full scale training exercise, involving emergency management staff of all units of government and BWL in the tri-county region, to take place annually.	Plan and coordinate BWL participation in full scale regional training exercises.
24		That all units of government within or partially within the BWL customer service area review their emergency operations plans to include a process for assessing the need for an anticipatory emergency declaration.	City of Lansing and local units of government
30	Lead: Nick Burwell	Remedy the lack of redundancy in their OMS System by (1) devising an alternative system and (2) including the potential loss of OMS as a contingency in EOP. The OMS failed during the December outage and had no backup system. PSC #23, contingency plan for OMS	Test BWL's disaster recovery process by August 1, 2014. Documentation of backup system by December 31, 2014.
33	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	Maintain and retain all information developed during restoration operations, including all forms of communications. Retaining this information will assist post restoration analysis, enhance institutional retention and uses of valid lessons learned, and improve the technical competencies of field engineers and technicians, as well as assuring operations or restoration manager's decision making processes are more clearly understood by future key personnel. PSC #24, collect and retain data during and after storm events	Develop and implement records retention requirements in emergency plans within 120 days of Emergency Director hire.
34		Information to be retained should include:	
a	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	A full log of the operations/restoration center input (phone calls, emails, radio messages, etc.), including identification of individuals sending and receiving, during the event.	Please see response to CRT #33.
b	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	A full log of output, as in #1 above.	Please see response to CRT #33.

c	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	Set of maps, optimally GIS, depicting the stages of the event, including at least, the initial outage area and affected components and customer zones, and stages of restoration sufficient to recreate the series of restoration actions leading to full restoration.	Please see response to CRT #33.
d	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	Full log of personnel engaged in restoration activities.	Please see response to CRT #33.
e	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	Full log of components and equipment used. This, optimally, would differentiate between components initially/originally identified for the restoration and those identified during the event based on discovery of event damage.	Please see response to CRT #33.
f	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	Log of field engineer actions; optimally with enough specificity to distinguish technical actions vs. administrative actions.	Please see response to CRT #33.
36	Lead: Dave Bolan	Contract with, or otherwise fund, the City of Lansing Operations and Maintenance Division to do all tree trimming for BWL in those areas (tree lawns and adjacent to city parks and golf courses) where the City is already engaged in vegetation management.	Proposal reviews and contracts completed by August 31, 2014
42	Lead: Calvin Jones	Establish a process of long-term scheduling and annual work coordination in conjunction with each of its host communities.	As practices and procedures, meet annually with local governments to inform and coordinate scheduling of major infrastructure projects. Meetings will be completed by end of 3rd quarter FY15.
44	Lead: Dave Bolan	Adopt the practice of installing breakaway service drops whenever it installs or repairs a service drop or performs major maintenance on the distribution line to which a service drop is connected.	Determine if breakaway service drops meet BWL safety, performance, and cost requirements by May 31, 2015. If they meet these requirements, the BWL will begin deployment of the breakaway service drops on a replacement basis.
45	Lead: Dave Bolan	Perform a benefit cost analysis to determine whether a proactive effort to install breakaway service drops is warranted.	Please see response to CRT #44.
49c	Lead: Dave Bolan	Once the value engineering analysis of the primary distribution system is completed, the BWL could begin using internal staff to undertake a substation-by-substation analysis of the secondary distribution lines fed from each substation and optimize the configuration of	Upgrades to BWL's high voltage transmission and primary systems underway and ongoing. Comprehensive long-term T& D plan, including secondary system, to be completed by 2017. Collaborate with local units of government on secondary system upgrades, see CRT #42.

		<p>that portion of the secondary distribution grid. The order in which this analysis is done should begin with those portions of the secondary distribution grid suffering the greatest outage experience in recent storms and proceed toward those with apparently less risk. As these lines run through neighborhoods, and options to improve the secondary distribution system will require collective decisions about vegetation management, line relocation, undergrounding, and the like, that the BWL is not necessarily institutionally empowered to make on its own, we recommend that this planning be done jointly with the local government and engage the affected neighborhood.</p> <p>PSC #30, Study worst performing circuits and cost benefit of undergrounding service</p>	
50	Lead: Calvin Jones	Direct its staff to work with local units of government to determine optimal strategies to harden the secondary distribution system, proceeding substation-by-substation in the order of susceptibility to storm damage as determined by experience in recent storms.	As part of practices and procedures this will be included in annual meetings with local governments. First meetings will be completed by end of 3rd quarter FY15.
55	Lead: Dave Bolan	Consider plans to install breakaway service drops first to those customers on lateral circuits or to special needs customers.	Please see response to CRT #44.
56	Lead: Bruce Cook Support: Emergency Manager and Calvin Jones	Develop through voluntary customer participation, and maintain, a list of all elderly customers and those with medical needs. PSC # 11, data base of vulnerable populations and service response facilities	Distribute consent forms to share medical alert customers and seniors residences with emergency response personnel for the purpose of wellness checks by August 1, 2014. Completed. Implement protocols for sharing information with local governments by end of second quarter FY15
57	Lead: Emergency Manager Support: Bruce Cook	Communicate daily with all EOCs to coordinate with emergency response personnel in all municipalities to ensure the safety of vulnerable citizens during an outage or other emergency event. Communication should be for the duration of a storm event. PSC # 11, data base of vulnerable populations and service response facilities	Please see CRT # 56
58	Lead: Emergency Manager Support: Bruce Cook	As part of the integrated Regional EOP, provide the regional EOC (or all EOCs or EMs for all governments within its customer service area, if no regional EOC is created) with up-to-date information of the location of its at-risk customers.	Please see responses to CRT #'s 56 and 57.
59	Lead: Emergency Manager Support: Bruce Cook	Revise items 44, 47, 48, 54 of the outage report. There must be a coordinated effort between BWL and local government emergency personnel and community groups to assure clear communication and coordination of efforts to protect at- risk customers when an emergency arises.	Please see responses to #'s 56 and 57.

60	Lead: Calvin Jones Support: Emergency Manager	Create a Community Resilience Planning Coalition which would take a broad approach to building community level resilience to extreme events by: PSC #'s 9 consumer education regarding outages and outreach to community organizations to build resiliency	Identify and establish contact with community groups and organizations, June 1 Completed Consolidate BWL resources and services to provide, November 30, 2014 Provide resources, adopt as practices and procedures Encourage and participate community coalition, adopt as practices and procedures
a	Lead: Emergency Manager Support: Calvin Jones	Participating in the drafting of a regional emergency response plan, that would include community organizations' input on issues including a coordinated crisis communications plan and procedures to ensure a coordinated, efficient response to hazards across jurisdictions;	The BWL's Emergency Operations Director will coordinate the BWL's emergency plan with the City within 180 days of hire and will be the primary liaison with the City and local communities regarding the BWL's emergency plan.
b	Lead: George Stojic Support: Dave Bolan and Dick Peffley	Providing a forum for consideration of new risk reducing technologies and design in the built environment;	Conduct risk reduction technology forum by end of third quarter of FY15.
c	Lead: Calvin Jones	Promoting strategies for engaging and organizing the community at multiple levels (household, block, neighborhood, shelters and non-profits, businesses, jurisdiction) to identify vulnerabilities, mitigate risk and better prepare for response and recovery from extreme events, and	Please see response to CRT # 60
d	Lead: Calvin Jones	Providing a platform for regional sharing of lessons learned; connecting people, ideas, and resources; and engaging policymakers and community members in an ongoing conversation about resilience.	Please see response to CRT #60.
61	Lead: George Stojic	Include regional resiliency, including energy self-reliance, as a strategic goal	Part of ongoing planning and investment program. See also CRT #3.
62	Lead: George Stojic	Explore the potential for "islanding" to protect the local electrical grid, with BWL taking the lead in creating an innovative, strategic solution	Please see response to #61.
63	LBWL Board of Commissioners	Hire an "operational auditor" to conduct annual performance audits of the BWL operations and planning;	
64	LBWL Board of Commissioners	Establish a standing committee for review of, and contract with outside expertise for, an annual operational audit.	
65	LBWL Board of Commissioners	Institute a training process for all board members in Carver or other Policy Governance Model. Implement and use the model and continue the training on an ongoing basis.	

66	LBWL Board of Commissioners	Request the City to consider provision to the BWL Board of expense reimbursement and/or some minor stipend for attendance.	
67	LBWL Board of Commissioners	Create a Local Government Liaison Committee of Board members and local government representatives from remaining governments, which will meet quarterly to review service-related issues and to recommend changes, improvements, and innovations AND the Board must institute a clear process for plenary and due consideration and action on the Committee's recommendations;	
68	LBWL Board of Commissioners	Request an opinion from the Lansing City attorney to clarify whether an ordinance or City Charter amendment could establish an expanded Board to include non-Lansing residents, to represent the municipalities within the BWL customer area.	
69	LBWL Board of Commissioners	Urge the involved governments, the City of Lansing and the City of East Lansing and all townships with residents within the BWL customer area to meet and discuss the concept of representation on the BWL Board. These discussions must focus on the need for regionally developed and implemented plans for emergency response and for resiliency.	
70	LBWL Board of Commissioners	Create and drive the system for implementation of the Internal Report and the CRT Report.	
71	LBWL Board of Commissioners	Recommend to the City a "Best Practice" for recruiting new board members. Not only those that may represent certain areas that they serve, but recruit to needs of expertise, including, as examples only, an engineering background, business background or security background.	
73	Lead: Bruce Cook	Customer call answer time – rule 460.724 (pg. 29 of MSPC staff report) PSC #7, customer standards	Estimated time to comply with this standard is June 1, 2015.
74	Lead: Calvin Jones	Community outreach activities (no rule – but see comparison pg. 32 of MPSC staff report)	Please see response to CRT # 60. GRCSO department will also survey utilities to identify outreach programs adopted for major outages by end of second quarter FY15
75	Lead: Bruce Cook	Blockage time of customer ability to report outage – (reference to rule at pgs. 32-33 of MPSC staff report) PSC #7, customer standards	Estimated time to comply with this standard is June 1, 2015. Agreed
81	Lead: J. Peter Lark	Hold an Annual Meeting of Stakeholders, with explicit invitations and opportunities for public debate on innovation and strategy.	Conduct an annual stakeholder meeting on innovation and strategy for end of third quarter FY15.

General Manager Lark also provided an update on the Michigan Public Service's (MPS) remaining recommendations. The yellow highlighted area indicates the completed tasks that have been implemented since the last update. (See Chart below)

Item #	Division	MPSC Remaining Recommendation	BWL Division Response
I.	Executive Management	The BWL's internal report and 54 actions contain numerous aspiring phrases such as: plan to update, are in the process of implementing, will consider, will work to develop, will expand testing, is investigating, will solicit, will work with, will make part of, will aggressively pursue, etc. The MPSC recommends the BWL create a standing committee that would track the implementation of all recommendations and create a transparent process for reporting progress to the Board and the City of Lansing.	Board of Commissioners
IV.	Executive Management		
V.	City Government	The MPSC recommends that the Mayor of the City of Lansing, as the appointing authority to the Board, should appoint new member(s) with expertise related to the duties of the BWL.	City of Lansing
VI.		In addition to adopting the recommendations of the CRT, the MPSC makes the following recommendations:	
MPSC 1	BRUCE COOK	Require specific customer service metrics as part of the BWL's Quality of Service best practices. The MPSC also recommends the BWL institute a billing credit.	Estimated completion date August 31, 2014
MPSC 3	Lead: Dave Bolan	Analyze the reliability measurements of System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency Index (SAIFI) and Customer Average Interruption Duration Index (CAIDI) on a circuit basis and expand the reporting of these indices to include each of the individual municipalities served by the BWL.	Estimated completion date September 1, 2014
MPSC 4	Lead: Dave Bolan	Develop metrics that allow the BWL to analyze the performance of all reliability investments.	MPSC #5
MPSC 5	Lead: Dave Bolan	Develop an annual reliability report that can be publicly available.	Estimated completion date end of FY15
MPSC 6	Lead: Dave Bolan	Develop an annual reliability spending report that focuses on current and future reliability project spending and analyzes customer benefits and the overall effectiveness of reliability projects.	MPSC #5
MPSC 12	Executive Management	Provide training to the Board and identify resources and opportunities for Board members to gain experience and knowledge that will allow for greater control of current and emerging issues.	Training to be conducted FY15

MPSC 14	Lead: Dave Bolan	Train and educate BWL staff so that experienced and knowledgeable staff can fill back-up roles in the event of an outage or energy emergency.	The BWL currently has staff with secondary roles to support operations staff and customer service staff. However, the BWL will review its secondary staff needs, identify staff to fill additional roles that may be needed, and schedule training for secondary role staff by November 30, 2014.
MPSC 17		Voluntarily report to MPSC Staff when outages affect more than 10 percent of its customers, when a significant event affects the operation of its system, or when there is loss of power to a critical facility or critical customer.	MPSC #5
MPSC 18	Calvin Jones	Keep the BWL Board and Lansing City Council continually informed on mutual assistance agreements should any contracts expire or have cause to be amended.	MPSC #5
MPSC 30	Lead: Dave Bolan	Study its poorest performing distribution power lines to determine the costs and benefits of undergrounding such lines as compared to other options aimed at increasing reliability.	This will be completed by the end of FY15

Item #	Division	BWL 54 Remaining Action Item	BWL Division Response
BWL 1	Emergency Manager	The BWL will include its distribution plan in its annual table top tests designed to stress its emergency response and will use the results to continually improve its emergency plans	Expected completion date 10/16/14
BWL 8	Dave Bolan	The BWL will begin to use multiple tree trimming contractors and assign work to contractors based on past performance. The contractor with the best record of performance will get a larger portion of the work. Recently, the BWL temporarily increased the number of tree trimming crews under contract to eighteen.	Original expected completion date 5/16/14 rescheduled to 8/29/14 due to contractors need to develop deployment.
BWL 10	Dave Bolan	The BWL is in the process of carefully reviewing spotter duty during the ice storm and determining how many additional trained spotters would be needed to efficiently secure down lines and provide timely damage assessment during an event with the destructive impact of the ice storm. Based on this analysis, the BWL will survey its staff for additional personnel who would be suitable for spotter duty and train personnel for both spotter and damage assessment duty.	Training scheduled for November 30, 2014
BWL 17	Dave Bolan	The BWL is in the process of hiring 3 additional line workers and an additional dispatcher to supplement its workforce and to help manage crews during the restoration process.	2 of 3 additional line workers hired along with dispatcher. Third line worker to transfer from production by end of second quarter FY15.

BWL 19	Dave Bolan and Emergency Manager	The BWL does update its critical and public safety lists periodically to ensure that it is up to date and complete. The BWL will share its overall restoration plans with local public officials so that they can be kept up to date on the BWL's restoration plans. If another catastrophic storm does occur, local officials will be better able to respond to citizen inquiries regarding the restoration progress.	T&D plans updated 6/30/14 Critical facilities list updated 8/29/14. Consolidation of BWL emergency plans within 120 days of Emergency Director hire. Coordination of BWL consolidated plan with local officials expected to be completed within 180 days of Emergency Director hire.
BWL 24	Dave Bolan	The BWL is moving forward with a project to implement smart grid and smart meter technology, which will allow it to identify individual customer outages. It will also develop a policy that will allow customers to "opt out" of smart meter use. c. customer communications:	Scheduled and budgeted for FY15 this will be a multi-year project
BWL 32	Nick Burwell	The BWL is working with the 877 vendor to provide additional methods for customers to be identified or matched when calling in to report an outage. This will include using the last digits of an account number or social security number.	Scheduled to be completed November 1, 2014
BWL 34	Nick Burwell	The BWL has added text outage reporting to the 877 system to offer customers another method for reporting outages.	Expected completion date rescheduled to 12/1/14. Need to register and comply with cell providers for standards and SMS code.
BWL 44	Bruce Cook	The BWL will work with customers and local officials to determine how to make local officials aware of seniors, customers with medical alerts, and other vulnerable populations during extended outages.	Expected completion date September 30, 2014.

Mr. Lark stated that we do not have an Emergency Manager yet, but have already done a lot of the training that is required by the Emergency Manager and we have more than doubled the number of employees who have taken basic incident command assistance training, sometimes called ICS. Training is progressing for see spotters and we now have 299 spotter roles filled. We have also expanded our internet length, which allow 200 additional phone lines. We have established and tested an external email system in case our own internet capabilities are interrupted by an emergency and we have also successfully again tested our OMS disaster recovery procedures.

General Manager Lark stated some of the recommendations do not have specific completion dates and are ongoing. For example, one of the BWL recommendations was to adopt a set of triggers that assign a resource mobilization response depending on a storms excepted severity. As part of the emergency plan a trigger system has been implemented. Triggers are a rating system 1-4 for storms and depending on how elevated the storm is, with 4 being the most severe, there is a set of procedures established and put in place to be followed with each level of storm designation. (Completed/ongoing recommendations chart attached at the end of minutes)

General Manager Lark stated that there has been some tree trimming complaints or issues in particular in the E. Lansing area. He stated in the future there will be meetings in neighborhoods where tree trimming is scheduled to take place in an effort to explain the Board of Water & Light's tree trimming procedures. General Manager Lark stated that it was important that the Board is aware of what is going on and explained

that we are cutting to what we believe to be primary lines that carry higher voltage and secondary lines in a typical setup that carry lower voltage. We are trimming to 2 feet on the secondary's and 10 feet on the primaries and we trimming overheads. So, any branches or limbs that are over the wires we are trimming which has been our policy for some time. In some ways, we are a little more lenient than the best management practices.

Board Chair Price stated that we need to say that we are trimming to a national standard and that we are not making this up as we go along and that this is acceptable by the utilities arborists; If proof is needed, we can provide it, but we cannot make exceptions for one neighborhood and were are going abide by the national standards.

Commissioner Louney stated that the Board of Water & Light's staff does an excellent job of explaining what our standards are, however the residents of E. Lansing were not happy with our policy. He spoke about some of the issues that the residents of E. Lansing have indicated for example, lack of notification. Commissioner Louney stated that he told the residents of E. Lansing that he would bring this issue to the attention of the Board, but in the meantime wanted to suspend cutting until there was further dialogue.

General Manager Lark stated there is an email from Commissioner Louney regarding the discontinuation of tree trimming.

After some discussion regarding the tree trimming policies and procedures, the following motion was offered:

Motion by Commissioner Louney, **No Second**, to suspend tree trimming in the E. Lansing until we have meetings with key their representatives to engage in dialogue regarding this matter.

Action: Motion Died, no Second

Renewable Energy Update

George Stojic, Executive Director of Strategic Planning and Development provided an update of the BWL's renewable energy program and an explanation of how the BWL's renewable options fit operational and planning needs of the BWL. He began by describing the operational and reliability needs of the BWL's electric system, including the need to follow demand as it changes.

Mr. Stojic provided an explanation of each category of renewable energy in the BWL's Renewable Energy Portfolio, how it contributes to the BWL's operational and planning needs, and those operational and reliability needs that they do not meet. The renewable options in order of presentation were landfill gas, hydroelectric, solar, and wind. He also mentioned the BWL's biomass test at the Erickson plant. Mr. Stojic concluded by stating that staff would soon be investigating additional renewable energy projects and considering their impacts on the BWL's operational and planning needs when doing so.

BWL Outage Map

General Manager Lark introduced the Board of Water & Light's new Outage Center Mobile Application (App).

This App features the ability to report outages, get restoration estimates; social media feeds as well as Board of Water & Light contact information. General Manager Lark indicated that this App is free to download and in the Apple and Google Play stores. General Manager Lark thanked the IT Department and Amy Akers, Social Media Specialist for putting this App together.

Other

None

Excused Absence

Motion by Commissioner Ward, Seconded by Commissioner Price to excuse Commissioners McCloud and Thomas from tonight's meeting.

Public Comments

None

Adjourn

On Motion by Commissioner Price, Seconded by Commissioner Ward, the meeting adjourned at 6:50 p.m.

Respectfully Submitted
Margaret Bossenbery
Committee of the Whole

(Attachment)

CRT Recommendations Completed or Ongoing

Item #	Division	Recommendation	Status
5a	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	During any event where the City EOC is activated, including during major widespread outages, a trained and experienced BWL Liaison Officer must be deployed to the City EOC.	Completed
14	Lead: Stephen Serkaian Support: Calvin Jones, Bruce Cook, and Nick Burwell	Create a robust social media presence for its customers – this work is already underway internally, but must become a priority for its communications operations, as consumers are primarily using digital communication tools to learn about outages and other service issues.	Completed
20	Lead: Emergency Operations Director	Work with BWL Operations and Senior Leadership to integrate their BESOC and Crisis Command Center, using the NIMS framework, with the City EOC.	Completed
25	Lead: Dave Bolan	Given that insufficient spotters for damage assessment was a serious problem in the December outage, identify the types of spotters necessary and currently lacking. PSC: #19, additional spotters	Completed
26	Lead: Dave Bolan	Include the acquisition of qualified primary distribution system spotters in its mutual aid agreements and extraordinary assistance contracts. Since repair crews are fundamentally more expensive than spotters, we believe that repair crews should be the restoration bottleneck rather than spotters.	Completed
27	Lead: Dave Bolan	Identify specific personnel for spotter duty and training for deployment in emergencies. This function should be mandatory, not voluntary on the part of the employee, as it appears to be now. Training should also be mandatory and held, minimally, once per year. PSC; #'s 19 and 20, additional spotters and training	Completed

Item #	Division	Recommendation	Status
28	Lead: Dave Bolan	That the two person line crew requirement and the requirement that a BWL employee accompany the outside contracted line crew are reasonable to ensure safety of BWL employees.	Completed
29	Lead: Nick Burwell Support: Emergency Operations Director	Integrate the OMS into an Emergency Operations Plan (EOP) which is tested to its maximum capacity68., both to assure system functionality and to assure integration with restoration operations, on a semi- annual (6 months) basis. Staff noted that because they had not experienced an outage of more than 20,000 customers, they assumed that was the maximum ever likely. As noted above, recent reports indicate that storm frequency and intensity are on the rise. Since the outage, the now apparently functional OMS has been tested for loss of power to 35,000 households— still fewer than lost power in the December outage. Therefore, the system must be tested to its maximum capability PSC # 22, Integrate OMS into emergency plan and test system	Completed
31	Lead: Nick Burwell and Dave Bolan	The IT Department shall report OMS implementation and maintenance and redundant system development to the Board of Commissioners at least monthly. Further, the Commissioners should carefully review the history of the selection, installation, and performance of the GE OMS system to determine if further action is required.	Completed and Ongoing
32	Lead: Bruce Cook Support: Nick Burwell	A contingency retainer agreement with a third-party answering service must be executed. This is consistent with the BWL changing its corporate philosophy to one that plans for, recognizes, and addresses all potential contingencies.	Completed
34g	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	Log of physical access entries, either IAW or similar to NERC CIP standards for Physical Access to BES sites.	Completed
34h	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	Log of all connections to the local control systems during the restoration, including full hardware/software descriptions and each connecting devices security certificate.	Completed
34i	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	Log of interactions with partner utilities, Independent/Regional Systems Operators (ISO/RSO), private, state and federal regulatory organizations, state utility commissions, state governing personnel, federal entity personnel supporting restoration activities, as well as other personnel or organization interactions relevant to the restoration or an understanding of their role or influence on the restoration activities.	Completed
35	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	Retain this documentation in a form that enables efficient use, recall, and reuse, and in a format that is compatible with performing the same series of retention actions for future events; i.e., not a ‘one time” storage, but with future use and comparison in mind.	Completed

Item #	Division	Recommendation	Status
37	Lead: Dave Bolan	Evaluate its 5-year schedule to determine whether vegetation management needs to be even more aggressive. Based on the Board's representation that it has been close to a five-year cycle for vegetation management, however, it is doubtful that shortening that cycle will provide much benefit. Rather, based on both public comments and comments from the BWL, focus should be placed on a strong and effective quality assurance program. Adjustments to the vegetation management standards must be made, especially with respect to the removal of dead trees or trees in poor condition. PSC #'s 2 and 25 Analyze vegetation management budget and practices	Completed
38	Lead: Dave Bolan	Perform an 100% audit of all lines annually to ensure both that the BWL can stay on track in its vegetation cycle and that sections that may require immediate attention are not neglected.	Completed
39	Lead: Dave Bolan	Explore collaboration with other entities doing tree-trimming (City of East Lansing, Townships, Consumers Energy, DTE) in order to increase efficiencies.	Completed
40	Lead: Dave Bolan	Budget for distribution system maintenance based on regular replacement of each and every component at its engineering-based life-length and continue to recalculate its grid maintenance budget on that basis in all future budgets. PSC #'s 27 and 29	Completed and ongoing
41	Lead: Dave Bolan	Implement a procedure that actual replacement of most grid assets will be condition-based, or because distinctly better technology is available and warrants replacement of equipment that is not yet at end of life. PSC #27, Develop inspection and maintenance program for critical equipment	Completed and ongoing
43	Lead: Dave Bolan	Undertake a value engineering analysis of the potential deployment of automatic circuit interrupters in its distribution grid and implement them accordingly. PSC # 28, study grid modernization and two-way communications technologies	Completed and ongoing
46	Lead: Dave Bolan	Undertake a value engineering analysis of its entire primary distribution system, with the intent to calculate the optimum extent and topology of the primary distribution grid, and the optimum design of each segment of its primary distribution grid. This analysis should consider all aspects of distribution grid performance, but particularly should include strong consideration of its effects on outage extent and time to service restoration in major storm events. PSC #'s 28 & 29, grid modernization and investments to build grid resiliency	Completed and ongoing
47	Lead: Dave Bolan	When performing value engineering of the primary distribution grid and in implementing any hardening of the primary distribution grid, the BWL should examine opportunities to reduce costs (or improve results) through collaboration with host communities.	Completed and ongoing
48	Lead: Dave Bolan	Examine options to add additional sensors to the primary distribution system so as to localize faults much more quickly. Sensors are not particularly expensive and use of increased numbers of them may well be warranted.	Completed and ongoing
49		Harden the Secondary Distribution System	
a	Lead: Dave Bolan	Breaks and other faults in the secondary distribution system affect fewer customers per fault and are easier to repair than are faults in the primary distribution system. Thus, while we encourage the Board to undertake some hardening of the secondary distribution system, the CRT believes the Board should focus its grid maintenance and upgrade investments on the primary distribution system for the next few years.	Completed and ongoing

Item #	Division	Recommendation	Status
b	Lead: Dave Bolan	Vegetation management is a key to reducing storm-induced outages in the secondary distribution system as it currently exists. Accepting BWL's representation that it will "strictly adhere" to a five-year cycle for vegetation management, the CRT believes that shortening that cycle further will not provide much further benefit. Rather, based on both public and BWL staff comments we believe that the Board should focus on a strong and effective quality assurance program for its vegetation management and consider making some adjustments in its vegetation management standards, especially with respect to the removal of dead trees or trees in poor condition. See the vegetation management section for further analysis of these issues.	Completed
50	Lead: Calvin Jones	Direct its staff to work with local units of government to determine optimal strategies to harden the secondary distribution system, proceeding substation-by-substation in the order of susceptibility to storm damage as determined by experience in recent storms.	
51	Lead: Dave Bolan	Proceed as quickly as is consistent with good practice to deploy smart meters and integrate them to its outage management system to accelerate the identification and repair of the secondary distribution system after storm damage.	Completed and ongoing
52	Lead: Dave Bolan	In the interim, ensure that it has an adequate core of spotters for restoration of the secondary distribution system following a storm.	Completed
53	Lead: Dave Bolan	Deploy smart meters first to those residences located on lateral circuits.	Completed and ongoing
54	Lead: Gennie Eva	Consider plans to own the system, including the mast, through to their meter box, as part of its benefit cost analysis to determine whether a proactive effort to install breakaway service drops is warranted.	Completed
72	Lead: Dave Bolan	Setting a vegetation management schedule and budget & complying with it (pgs. 23-26 of MPSC staff report)	Completed
76	Lead: Gennie Eva	Service quality credits (rule 461.744-746, pg. 34 of MSPC staff report) PSC #7, customer standards	Completed
77	Lead: Dave Bolan	Time limits for relief of non-utility personnel guarding downed power lines	Completed
78	Lead: Dave Bolan	(Rule 460.723, pg. 37 of MPSC staff report) sets time limits for non-utility employees (i.e. police /fire personnel) guarding a downed wire. & adequate number of persons certified to perform wire down duty during high volume event (pg. 38 of MPSC staff report).	Completed
79	Lead: J. Peter Lark	Establish a Customer Ombudsman, Chief Customer Officer or expand the duties of the Director of Governmental Affairs and Customer Relations, directly reportable to the General Manager.	Completed
80	Lead: J. Peter Lark	Restructure its organizational chart so that the positions of Strategic Planning, Information Technology, and Operations direct reporting to the General Manager.	Completed
82	Lead: Susan Devon	Implement a utility-wide quality assurance plan. The testimony on vegetation management (that they looked at bills submitted by contractor monthly, and only now are adding a competitor and checking performance after trimming) suggests the lack of a comprehensive quality assurance plan.	Completed
83	Lead: George Stojic	Consider revision of the 54 Recommendations, using the SMART analysis to include specific metrics, including the tasks to be performed, the directorate or section within BWL charged with performance and the time need for accomplishment.	Completed
84	Lead: J. Peter Lark	Require staff reports monthly to the Board of Commissioners on specific actions that have been taken on all of the 54 recommendations made in the Ice Storm Outage Report and that the BWL post those reports on its website for the next 18-24 months.	Completed and ongoing

MPSC Recommendations Completed or Ongoing			
Item #	Division	Recommendation	Status
8	Lead: Stephen Serkaian Support: Calvin Jones	Develop a Communication Plan, as part of an overall emergency operations plan, aligning with industry best practices for customer service obligations for major service outage responses and during restoration periods.	Completed
10	Bruce Cook	Maintain single phone number for customer inquiries	Completed
15	Calvin Jones	Consider use of the Local Energy Assistance Program (LEAP) process to serve as the conduit for establishing private-public partnerships focused on improving community resiliency to a prolonged energy disruption. The CRT was explicit in recommending that the BWL develop an emergency operations plan in the context of a regional plan. This would satisfy that suggestion.	Completed
16	Dave Bolan Support: Emergency Manager	Work in conjunction with the Michigan Municipal Electric Association (MMEA) to share the lessons learned and best practices with other municipal utilities within the state in an effort to improve the resiliency and outage response of all municipal utilities in Michigan.	Completed
19	Executive Management	Perform its own action items 10 through 15 from the BWL December 2013 Ice Storm Outage Report regarding spotters and provide frequent update reports to the BWL Board and Lansing City Council.	Completed
20	Dave Bolan	Provide spotter training at least two times per year at a very minimum, once in the spring and once in the fall for respective storm events.	Completed
21	Dave Bolan	Survey several Michigan utilities to determine the industry best practice regarding the BWL "bird dogs" assisting mutual assistance crews.	Completed
22	Nick Burwell Support: Emergency Manager	Integrate the BWL's Outage Management System (OMS) into an Emergency Operation Plan and test the system to its maximum capacity as recommended by the CRT.	Completed
23	Nick Burwell Support: Emergency Manager	Create a contingency process that will provide guidance to BWL staff in the event the OMS is not operational during an outage or catastrophic event.	Completed
25	Dave Bolan	Continue a rigorous tree trimming program and develop tree trimming practices that include overhead branch removal and hazardous tree removal.	Completed
26	Dave Bolan	Develop inspection procedures to ensure that companies who lease space on poles are clearing around communication lines.	Completed
27	Dave Bolan	Develop a comprehensive and transparent inspection and preventive maintenance plan that includes all equipment critical for maintaining system reliability.	Completed and ongoing
28	Dave Bolan	Study all grid modernization and two-way communication technologies to develop a capital investment plan that maximizes reliability and customer benefit.	Completed and ongoing
29	Dave Bolan	Continue to invest in assets that increase the overall strength and resiliency of the electric system when replacing assets that are at the end of their useful life.	Completed and ongoing

BWL 54 Items Completed or Ongoing

Item #	Recommendations	Status
2.	The BWL will consider implementing a set of triggers into its distribution plan.	Completed
3.	The BWL will consolidate its Transmission and its Distribution emergency response plans into one document.	Completed
4.	The BWL will investigate the benefit of collaborating with other Michigan utilities to track and estimate the impact of inclement weather.	Completed
5.	Based on the BWL's experience with the impact of the ice storm, the BWL will make use of additional secondary role employees and these roles will be discussed in subsequent sections.	Completed
6.	Most utilities have not found placing overhead lines underground to be cost effective. Instead reviewing maintenance practices and construction standards seems to be a more reasonable method for improving the resiliency of the BWL's distribution system. However, for those customers who want and are willing to pay for undergrounding existing services, the BWL will provide the service.	Completed
7.	The BWL will strictly adhere to a 5 year trimming cycle and is in the process of modifying its tree trimming standards and procedures to remove all branches located above distribution lines and better protect its lines during a major storm.	Completed
9.	The BWL will publish the contact information for its supervisor responsible for trimming scheduling so customers can contact the Manager directly with questions or complaints regarding tree trimming procedures and workmanship.	Completed
11.	The BWL will also utilize retired line workers to perform damage assessments and serve as spotters.	Completed
12.	The BWL will consider contracting with electric service firms for damage assessment services to supplement its own staff.	Completed
13.	The BWL is developing common reporting forms and methods to be used by all spotters and damage assessors and will stress the importance of adhering to these during the annual training sessions.	Completed
14.	The BWL will evaluate the use of damage predictive tools to determine if these tools could help in assessing possible damage earlier in a storm's approach.	Completed
15.	The BWL will remind customers that lines marked with red and white tape are power lines and the tape indicates that the BWL is aware that the line is down. The BWL will publish this information on its website and Customer Connections newsletter.	Completed
16.	The BWL has expanded the number of utilities and non-utility electric service contractors with which it has mutual aid agreements or service contracts. The list is shown below. Existing Agreements• Michigan Municipal Electric Association (35 Municipal Utilities)• Consumers Energy New Agreements• American Public Power Association• Asplundh• Kent Power• Hydaker-Wheatlake• FEMA Mutual Aid (Upon a Declaration of a State of Emergency) Pending Agreements• DTE Energy (Under Negotiations)These agreements both increase the number of potential crew sources and provide geographical diversity as well. For example the APPA agreement would enable the BWL to bring crews in from a number of different states. In the event of a declaration of emergency, the FEMA agreement would allow the BWL to bring in crews from nearly anywhere in the United States.	Completed
18.	With the addition of 3 line workers, an additional dispatcher, more trained spotters, and the new mutual aid agreements the BWL has tripled the number of line crews that are available for immediate deployment and can be used safely and efficiently during a major outage event.	Completed
20.	The BWL will review its storm inventory based on the recent ice storm.	Completed
21.	The BWL will investigate connecting its line truck laptops to its OMS system as a tool to assist crews with storm responses.	Completed

Item #	Recommendation	Status
22.	The BWL has resolved the matters related to the OMS functionality. The conductor cuts are now operational and the OMS performs to design standards.	Completed
23.	To avoid this situation with other outage tools that may be employed in the future, the BWL will conduct annual stress tests of all its restoration tools including, but not limited to the OMS, outage call in number, Customer Service Center, and Communications plans.	Completed and ongoing
25.	The BWL is hiring additional call center staff.	Completed
26.	The BWL has implemented a process to assure call forward to the 877 number occurs during large outages. This will allow CSR and supporting staff to concentrate on line down, voice mail and other communications mediums.	Completed
27.	The BWL will trigger the IVR in the 877 system to direct non-matched callers to voicemail during major outage events.	Completed
28.	The BWL has reconfigured the Call Center to send messages in the voice mailbox to CSR's automatically.	Completed
29.	The BWL is aggressively advertised the 877 number for outages including all available communications mediums, like magnets, social media, BWL Website, and other customer communications.	Completed
30.	During a major outage, the BWL Call Center staff will focus their efforts on responding to email, texts, Facebook, Twitter, and voicemails left on the outage reporting system with the goal of responding to storm related inquiries in a timely fashion. The BWL has expanded the number of employees in secondary storm roles to assist with these customer service functions.	Completed
31.	The BWL will ensure that the distribution plan weather forecasting and storm preparation function include employees who are directly or indirectly, through secondary roles, responsible for customer service. This, along with other changes, will assure that the BWL can respond to customer inquiries promptly.	Completed and ongoing
33.	The interface between the 877 number and the OMS has been fixed and alarms will be added on each system to alert staff of any problems in the future.	Completed
35.	The BWL is working on a method to provide quicker updating of customer data from BWL system to 877 system. This is intended to provide better matches of customers to service addresses.	Completed
36.	The BWL is working to improve its ability to automatically call back customers and provide them with updated outage information.	Completed
37.	The BWL will continue its enhancements to its phone system. The enhancements will use newer technology to increase Internet bandwidth, increase available phone lines, and make the system fully redundant across the BWL private city-wide network. This upgrade will allow the system to dynamically increase the number of available lines to the call center during a large outage, using many of them to forward calls to the 877 vendor site which is designed for large volumes.	Completed
38.	The BWL has increased the TFCC voice mailbox size to 8,000 messages and is in the process of contracting with another vendor to assist in responding to voice mailbox messages during a large outage.	Completed
39.	The BWL is investigating a separate site created just for outage information (including outage maps). This will help ensure that the BWL's outage website will be available to customers in the event that a catastrophic outage disables the BWL's main website.	Completed
40.	BWL has tested and established a redundant external email system	Completed
41.	The BWL has developed a temporary web-based outage map for its website. The BWL is also working with a local vendor for a permanent outage map linked directly to the BWL's OMS system. Phase I of the project covering functionality has been completed and development is underway. Phase I is Scheduled for completion soon.	Completed

Item #	Recommendation	Status
42.	In Phase II of the project, the BWL plans to continue enhancements to all of its Information Systems that interact with customers. The next phase of the outage map product for BWL will include further interaction with our customers, allowing them to identify themselves to learn if our system shows them specifically out as well as possibly reporting an outage through the map system to our OMS system. Other enhancements and features are being evaluated.	Completed
43.	In addition to using Twitter and Facebook, the BWL is investigating the use of Nixle to communicate outage and other information to its customers.	Completed
45.	The BWL will be more proactive informing customers of where their responsibility for service ends, the service mast, and the BWL's begins.	Completed
46.	The BWL will maintain a list of qualified electricians who can repair service masts and the BWL will help customers finance the cost of mast repair by allowing customers to pay it off on their bill over a one year period without interest. A list of qualified electricians will appear on the BWL's website.	Completed
47.	During events like the ice storm, the BWL will work with local organizations to maintain warming centers in the winter and cooling centers in the summer for Lansing area residents.	Completed and ongoing
48.	As an integral part of the Lansing community, the BWL will work with other organizations to respond to crisis that may affect mid-Michigan in the future. The BWL is supporting work by The Power of We and others to help empower neighborhoods to react to any type of emergency. The BWL pledges to be a part of that coalition and play its part in protecting the Lansing community and to meet with neighborhood associations to explain the BWL storm response plans and listen to their concerns and questions.	Completed and ongoing
49.	Since ice storm outage restoration, the BWL's service territory has experienced a number of severe winter weather events, and four separate outage events ranging from 100 outages to 7,400 outages. In all of the severe weather events, the BWL has posted, on all communications channels, at least two days prior to the forecasted weather, warning customers about the impending storm and directing them to call the BWL "877" outage number if they lost power. The BWL has also continuously posted updates, cold weather safety tips, and City of Lansing updates.	Completed
50.	During outages, the BWL has acknowledged the time the outage began, the number of outages, the cause of the outage, the geographic area of the outage that can be found on the outage map, the projected time of restoration, and full restoration all clear.	Completed
51.	Communication improvements have been noted on Facebook and Twitter with positive comments by our customers.	Completed
52.	The BWL has retained the communications firm of Martin Waymire to help develop a crisis communications plan based on an examination of best practices across the utility industry to make sure it has a strong crisis communications protocol in place in the very near future. Martin Waymire will also assist during emergencies if needed. In the meantime, the BWL has a working interim crisis communications plan.	Completed
53.	The BWL has also hired a social media specialist, a newly created position. The social media specialist will help develop strategies on how to best communicate with our customers over all social media channels.	Completed
54.	The BWL will provide information to state and local officials on a regular basis. During an event like the ice storm, it will assign a liaison to state and local officials to answer questions that they may have from their constituents.	Completed and ongoing

COMMITTEE OF THE WHOLE

September 9, 2014

The Committee of the Whole of the Lansing Board of Water and Light met at the BWL Headquarters – REO Town Depot located on 1201 S. Washington Ave., Lansing, MI, at 5:30p.m. on Tuesday, September 9, 2014.

Committee of the Whole (COW) Chair Margaret Bossenbery called the meeting to order and asked the Corporate Secretary to call the roll.

Present: Commissioners Dennis M. Louney, Margaret Bossenbery, Tony Mullen, David Price, Cynthia Ward and Sandra Zerkle.

Absent: Commissioner Tracy Thomas.

Public Comments

Ruth Beier of East Lansing commented on the tree trimming. She stated that since having a meeting in East Lansing it appears that the BWL has been more careful with the trimming of trees and have been working directly with the owners of the trees on how best to make everything safe without denuding the neighborhood. She thanked the board for taking the concerns of her neighborhood into account while making the decisions about the trees.

Robert Mavervada of East Lansing thanked the Board for opening up the discussion to the public in order to help find a balance between keeping the aesthetic value of the trees in the neighborhoods and keeping the public safe.

Kepler Domurat-Sausa of East Lansing stated concern regarding tree-trimming rules pertaining to the justification of cutting down an entire tree.

Approval of Minutes

Motion by Commissioner Ward, Seconded by Commissioner Ward to approve the Committee of the Whole meeting minutes of August 19, 2014.

Action: Motion Carried

Regional Customer Input

Mr. Davis of Delhi Township raised the issue of the water main breakage off of Holt Road and Depot. He stated that his constituents would like to know how many feet of forced water main are wrapped in ductal iron. He raised the questions in issuance of the concern of having to replace water lines because we have an eclectic ground that is eating through the water lines in the township.

Mr. Lark asked Dick Peffley to work with Mr. Davis to resolve the issue.

CRT/MPSC Reports Recommendations update

General Manager Lark provided an update on the Community Review Team's (CRT), Public Serve Commission's (PSC) and the BWL 54 points remaining recommendations. Mr. Lark stated that the yellow writing indicated

the completed recommendations/tasks that have been implemented since the last update. (See Attachment A)

Mr. Lark stated that there have been a number of improvements with community resilience and readiness. First being the government affairs and chief customer officer have been meeting with all the local governments to establish contact, improve communications and explain the Board of Water and Light (BWL) storm readiness and restoration program. Local government officials now have a direct contact at the BWL for use in a major outage and they will be provided with updates during an outage.

Mr. Lark stated that the BWL has also collaborated with the Red Cross to be part of the Readiness 365 Program. Readiness the trainer courses will be offered to the BWL employees, the Lansing City Council, surrounding community officials and neighborhood association leadership in our service territory.

Mr. Lark stated the Board of Water & Light has also partnered with Do 1 Thing, an organization that focuses efforts on educating the public on readiness and encourage participants to "Do1 Thing" each month to prepare for emergency situations. We are also going to participate in readiness month with activities in the area, for example we will be attending the Lansing Community College (LCC) Readiness Fair and the Peckham Safety Fair.

Mr. Lark stated that in respect to communications we have taken a number of steps to improve our normal and emergency communications with our customers. We now have a crisis communication plan that is based on the industry best practices and that as industry standards change our plan will be reviewed and updated. Mr. Lark also stated that to help ensure effective communications and operations as part of an emergency response, the staff takes part in table top exercises that test the emergency plans and the staff also participates in storm preparation meetings which occur each time weather or other events threaten damage to our territory.

Mr. Lark commented on the outage center that is on the BWL website. This allows customers to report an outage, view an outage map and provides storm preparation tips and what to do when an outage occurs. Mr. Lark also commented on the launch of the free mobile app, and customers can receive Nixle alerts which provide information during outages or other emergency events.

Mr. Lark stated that to keep the public informed of the communication and operational improvements that he has personally completed eight interviews with radio stations, television stations and a newspaper.

Mr. Lark stated in regards to seniors and customers with medical needs they have solicited permission from them in August to share their information with us and allow us to share that information to local officials in an even of a local emergency. To date we have received 4000 individuals that have granted the BWL permission to share their names and locations so local officials can perform wellness checks if there is an outage.

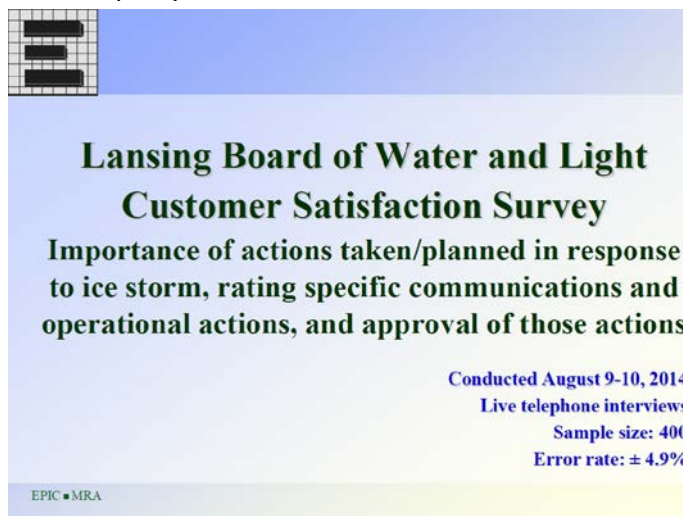
Mr. Lark state that in regards to the training recommendations from the CRT and PSC, staff will soon begin National Incident Management Systems training (NIMS) to which board members are invited. There will also

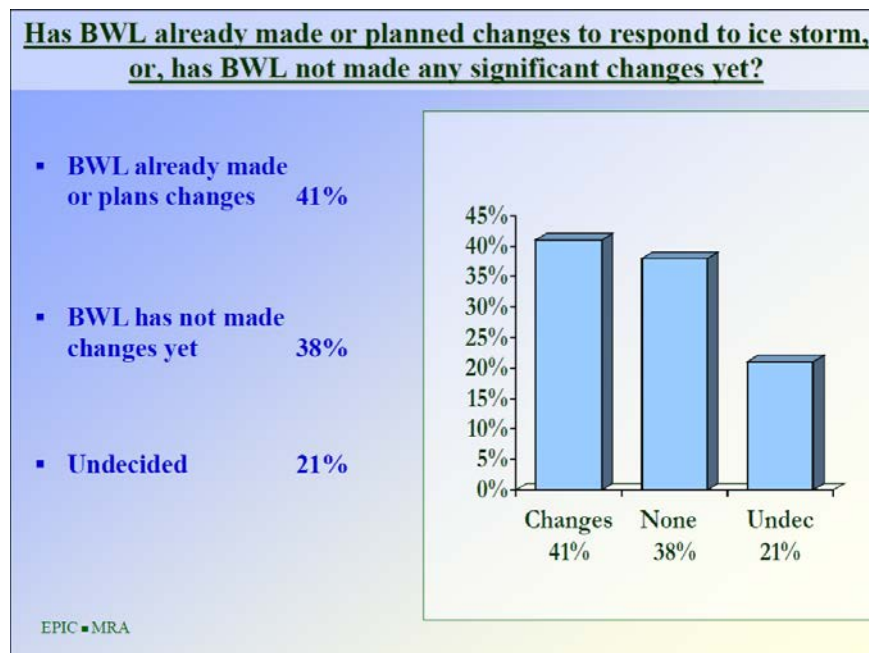
be an opportunity to learn about our emergency management techniques and procedures during our tabletop exercises, and board members will be invited to attend those to gain further knowledge of our emergency plans.

Commissioner Mullen stated that Do 1 Thing was recently mentioned in the Lansing State Journal that the Executive Director was at an event at the White House and that it was interesting that we are working with people that are nationally recognized in their field.

EPIC MRA Poll

General Manager Lark introduced Bernie Porn, owner of EPIC MRA, a Polling Outfit. Mr. Porn stated that the purpose of the survey was to measure the extent to which customers within the BWL electric service area know about the changes the BWL has put in place. The survey first goes inquiries as to whether customers know of the changes and then goes through all of the changes in communication and operations. For each change, the customers were asked if they saw those changes as essential, very important or not important. Mr. Porn stated that the survey consisted of 400 BWL customers and the results were broken down in a variety of ways but these were the top key results.





Mr. Porn then commented on the results of the survey saying that the challenge will be continuing to get the message out to customer about the improvements that have been and are being made. Mr. Porn stated that he believed that once customers hear about the improvements, the faith the customers once had would be restored by letting them know what we have done and what we are planning on doing.

Tree Trimming Update

General Manager Lark introduced Dave Bolan, Director of Electric Transmission Distribution, who presented an update on tree-trimming. Mr. Bolan stated that they have adopted a 5 year tree trimming cycle, increased the number of firms that are doing tree trimming to a total of 21, and have modified our standards to include the recommendation of trimming overhang.

Mr. Bolan provided an explanation of the schedule thus far and the notification process.

Commissioner Ward asked what was the time span between the first notification going out to the actual work-taking place.

Mr. Bolan stated in response to Commissioner Ward's question that the goal is between two months prior to the crews actually going out there to two weeks before.

Rate Presentation

General Manager Lark stated this was the document the Finance Committee saw on July 8th and at the Board meeting on July 2nd the Board approved by resolution our authority to publish a notice of a rate hearing. On August 27th a notice was published and the hearing will take place on September 18th.

Mr. Lark stated that Commissioner Louney had asked via email about the material that Jim Deline, the City Internal Auditor, presented at the quarterly meeting between the City Council and the Board, which suggested the rate increases were higher than what was presented.

Ms. Devon explained that Mr. Deline had put together his analysis by doing a line by line of all of our rates that are posted in our rate structure but by doing so he did not take into consideration the impact of two items. The items are a reduction in our renewable energy surcharge and a rolling of our Energy Cost Adjustment (ECA) into our base rate. That is revenue neutral and that has no impact on the customers on their bills but it is a separate item on the list of charges that Mr. Deline was looking at.

Commissioner Ward commented on the additional information that will be included in the packet and stated that the additional information makes a compelling case for the need of a rate increase and thanked Mr. Lark for including that information.

Commissioner Mullen asked if there was any type of feedback from the customers thus far on the possibility of a rate increase.

Mr. Lark stated that he has not received any feedback from customers on the rate increase.

Commissioner Price stated that he thinks it is important to show the charts of where our rates are compared to other municipals and utilities. He stated that we are right in the middle of the pack so a rate increase hardly seems out of line in comparison.

Commissioner Louney asked if our net increase overall would be \$3.69 a month for the average residential customer. Mr. Lark confirmed that number.

Other

Commissioner Louney then asked Mr. Lark on the status of an Emergency Manager.

Mr. Lark responded that an announcement would be made within the next few weeks.

Excused Absence

Motion by Commissioner Mullen, Seconded by Commissioner Price to excuse Commissioner Thomas from tonight's meeting.

Public Comments

None

Adjourn

On Motion by Commissioner Price, Seconded by Commissioner McCloud, the meeting adjourned at 6:37 p.m.

Respectfully Submitted
Margaret Bossenbery, Chair

Committee of the Whole

FINANCE COMMITTEE

September 9, 2014

The Finance Committee of the Board of Water and Light met at the BWL Headquarters – REO Town Depot located as 1201 S. Washington Ave., Lansing, MI, at 6:51 on Tuesday, September 9, 2014.

Finance Committee Chairperson Dennis Louney called the meeting to order and asked the Corporate Secretary to call the roll. The following members were present: Commissioners Dennis Louney, Margaret Bossenbery, Tony Mullen, Sandra Zerkle; Also present, Commissioner Price.

Absent: None

Public Comments

There was no Public Comment

Approval of Minutes

Motion by Commissioner Bossenbery, seconded by Commissioner Zerkle to approve the Finance Committee meeting minutes of July 8, 2014.

Action: Carried Unanimously

Plante Moran Presentation of Audited Financial Statements FY 2014

General Manager J. Peter Lark introduced Douglas Rober, Managing Partner with Plante & Moran (P&M). Mr. Lark thanked all the BWL's employees who worked on the audit process.

Mr. Rober reviewed the audit findings for the Enterprise Fund and the Pension Trust Fund. Mr. Rober indicated that their opinion was an Unqualified Opinion and there were no significant issues or adjustments. Mr. Rober also reviewed changes that would affect the financial statement for the BWL and the Pension trust Funds, which include the implementations of the new Governmental Accounting Standards Board's (GASB), Statement No. 65 and No. 67. He also reviewed the Wise Road regulatory deferral, the revenue expense adjustments which relate to the storm expenses, higher interest related to the new cogeneration facility bond, higher return on equity to the city of Lansing for the PILOT.

Marie Stegal, Manager with Plante & Moran reviewed the following Financial Information:

- Operating Revenue – Four Year Comparison
- Operating Expenses – Four Year Comparison
- Operating Income
- Sales of Kilowatt Hours – Five Year Trend
- Kilowatt Hours Generated Versus Produced
- Significant Power Cost

- Projected Principal and Interest Payments – Five year Projection
- Revenues, Expense and Net Income by Utility

Mr. Rober, spoke about required Audit communication which indicated that there were no discrepancies in the internal control or in the numbers.

Ms. Stegal reviewed the implementation of GASB No. 65 and GASB No. 67 and the future implementation of GASB No. 68.

Mr. Rober presented information on the regulatory assets and regulatory liabilities. He stated that the board had adopted a regulatory deferral to defer any gain on insurance proceeds on the Wise Rd. event into the future. Since the Wise Rd. began depreciation in the current fiscal year, regulatory liability was set up and that regulatory liability is now approximately \$10 million.

Mr. Rober then went on to address three additional regulatory assets/liabilities which are the Energy Cost adjustment (ECA), Fuel Cost adjustments (FCA) and Power Chemical Adjustment (PCA) which are represented as recoverable energy assets on the financial statement. Mr. Rober reviewed the final pages of the Audit letter, which pertained to information regarding new rules, regulations and legislation items.

Motion by Commissioner Zerkle, Seconded by Commissioner Mullen to forward the proposed Resolution for the acceptance of the 2014 audited financial statements to the full Board for consideration.

Action: Motion Carried

Excused Absence

None

Other

None

Adjourn

On Motion by Commissioner Bossenbery, seconded by Commissioner Zerkle, the meeting adjourned at 7:29 p.m.

Respectfully submitted
Dennis M. Louney, Chair
Finance Committee

HUMAN RESOURCE COMMITTEE

September 16, 2014

The Human Resource Committee Chairperson Cynthia Ward called the meeting to order and asked the Secretary to call the roll. The following members were present: Commissioners Cynthia Ward, Tony Mullen and David Price. Also present: Commissioner Sandra Zerkle.

Absent: Commissioner Anthony McCloud

Public Comments

There were no public comments

Approval of Minutes

Motion by Commissioner Mullen, seconded by Commissioner Price to approve the Human Resource Committee meeting minutes of June 10, 2014.

Action: Carried unanimously

PULLED--Benefit Plan Document Update

Commissioner Ward stated that based on a request from General Manager Lark the Benefit Plan Document update would be pulled from the agenda and brought back to the Committee at a later date.

PA 152 Statutorily Required Insurance Co-Pay

General Manager Lark reviewed the details and cost (with various percentages) for the following available options:

- Limit expenditures on health care cost based on a schedule of dollars provided in the Act (the Hard Cap)
- Limit expenditures to a 80/20 percentage split with a majority vote (or)
- Exempt itself entirely from the Act through a 2/3 majority vote. With a 2/3 majority vote, the Board could then implement premium sharing in an amount desired.

After a lengthy discussion regarding PA 152 requirements and the effect on employees the motion was made:

Motion by Commissioner Price, seconded by Commissioner Mullen, to forward the grammatically correct resolution for the implementation of staying at a 12% premium sharing for all active employees for medical benefits, to the full Board for consideration.

Action: Motion Carried.

Planning HR Committee's Work for the Next Year (INFORMATION ONLY)

After some dialogue regarding HR's committee work for the year the following suggestion were proposed:

- Commissioner Price suggested using a new instrument for the appointed employee's evaluations in which he would provide examples at a future meeting. He also wanted to include employee objective to be attained in the year as part of the evaluation process.

- Commissioner Mullen wanted discussion regarding Commissioners signing their names on the employee's evaluations.
- Commissioner Ward proposed an employee survey to be fully contained within the body of the Board of Commissioners.

Other

None

Excused Absence

Motion by Commissioner Price, seconded by Commissioner Mullen to excuse Commissioner McCloud from tonight's meeting.

Public Comments

None

Adjourn

On Motion by Commissioner Price, seconded by Commissioner Mullen, the meeting adjourned at 5:20 p.m.

Respectfully Submitted
Cynthia Ward, Chair
Human Resource Committee

OTHER

Commissioner Price stated for the record that on September 18, 2014 the Board of Commissioners conducted a Public Hearing to consider the rate adjustments which would be effective on November 1, 2014.

MANAGER'S RECOMMENDATIONS

General Manager Lark responded to comments made at the Public Hearing on September 18, 2014.

Mr. Lark stated in response to Russell Terry and Tammy Errand concerns of low income customers not being able to pay their bills that there are some community programs available for assistance. He indicated that the Board of Water and Light made a contribution to two programs, Capital Area Community Services, also known as Pennies for Power, and St. Vincent De Paul. The person to contact about these programs would be Dr. Joan Jackson Johnson with the City of Lansing. The contribution from the Board of Water and Light was \$100,000, giving each entity \$50,000. Mr. Lark stated that this is the first quarter the Board of Water and Light has done a contribution and they hope to continue making that level of contributions throughout the year to the programs depending on the evaluation from Dr. Jackson Johnson.

Mr. Lark commented on the concerns of wasteful spending from Grif Canfield. Mr. Lark stated in regards to the spacer cable, in the case Mr. Canfield was referring to, that the span of wire was under stress and tension

and the space cable was used to strengthen the cable. It was a less expensive way of fixing the wire than using cross members which would have cost \$48,000 more to use.

Mr. Lark stated in response to the concern of wasteful spending on Saginaw between Canal St. and Canal Rd. were fiber glass cross arms were used, was the Board of Water and Light's own experimenting with fiber glass cross arms. Mr. Lark stated that these have never been used before and are sort of a phenomenon at the Board of Water and Light. Mr. Lark stated that what they learned was that indeed cross members that are fiber glass are not always necessary and not necessarily a good investment but at the end of the lines on dead end streets, there is more stress on the lines that the fiber cross members were worthwhile. So, the pilot program was a learning experience where some good things were learned and other things were not as helpful.

Mr. Lark commented Mr. Canfield concern of an extra pole near the Niowave Facility that he thought could be eliminated. Mr. Lark stated that the span between the two poles on either side of the extra pole was too long unless there were guy wires. He stated that there were guys wires on the other poles but they would have had to be beefed up and bring the guy wires back further, so the conclusion they made was that because there was limitations of space and one of the guy wires would have had to gone up on a residents porch that the obvious solution was an extra pole.

Mr. Lark also stated that he has told Dave Bolan to be mindful of anything he gets from Mr. Canfield and that the Board of Water and Light would be happy to listen to him on any suggestions he has to help improve our system.

Mr. Lark commented on the statements made by Bran van Guilder on the Eckert Power Plant units 4 through 6 that he believes should be retired in 2016. Mr. Lark stated that we are not able to do so because of a reliability question concern for serving General Motors (GM) and Downtown Lansing. If we were to take one of the units out we would not have sufficient back-up plan for GM or Downtown Lansing and we would be in violation and would have to pay a fine. The Board of Water and Light is working on backup plan to be able to serve GM and Downtown Lansing but until that is done we cannot retire those units without violating reliability rules.

Mr. Lark also commented on Mr. van Guilders comment of turning on the Mercury Reduction Equipment by April 2015. Mr. Lark stated that they hope to do better than Mr. van Guilders request and have them turned on by the end of the year.

Mr. Lark then commented on Ms. Julie Powers remark on reducing Mercury. Mr. Lark stated that the Board of Water and Light plans to do this by the end of the year.

Mr. Lark then commented on Mr. Zamron remarks on the Wise Rd. chemical spill. Mr. Lark stated that having a chemical spill is something we never want to have. Prior to the spill we had done a life expectancy study on the that plant which indicated that we would have to spend millions of dollars to bring that plant up to grade. Because of the spill we were able to upgrade the plant and is now good for 40 years and was paid for by insurance proceed except for the \$500,000 dollars which is the deductible.

Mr. Lark commented on Mr. Zamrons remarks about the Emergency Managers salary. Mr. Lark stated that we had used a national outfit to study the correct pay for the position of Emergency Manager and that the salary was far less than \$250,000.

Mr. Lark responded to Mr. Hicks concerns about the unfunded retiree medical liability. He stated that the Board of Commissioners has been very fine stewards as trustees for the VEBA plan and at 74% funded that is no need to be worried.

Mr. Lark responded to Mr. Rowly's concerns that the Board of Water and Light has 2 supervisors for every worker. Mr. Lark stated that this was not correct and that in fact the Board of Water and Light had 59 supervisors for 450 workers. And in regards to his concern about Hydro, Mr. Lark stated that we do have a Hydro unit that unfortunately broke and we have a contractor who is expected to have it repaired in time for spring.

Mr. Lark commented on Mr. Cohut's suggestion of putting the power lines underground. Mr. Lark stated that while it is not a bad idea to have buried power lines it is not an insurance against never having a fault. Faults occur whether lines are above ground or under. Mr. Lark also stated while there are positives for underground lines there are also negatives. He explained that wires do go bad and often times it is harder to find those lines when they are underground, it can be messier to get to those lines and fix them. He also stated that arborists have said that it is more likely to kill more vegetation when you add lines underground. He stated that the cost of putting lines underground would cost about a million dollars a mile. Mr. Lark stated that if this is something the customers want and are willing to pay for them then the Board of Water and Light would be happy to do it for them.

Mr. Lark lastly commented on Mr. Cohut's concern of management not being able to work within its budget. Mr. Lark stated that as the board knows we have O&M in capital budgets and that we have met every one of our O&M capital budgets since he has been in the position of General Manager but could not speak for the years prior.

Commissioner Price thanked Mr. Lark for having a response to the issues the customers brought to the Board at the Public Meeting in September 18, 2014.

General Manager Lark respectfully asked that the following Resolutions be considered for approval.

RESOLUTION #2014-09-01

Electric, Water, Steam and Chilled Water Rate Increases

WHEREAS, the Corporate Financial Targets for each of the Lansing Board of Water and Light's strategic business units is a 6.18% return on net fixed assets and materials and supplies that would require \$19.7 million of Electric net income, \$9.5 million of water net income, \$2.7 million of steam net income, and \$1.3 million of chilled water net income; and

WHEREAS, the Fiscal Year 2015 budget filed with the City of Lansing included proposed rate increases for the electric, water, steam, and chilled water utilities; and

WHEREAS, the Fiscal Year 2015 budget with the proposed rate adjustments would result in an electric net income of \$532,000 or a 0.12% return on net fixed assets and materials and supplies; and

WHEREAS, the Fiscal Year 2015 budget with the proposed rate adjustments would result in a water net income of \$2.0 million or a 0.93% return on net fixed assets and materials and supplies; and

WHEREAS, the Fiscal Year 2015 budget with the proposed rate adjustments would result in a steam net loss of \$814,000 or a negative 1.34% return on net fixed assets and materials and supplies; and

WHEREAS, the Fiscal Year 2015 budget with the proposed rate adjustments would result in a chilled water net income of \$820,000 or a 2.81% return on net fixed assets and materials and supplies; and

WHEREAS, BWL management proposes to increase annual electric billings by \$16 million; and

WHEREAS, BWL management proposes to increase annual water billings by \$3.3 million; and

WHEREAS, BWL management proposes to increase annual steam billings by \$1.0 million; and

WHEREAS, BWL management proposes to increase annual chilled water billings by \$0.2 million; and

WHEREAS, BWL management proposes to add an Economic Development Rider for large commercial and industrial customers; and

WHEREAS, BWL management proposes to roll June 2014 ECA rate into Electric Rate Base (rate neutral); and

WHEREAS, BWL management proposes to decrease the Electric Renewable Energy Surcharges; and

WHEREAS, the notice of the proposed increases was communicated to all customers by public notice on August 27, 2014, and a public hearing was held on September 18, 2014 to receive comments on the proposed increases; and

WHEREAS, the Board of Commissioners has considered the comments of the public as well as recommendations made by the BWL.

RESOLVED, that the electric, water, steam and chilled water rate schedules listed below and detailed in the attached rate schedules be adopted and made effective for electric, water, steam and chilled water consumption on or after November 1, 2014.

Electric: (Attachment A)

Residential Service – Rate 1

General Service – Rate 3

Large General Service – Rate 4

Primary Service – Rate 5
Municipal Water Pumping Service – Rate 7
Large Capacity Service – Rate 8
Outdoor Lighting Service – Rate 9
Traffic Light Service – Rate 11
Space Conditioning and Water Heating Service – Rate 12
Residential Senior Citizen Service – Rate 21
Residential Plug-In Electric Vehicle Service – Rate 22
Street Lighting Service Board Owned Systems – Rate 31
Street Lighting Service Board Owned Systems – Rate 31a
Street Lighting Service Customer Owned Systems – Rate 32
Energy Cost Adjustment
Renewable Energy Plan Surcharge
Economic Development Rider

Water: (Attachment B)

Residential Service – Rate 1
General Service – Rate 2
Fire Service – Rate 4
Lawn Sprinkling Service – Rate 5
Fire Hydrant Charges – Rate 6

Steam: (Attachment C)

General Service – Rate 1
Industrial Service – Rate 2
Residential Service – Rate 5

Chilled Water: (Attachment D)

General Services – Rate 1

Attachment A

RESIDENTIAL ELECTRIC SERVICE
RATE NO. 1

Availability - This rate is available to any single-family or multifamily dwelling of 4 units or less when the entire electric requirements are supplied at one point of delivery through one meter. Service to appurtenant buildings may be taken through the same meter.

Service under this rate is not available to any single-family or multifamily dwelling unit of 4 units or less when a portion of the dwelling unit is used for commercial, industrial, or resale purposes unless the wiring is so arranged that service for residential and non-residential purposes are metered separately.

Nature of Service - The service is alternating current, 60 hertz, single phase, 120/240 nominal volts.

Monthly Rate - Shall be computed in accordance with the following charges:

	<u>11/1/14</u>		
Basic Service Charge	\$10.00		Per customer per month
Commodity Charge		Summer Billing Months of June through October	
	\$0.1197		Per kWh for the first 500 kWh
	\$0.1252		Per kWh for all over 500 kWh
		Winter Billing Months of November through May	
	\$0.1197		Per kWh for the first 500 kWh
	\$0.1232		Per kWh for all over 500 kWh

Minimum Bill - The minimum bill is the basic service charge included in the monthly rate.

Energy Cost Adjustment - This rate is subject to an Energy Cost Adjustment factor added to the above energy charges and calculated as defined on a separate rate schedule incorporated herein by this reference.

Environmental Charge – This rate is subject to an Environmental Charge as defined on a separate rate schedule incorporated herein by this reference. The current Environmental Charge is \$0.0025/kWh.

Renewable Energy Plan Surcharge – This rate is subject to the Renewable Energy Plan Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Energy Optimization Surcharge – This rate is subject to the Energy Optimization Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the Board of Water and Light (BWL) property, or its operation, or the production and/or sale of electric energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Application Charge - A \$10.00 charge shall be added to the first regular bill for all customers turning on service at a service location irrespective of prior service with the BWL.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Electric Service incorporated herein by this reference.

Effective: November 1, 2014

GENERAL ELECTRIC SERVICE
 RATE NO. 3

Availability - This rate is available to any customer desiring secondary voltage service for any purpose when supplied at one point of delivery through one meter. The limitation to secondary-voltage service may be waived in instances where the character of the electric load at the premises served has changed substantially. This rate is not available for emergency or standby service.

Nature of Service - The service is alternating current, 60 hertz, single phase or three phase. The secondary voltage is determined by the Board of Water and Light (BWL).

Monthly Rate - Shall be computed in accordance with the following charges.

Basic Service Charge	<u>11/1/14</u> \$24.00	per customer per month
Commodity Charge		Summer Billing Months of June through October per kWh Winter Billing Months of November through May per kWh
	\$0.1342	
	\$0.1303	

Minimum Bill - The minimum bill is the basic service charge included in the monthly rate.

Energy Cost Adjustment - This rate is subject to an Energy Cost Adjustment factor added to the above energy charges and calculated as defined on a separate rate schedule incorporated herein by this reference.

Environmental Charge – This rate is subject to an Environmental Charge as defined on a separate rate schedule incorporated herein by this reference. The current Environmental Charge is \$0.0025/kWh.

Renewable Energy Plan Surcharge – This rate is subject to the Renewable Energy Plan Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Energy Optimization Surcharge – This rate is subject to the Energy Optimization Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the BWL property, or its operation, or the production and/or sale of electrical energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Metering - Where the BWL elects to measure the service on the primary side of the transformers, the metered kWh thus measured will be reduced by 3% for billing purposes to adjust for transformer losses. Where the customer receives service through more than one meter, the consumption as registered by the different meters will not be combined for billing purposes, but will be computed and billed separately.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Application Charge - A \$10.00 charge shall be added to the first regular bill for all customers turning on service at a service location irrespective of prior service with the BWL.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Electric Service incorporated herein by this reference.

Effective: November 1, 2014

LARGE GENERAL ELECTRIC SERVICE
 RATE NO. 4

Availability - This rate is available to any customer desiring secondary voltage for any purpose when the electrical requirements are supplied at one point of delivery through one metering installation and the billing demand is 15 kW or more. The limitation to secondary-voltage service may be waived in instances where the character of the electric load at the premises served has changed substantially. This rate is not available for standby or emergency services.

Nature of Service - The service is alternating current, 60 hertz, single phase or three phase. The secondary voltage is determined by the Board of Water and Light (BWL).

Monthly Rate - Shall be computed in accordance with the following charges.

	<u>11/1/14</u>	
Basic Service Charge	\$50.00	per customer per month
Capacity Charge	\$11.76	Per kW for all kW of Maximum Demand
Commodity Charge		Summer Billing Months of June through October
	\$0.0877	Per kWh
		Winter Billing Months of November through May
	\$0.0832	Per kWh
Reactive Power Charge	\$0.0106	per kvarh in excess of 50% of total kWh.

The Reactive Power Charge shall be applicable to customers who have reactive kilovar hour (kvarh) metering installed in accordance with BWL Rules and Regulations regarding power factor.

Minimum Bill - The minimum bill is the basic service charge included in the monthly rate.

Energy Cost Adjustment - This rate is subject to an Energy Cost Adjustment factor added to the above energy charges and calculated as defined on a separate rate schedule incorporated herein by this reference.

Environmental Charge – This rate is subject to an Environmental Charge as defined on a separate rate schedule incorporated herein by this reference. The current Environmental Charge is \$0.0025/kWh.

Renewable Energy Plan Surcharge – This rate is subject to the Renewable Energy Plan Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Energy Optimization Surcharge – This rate is subject to the Energy Optimization Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the BWL property, or its operation, or the production and/or sale of electrical energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Billing Demand - The billing demand shall be the kW supplied during the 15-minute period of maximum use during the month.

Metering - Where the BWL elects to measure the service on the primary side of the transformer, the metered kW and kWh quantities thus measured will be reduced by 3% for billing purposes to adjust for transformer losses. Where the customer receives service through more than one metering installation, the consumption as registered by the different metering installations will not be combined for billing purposes, but will be computed and billed separately.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Application Charge - A \$10.00 charge shall be added to the first regular bill for all customers turning on service at a service location irrespective of prior service with the BWL.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Electric Service incorporated herein by this reference.
Effective: November 1, 2014

PRIMARY ELECTRIC SERVICE
RATE NO. 5

Availability - This rate is available to any customer desiring primary voltage service when the electrical requirements are supplied at one point of delivery through one metering installation (except as provided below for Multiple Delivery Point Aggregation) and the billing demand is 100 kW or more. This rate is not available for standby or emergency service.

Nature of Service - The service is alternating current, 60 hertz, three phase. The primary voltage is determined by the Board of Water and Light (BWL).

Monthly Rate - Shall be computed in accordance with the following charges:

	<u>11/1/14</u>	
Basic Service Charge	\$125.00	per customer per month
Capacity Charge	\$9.53	Per kW for all kW of On-Peak Billing Demand, plus
	\$3.16	Per kW for all kW of Maximum Demand

Commodity Charge		Summer Billing Months of June through October
	\$0.0813	Per kWh for all kWh during the On-Peak Period, plus
	\$0.0769	Per kWh for all kWh during the Off-Peak Period, plus
		Winter Billing Months of November through May
	\$0.0789	Per kWh for all kWh during the On-Peak Period, plus
	\$0.0769	Per kWh for all kWh during the Off-Peak Period
Reactive Power Charge	\$0.0106	per kvarh in excess of 50% of total kWh

The Reactive Power Charge shall be applicable to customers who have reactive kilovar hour (kvarh) metering installed in accordance with BWL Rules and Regulations regarding power factor.

Minimum Bill - The minimum bill is the basic service charge included in the monthly rate.

Energy Cost Adjustment - This rate is subject to an Energy Cost Adjustment factor added to the above energy charges and calculated as defined on a separate rate schedule incorporated herein by this reference.

Environmental Charge – This rate is subject to an Environmental Charge as defined on a separate rate schedule incorporated herein by this reference. The current Environmental Charge is \$0.0025/kWh.

Renewable Energy Plan Surcharge – This rate is subject to the Renewable Energy Plan Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Energy Optimization Surcharge – This rate is subject to the Energy Optimization Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the Board's property, or its operation, or the production and/or sale of electrical energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Billing Demand

On-Peak Billing Demand: The On-Peak Billing Demand shall be the kW supplied during the 15-minute period of maximum use during the On-Peak Period during the month.

Maximum Demand: The Maximum Demand shall be the kW supplied during the 15-minute period of maximum use during the month whether on-peak or off-peak.

Schedule of on-peak and off-peak periods - The On-Peak Period shall be from 10:00 a.m. until 6:00 p.m., Monday through Friday. All other hours shall comprise the Off-Peak Period.

Effective: November 1, 2014

PRIMARY ELECTRIC SERVICE
RATE NO. 5

Multiple Delivery Point Aggregation - The 15-minute period demands of multiple delivery points of a customer may be summed for determination of the total On-Peak Billing Demand under the following conditions: (a) the Maximum Demand at each delivery point must equal or exceed 100 kW; (b) the total On-Peak Billing Demand shall not be less than 4,000 kW; and (c) the customer shall agree to a service contract with the BWL for the customer's full electrical service requirements at the aggregated delivery points for a period of not less than five (5) years. Aggregation shall be applicable for determination of the On-Peak Billing Demand only. All other charges, including the Basic Service Charge and Maximum Demand, shall apply to each delivery point independently.

Metering - When the BWL elects to measure the service on the secondary side of the transformers, the metered kW and kWh quantities thus measured will be increased by 3% for billing purposes to adjust for transformer losses. Where the customer receives service through more than one meter installation, consumption as registered by the different meter installations will not be combined for billing purposes, but will be billed and computed separately except as provided for in Multiple Delivery Point Aggregation.

Equipment Supplied by Customer - The customer shall be responsible for furnishing, installing and maintaining all necessary transforming, controlling and protective equipment required for service beyond the BWL primary-voltage delivery point. At the sole option of the BWL, a customer may lease such transformers or other equipment from the BWL under terms established by the BWL.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Application Charge - A \$10.00 charge shall be added to the first regular bill for all customers turning on service at a service location irrespective of prior service with the BWL.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Electric Service incorporated herein by this reference.

Effective: November 1, 2014

MUNICIPAL WATER PUMPING ELECTRIC SERVICE
RATE NO. 7

Availability - This rate is available to any political subdivision or agency of the State of Michigan desiring service for potable water pumping and associated potable water production equipment when the entire electrical requirements are supplied at one point of delivery through one meter. This rate is not available for emergency, standby, or auxiliary service.

Nature of Service - The service is alternating current, 60 hertz, three phase. The secondary or primary voltage is determined by the BWL.

Monthly Rate - Shall be computed in accordance with the following charges.

		<u>11/1/14</u>			
Basic	Service	\$16.00	Per	customer	per
Charge				month	
Commodity		\$0.1102	Per	kWh	
Charge					

Minimum Bill - The minimum bill is the basic service charge included in the monthly rate.

Energy Cost Adjustment - This rate is subject to an Energy Cost Adjustment factor added to the above energy charges and calculated as defined on a separate rate schedule incorporated herein by this reference.

Environmental Charge – This rate is subject to an Environmental Charge as defined on a separate rate schedule incorporated herein by this reference. The current Environmental Charge is \$0.0025/kWh.

Renewable Energy Plan Surcharge – This rate is subject to the Renewable Energy Plan Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Energy Optimization Surcharge – This rate is subject to the Energy Optimization Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the BWL property, or its operation, or the production and/or sale of electrical energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Metering - Where the BWL elects to measure the service on the primary side of the transformers serving the customer, the metered kWh thus measured will be reduced 3% for billing purposes to adjust for transformer losses.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Application Charge - A \$10.00 charge shall be added to the first regular bill for all customers turning on service at a service location irrespective of prior service with the BWL.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Electric Service incorporated herein by this reference.

Effective: November 1, 2014

LARGE CAPACITY ELECTRIC SERVICE RATE NO. 8

Availability - This rate is available to any customer desiring primary voltage service when: (a) the electrical requirements are supplied at one or more points of delivery as provided below for Multiple Delivery Point Aggregation; (b) where the total On-Peak Billing Demand is 25,000 kW or more; and (c) the customer agrees to a service contract with the BWL for the customer's full electrical service requirements at the applicable

delivery points for a period of not less than ten (10) years. This rate is not available for standby or emergency service.

Nature of Service - The service is alternating current, 60 hertz, three phase. The primary voltage is determined by the Board of Water and Light (BWL).

Monthly Rate - Shall be computed in accordance with the following charges:

	<u>11/1/14</u>	
Basic Service Charge	\$400.00	per delivery point per month
Capacity Charge	\$ 10.74	per kW for all kW of On-Peak Billing Demand, plus
	\$ 2.02	per kW for all kW of Maximum Demand
Commodity Charge		Summer Billing Months of June through October
	\$0.0752	per kWh for all kWh during the On-Peak Period, plus
	\$0.0696	per kWh for all kWh during the Off-Peak Period, plus
		Winter Billing Months of November through May
	\$0.0736	per kWh for all kWh during the On-Peak Period, plus
	\$0.0696	per kWh for all kWh during the Off-Peak Period
Reactive Power Charge	\$0.0106	Per k varh in excess of 50% of total kWh

Minimum Bill - The minimum bill is the basic service charge included in the monthly rate.

Energy Cost Adjustment - This rate is subject to an Energy Cost Adjustment factor added to the above energy charges and calculated as defined on a separate rate schedule incorporated herein by this reference.

Environmental Charge – This rate is subject to an Environmental Charge as defined on a separate rate schedule incorporated herein by this reference. The current Environmental Charge is \$0.0025/kWh.

Renewable Energy Plan Surcharge – This rate is subject to the Renewable Energy Plan Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Energy Optimization Surcharge – This rate is subject to the Energy Optimization Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the Board's property, or its operation, or the production and/or sale of electrical energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Billing Demand

On-Peak Billing Demand: The On-Peak Billing Demand shall be the total kW supplied to all applicable delivery points during the 15-minute period of maximum use during the On-Peak Period during the month. (See Multiple Delivery Point Aggregation.)

Maximum Demand: The Maximum Demand for each delivery point shall be the kW supplied during the 15-minute period of maximum use during the month whether on-peak or off-peak.

Effective: November 1, 2014

LARGE CAPACITY ELECTRIC SERVICE

RATE NO. 8

Schedule of on-peak and off-peak periods - The On-Peak Period shall be from 10:00 a.m. until 6:00 p.m., Monday through Friday. All other hours shall comprise the Off-Peak Period.

Multiple Delivery Point Aggregation - The 15-minute period demands of multiple delivery points of a customer shall be summed for determination of the total On-Peak Billing Demand under the following conditions: (a) the Maximum Demand determined at each delivery point must equal or exceed 1,000 kW; and (b) the total On-Peak Billing Demand shall not be less than 25,000 kW. Aggregation shall be applicable for determination of the On-Peak Billing Demand only. All other charges, including the Basic Service Charge and Maximum Demand, shall apply to each delivery point independently.

Metering - When the BWL elects to measure the service on the secondary side of the transformers, the metered kW and kWh quantities thus measured will be increased by 3% for billing purposes to adjust for transformer losses. Where the customer receives service through more than one meter installation, consumption as registered by the different meter installations will not be combined for billing purposes, but will be billed and computed separately except as provided for Multiple Delivery Point Aggregation.

Equipment Supplied by Customer - The customer shall be responsible for furnishing, installing and maintaining all necessary transforming, controlling and protective equipment required for service beyond the BWL primary-voltage delivery point. At the sole option of the BWL, a customer may lease such transformers or other equipment from the BWL under terms established by the BWL.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Application Charge - A \$10.00 charge shall be added to the first regular bill for all customers turning on service at a service location irrespective of prior service with the BWL.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Electric Service incorporated herein by this reference.

Effective: November 1, 2014

OUTDOOR LIGHTING SERVICE

RATE NO. 9

Availability - This rate is available to any customer located within the Board of Water and Light (BWL) service area for dusk to dawn lighting of customer's premises. The BWL furnishes and maintains all lights. The installation will overhang private property from existing or new poles set at points accessible to BWL construction and maintenance equipment. This rate is not available for purposes of street, highway, or public thoroughfare lighting.

Monthly Rate - Shall be computed in accordance with the following charges.

Luminaires on Overhead Mast Arm on existing BWL poles

High Pressure Sodium	<u>11/1/14</u>
100 W	\$12.59
250 W	\$19.99
400 W	\$22.72

Mercury Vapor¹

175 W	\$13.22
400 W	\$22.72

LED

End Mount	\$10.49
-----------	---------

Floodlighting Luminaires on Bracket Arm on existing BWL poles

High Pressure Sodium	
100 W	\$16.74
250 W	\$22.53
400 W	\$26.42

Metal Halide

400 W	\$32.83
1000 W	\$56.79
1500 W	\$78.80

LED

Flood	\$20.58
-------	---------

In the event additional facilities or rearrangement of existing facilities is required, the BWL shall install, operate and maintain such facilities for the following monthly charges.

Type of Facilities

11/1/14

¹ Rates apply to existing luminaires only and are not open to new business.

35-foot wood poles including span of overhead secondary extension	\$14.30	Per pole
37-foot concrete pole including span of overhead secondary extension	\$23.71	Per pole
Other facilities, hand set poles, or rearrangement of existing facilities	1.67%	of estimated cost

Effective: November 1, 2014

OUTDOOR LIGHTING SERVICE RATE NO. 9

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the Board's property, or its operation, or the production and/or sale of electrical energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Electric Service incorporated herein by this reference.

Service Contract - A written service agreement shall be entered into to take BWL service for a term of years determined as follows:

- (a) One year, if additional facilities are not required, or
- (b) Three years, if additional facilities are required
- (c) Five years, for metal halide lamps or if monthly charges calculated at 1.67% of estimated cost,
- (d) Ten years, if special contractual arrangements are made.

In the event the customer discontinues service before the end of the agreement term, the established rate for the remaining portion of the agreement shall immediately become due and payable. The BWL will replace lamps or make repairs when practicable after the customer has reported that the installation requires servicing. Such replacements and repairs will be made during regular working hours. The BWL may refuse or restrict the service provided in this rate to seasonal type customers and/or may require such customers to pay for the service annually in advance where the permanency of the customer is doubtful or has not been demonstrated by the customer. If relocation, including adjustment, of the outdoor protective light or relocation of other facilities used in connection with the light is desired by the customer during the term of the contract, the BWL will provide this service, if feasible, at the customer's expense.

Effective: November 1, 2014

TRAFFIC LIGHT SERVICE RATE NO. 11

Availability - This rate is available to any political subdivision or agency of the State of Michigan desiring unmetered secondary service for operating traffic lights installed on streets or highways for traffic control and guidance.

Nature of Service - The service is alternating current, 60 hertz, single phase, 120/240 nominal volts

Monthly Rate - Shall be computed in accordance with the following charges.

	<u>11/1/14</u>	
Basic Service Charge	\$3.00	Per customer per month
Commodity Charge	\$0.0417	Per watt of active load per month

The actual labor, material, miscellaneous and indirect charges experienced maintaining and relamping traffic signals during the preceding month.

Minimum Bill - The minimum bill is the basic service charge included in the monthly rate.

Renewable Energy Plan Surcharge – This rate is subject to the Renewable Energy Plan Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the Board's property, or its operation, or the production and/or sale of electrical energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Determination of Active Load - The active load of flasher lamps or cyclically operated traffic control lamps shall be 50% of total wattage of all lamps used during one complete cycle of operation. The active load of continuous, non-intermittent steady burning lamps shall be 100% of the total wattage of all lamps used.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Electric Service incorporated herein by this reference.

Effective: November 1, 2014

SPACE CONDITIONING AND

ELECTRIC WATER HEATING SERVICE

RATE NO. 12

Availability - This rate is available to any customer desiring service for commercial/industrial space conditioning and/or electric water heating furnished through a separate meter to which no other electrical device except electric space heating, electric air conditioning, humidity control equipment or electric water heating equipment may be connected. Electric space heating will be considered to include heating by light system provided the primary means of space heating at the time of maximum heating requirements will be

furnished by the lighting system with the balance of the heating requirements furnished by supplementary electric heating equipment. This rate is not available to new applications for heat for light systems received after March 1, 1979. This rate is not applicable to the use of electricity for electric air conditioning unless the customer has permanently installed electric space heating equipment and uses it as the principal source of space heating, or to the use of electricity for occasional or seasonal substitute for another method of water heating.

Nature of Service - The service is alternating current, 60 hertz, single phase at Board of Water and Light (BWL) available secondary voltage. Three phase service will be furnished at BWL option.

Monthly Rate - Shall be computed in accordance with the following charges.

	<u>11/1/14</u>
Basic Service Charge	\$30.00
Commodity Charge	Summer Billing Months of June through October \$0.1487 per kWh Winter Billing Months of November through May \$0.1056 per kWh

Minimum Bill - The minimum bill is the basic service charge included in the monthly rate.

Energy Cost Adjustment - This rate is subject to an Energy Cost Adjustment factor added to the above energy charges and calculated as defined on a separate rate schedule incorporated herein by this reference.

Environmental Charge – This rate is subject to an Environmental Charge as defined on a separate rate schedule incorporated herein by this reference. The current Environmental Charge is \$0.0025/kWh.

Renewable Energy Plan Surcharge – This rate is subject to the Renewable Energy Plan Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Energy Optimization Surcharge – This rate is subject to the Energy Optimization Surcharge as defined on a separate rate schedule incorporated herein by this reference

Tax Adjustment - Bill shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the BWL property, or its operation, or the production and/or sale of electrical energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Application Charge - A \$10.00 charge shall be added to the first regular bill for all customers turning on service at a service location irrespective of prior service with the BWL.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Electric Service incorporated herein by this reference.

Effective: November 1, 2014

RESIDENTIAL ELECTRIC SERVICE,

SENIOR CITIZEN

RATE NO. 21

Availability - This rate is available to any single family or multifamily dwelling of 4 units or less when the entire electric requirements are supplied at one point of delivery through the same meter. The customer must be 65 years of age or older and head of the household being served. Service to appurtenant buildings may be taken through the same meter.

Service under this rate is not available to any single family or multifamily dwelling of 4 units or less unit when a portion of the residence or dwelling unit is used for commercial, industrial, or resale purposes unless the wiring is so arranged that service for residential and non-residential purposes are metered separately.

Customers taking service under this rate shall provide evidence of age and contract with the Board of Water and Light (BWL) to remain on this rate for at least twelve (12) months.

Nature of Service - The service is alternating current, 60 hertz, single phase, 120/240 nominal volts.

Monthly Rate - Shall be computed in accordance with the following charges.

		<u>11/1/14</u>
Basic	Service	\$5.22
Charge		
Commodity		\$0.0961 per kWh for the first 300 kWh
Charge		\$0.1383 per kWh for the next 200 kWh
		\$0.1734 per kWh for all over 500 kWh

Minimum Bill - The minimum bill is the basic service charge included in the monthly rate.

Energy Cost Adjustment - This rate is subject to an Energy Cost Adjustment factor added to the above energy charges and calculated as defined on a separate rate schedule incorporated herein by this reference.

Environmental Charge – This rate is subject to an Environmental Charge as defined on a separate rate schedule incorporated herein by this reference. The current Environmental Charge is \$0.0025/kWh.

Renewable Energy Plan Surcharge – This rate is subject to the Renewable Energy Plan Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Energy Optimization Surcharge – This rate is subject to the Energy Optimization Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the BWL property, or its operation, or the production and/or sale of electrical energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Application Charge - A \$10.00 charge shall be added to the first regular bill for all customers turning on service at a service location irrespective of prior service with the BWL.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Electric Service incorporated herein by this reference.

Effective: November 1, 2014

RESIDENTIAL PLUG-IN ELECTRIC VEHICLE CHARGING SERVICE

RATE NO. 22

Availability – The Experimental Residential Plug-in Vehicle Charging Rate is a voluntary pilot rate available to any single-family or multifamily dwelling of 4 units or less with separately metered Electric Vehicle Supply Equipment (EVSE) capable of providing Level 2 charging for plug-in electric motor vehicles.

Service under this rate is not available to any single-family or multifamily dwelling unit of 4 units or less when a portion of the dwelling unit is used for commercial, industrial, or resale purposes unless the wiring is so arranged that service for residential and non-residential purposes are metered separately.

“EVSE” means a device or apparatus, including vehicle supply cable, connector, internal relays and controls designed specifically for the purpose of delivering energy from the premises wiring to a plug-in-electric motor vehicle. This equipment must meet or exceed the following codes, standards and recommended practices:

1. National Electric Code Article 625 Electric Vehicle Charging System.
2. Society of Automotive Engineers Standard (SAE) J1772.
3. Underwriters Laboratory (UL) 2202, Charging Station Safety.
4. UL 2231 Personal Protection Device.
5. UL 2251 Standard for Safety of Plugs, Receptacles and Couplers for EVs.
6. UL 1998 Standard for Safety-Related Software
7. UL 991 Standard for Tests for Safety-Related Controls Employing Solid-State Devices
8. UL Subject 2594 Electric Vehicle Supply Equipment
9. Michigan Administration codes 408.30801 or 408.30876.

“Level 2 Charging” means providing 208 – 240 volt single phase alternating current energy to an onboard charger of an electric motor vehicle with a maximum current specified at maximum 32 continuous amps and a Branch Circuit Breaker rated at 40 amps. The maximum continuous input power is specified as 7.68 Kilowatts.

Nature of Service - The service is alternating current, 60 hertz, single phase, 208 to 240 nominal volts, Level 2 Charging as defined.

Monthly Rate - Shall be computed in accordance with the following charges:

	<u>11/1/14</u>	
Basic Service Charge	\$1.95	Per customer per month
Commodity Charge	\$ 0.0821	Per kWh for all Off-Peak Usage
	\$ 0.1715	Per kWh for all On-Peak Usage

On-Peak Hours: All kWh used between 7am and 11 pm Monday through Friday.

Off-Peak Hours: All other kWh used.

Minimum Bill - The minimum bill is the basic service charge included in the monthly rate.

Energy Cost Adjustment - This rate is subject to an Energy Cost Adjustment factor added to the above energy charges and calculated as defined on a separate rate schedule incorporated herein by this reference.

Environmental Charge – This rate is subject to an Environmental Charge as defined on a separate rate schedule incorporated herein by this reference. The current Environmental Charge is \$0.0025/kWh.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the Board of Water and Light (BWL) property, or its operation, or the production and/or sale of electric energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding previous delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Effective: November 1, 2014

RESIDENTIAL PLUG-IN ELECTRIC VEHICLE CHARGING SERVICE RATE NO. 22

Application Charge - A \$10.00 charge shall be added to the first regular bill for all customers turning on service at a service location irrespective of prior service with the BWL.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Electric Service incorporated herein by this reference.

Effective: November 1, 2014

STREET LIGHTING SERVICE BOARD OWNED SYSTEMS RATE NO. 31

Availability - Available to any political subdivision or agency of the State of Michigan for street lighting service for any system consisting of one or more luminaires where the BWL has an existing distribution system with secondary voltage available. Luminaires may be installed with no limitations as to spacing between luminaires. Where an overhead line extension is required to serve one or more luminaires, the BWL will furnish 350 linear feet of line extension per luminaire served from such extension.

Nature of Service - The BWL will furnish, install, own, operate, and maintain all equipment comprising the street lighting system, and supply the unmetered energy. The BWL reserves the right to furnish service from either a series or multiple system or both.

Annual Rate- The annual rate per luminaire with fixture and setting, payable in twelve (12) monthly installments, shall be as follows;

High Pressure Sodium Luminaire	<u>11/1/14</u>
70 W	\$ 94
100 W	\$107
150 W	\$125
250 W	\$152
400 W	\$193
1000 W	\$396

Mercury Vapor Luminaire ²	
100 W	\$100
175 W	\$121
250 W	\$143
400 W	\$183
1000 W	\$347

Metal Halide Luminaire	
175 W ¹	\$212
250 W ¹	\$242
400 W	\$244
1000 W	\$474
1500 W	\$727

Induction Luminaire	
85 W	\$100
165 W	\$122

LED Luminaire	
Decorative	\$143
End Mount	\$94
Rectilinear	\$124
Flood	\$202

Effective: November 1, 2014

STREET LIGHTING SERVICE

² Rates apply to existing luminaires only and are not open to new business.

BOARD OWNED SYSTEMS
RATE NO. 31

Annual Rate (continued)

plus an additional annual charge, depending on type of installation, of:

	<u>11/1/14</u>
Wood Pole – Overhead Service	\$70
Wood Pole – Underground Service	\$109
Concrete Pole – Overhead Service	\$172
Concrete Pole – Underground Service	\$172
Post Top - Concrete	\$109
Historic – Single Top	\$359
Large Historic – Dual Top	\$720
Small Historic – Dual Top	\$605
Wall/Tunnel – 8760 hours	\$152
Wall/Tunnel – 4200 hours	\$92
Bollard	\$305

Note: Luminaires installed on existing poles will be charged only the applicable rate for the luminaire. None of the additional charges above will be applied.

Customer Contribution - The annual rates are based on fixtures normally stocked by the BWL, and installed utilizing normal construction techniques. The BWL may, at its option, upon customer request install a street lighting system not covered by the rates above. Such requests shall be subject to the terms and conditions of Rate 31a.

Unit Replacement - The BWL may, at its option, upon customer request replace existing street light units. After installation, the customer shall make a one-time contribution equal to the un-depreciated value of the unit plus the cost of removal.

Renewable Energy Plan Surcharge – This rate is subject to the Renewable Energy Plan Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the BWL property, or its operation, or the production and/or sale of electrical energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Electric Service incorporated herein by this reference.

Effective: November 1, 2014

STREET LIGHTING SERVICE

BOARD OWNED SYSTEMS

RATE NO. 31a

Availability - Available to any political subdivision or agency of the State of Michigan for non-standard BWL street lighting service for any system consisting of one or more luminaires where the BWL has an existing distribution system with secondary voltage available.

Nature of Service - The BWL will furnish, install, own, operate, and maintain all equipment comprising the street lighting system, and supply the unmetered energy. The BWL reserves the right to furnish service from either a series or multiple system or both.

Annual Rate- The annual rate per luminaire with fixture and setting, payable in twelve monthly installments, shall consist of an annual energy charge and an annual facilities charge, as set forth below:

Annual Energy Charge- The annual rate per watt for energy used by a luminaire, shall be as follows;

11/1/14

High Pressure Sodium Luminaire	0.61 per watt of rated energy usage
Metal Halide Luminaire	\$0.84 per watt of rated energy usage
LED Luminaire	\$0.42 per watt of rated energy usage

Annual Facilities Charge- The annual rate to recover the cost of luminaires, poles, attachments, and other equipment installed to provide service under this rate schedule, including the total facilities cost less any customer contributions, projected annual maintenance cost, and return on investment. The annual facilities charge for each luminaire and setting will be specified in the service contracts with each customer.

Unit Replacement - The BWL may, at its option, and upon customer request replace existing street light units. After replacement, the customer shall make a one-time contribution equal to the un-depreciated value of the replaced unit plus the cost of removal.

Renewable Energy Plan Surcharge – This rate is subject to the Renewable Energy Plan Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the BWL property, or its operation, or the production and/or sale of electrical energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Electric Service incorporated herein by this reference.

Effective: November 1, 2014

CUSTOMER OWNED SYSTEMS

RATE NO. 32

Availability - Available to any political subdivision or agency of the State of Michigan for street lighting service for any system consisting of one or more luminaires where the BWL has an existing distribution system available.

Nature of Service - The BWL will connect the customer's equipment to BWL lines, furnish the control equipment, supply the unmetered energy, control the burning hours of the lamps, and provide normal replacement of luminaire refractors, control devices and lamps. The customer will furnish, install and own all equipment comprising the street lighting system, including, but not limited to the overhead wires or underground cables between luminaires and the supply circuits extending to the point of attachment with the BWL. All maintenance and replacement of the customer's equipment except normal lamp and glass replacement shall be paid by the customer. The BWL reserves the right to furnish service from either a series or multiple system or both.

Annual Rate- The annual rate per luminaire, payable in twelve (12) monthly installments, shall be as follows:

High Pressure Sodium Luminaire	<u>11/1/14</u>
70 W	\$51
100 W	\$62
150 W	\$79
250 W	\$105
400 W	\$150
1000 W	\$354
Mercury Vapor Luminaire ³	
175 W	\$72
250 W	\$95
400 W	\$137
1000 W	\$301
Incandescent Luminaire	
2500 L	\$99
4000 L	\$158
6000 L	\$192

Maintenance Charge - The actual labor, material, miscellaneous and indirect charges experienced maintaining street light units during the preceding month.

³ Rates apply to existing luminaires only and are not open to new business.

Combined Rates - The annual rate for units consisting of more than one luminaire shall be the appropriate combination of individual unit charges above.

Effective: November 1, 2014

STREET LIGHTING SERVICE
CUSTOMER OWNED SYSTEMS
RATE NO. 32

Special Terms and Conditions - The BWL reserves the right to make special contractual arrangements as to termination charges, contributions in aid of construction, term or other special considerations when the customer requests service, equipment or facilities not normally provided under this rate.

Renewable Energy Plan Surcharge – This rate is subject to the Renewable Energy Plan Surcharge as defined on a separate rate schedule incorporated herein by this reference.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the BWL property, or its operation, or the production and/or sale of electrical energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Electric Service incorporated herein by this reference.

Effective March 1, 2011, this rate is not open to new business.

Effective: November 1, 2014

ENERGY COST ADJUSTMENT

The Energy Cost Adjustment permits the monthly adjustment of rates for the costs of energy incurred in supplying electricity to retail customers. All residential and general service rates are subject to the Energy Cost Adjustment. In applying the Energy Cost Adjustment, the applicable rate per kWh shall be increased or decreased by the amount of the current Energy Cost Adjustment. The following definitions and procedures will be followed in calculating the monthly Energy Cost Adjustment.

Definitions

Energy Cost Adjustment - the amount per kWh by which the applicable rates shall be adjusted for billing in each month.

Energy Costs - those costs incurred in supplying retail and wholesale electricity. Such costs include fuel burned, energy costs associated with firm power purchases, net interchange power costs, and costs associated with other temporary power transactions. The cost of fuel burned shall include the delivered cost of fuel

(base cost, escalations, premiums/penalties, transportation, demurrage), outside lab fees and other outside costs related to fuel procurement, and fuel additives such as freeze proofing.

Over/Under Recovery - the difference between actual Energy Costs for prior months and the amount of energy cost recovered by means of the Base Cost of Energy and the Energy Cost Adjustment. The Over/Under Recovery shall be added to the Energy Costs for purposes of computing the Energy Cost Adjustment for each month. Energy costs will be offset with wholesale revenues.

Base Cost of Energy - the average Energy Cost included in the energy rates of the various rate schedules. Such amount shall not be recovered by means of the Energy Cost Adjustment. The current Base Cost of Energy is \$0.047934 per kWh sold.

Procedures

Estimated Energy Cost shall be projected for a twelve-month period. Any amount of Over/Under Recovery (positive or negative) shall be added to the Energy Cost to determine the total cost basis for the Energy Cost Adjustment. The total cost basis shall be divided by the projected total retail billed sales for the twelve-month period resulting in the average energy cost per kWh. The Base Cost of Energy shall be subtracted from the average energy cost to result in the Energy Cost Adjustment.

The Energy Cost Adjustment shall be reviewed and, as necessary, revised periodically in accordance with the provisions of this schedule, but not less frequently than every twelve months.

Effective: November 1, 2014

RENEWABLE ENERGY PLAN SURCHARGE

The Renewable Energy Plan Surcharge (REP Surcharge) is designed to recover Renewable Energy Plan program costs, as required by 2008 PA 295.

The REP Surcharge will appear as a line item on the customer's bill.

Monthly REP Surcharges are as follows:

<u>Rate Schedule</u>	<u>REP Surcharge 11/1/2014</u>
<u>Residential</u>	
Rate 1 Residential	\$0.75/customer
Rate 21 Senior Citizen Residential	\$0.50/customer
<u>Secondary Commercial and Industrial</u>	
Rates 3,4,7,and 12	\$0.0024/kWh
Minimum Monthly Charge	\$2.80/customer
Maximum Monthly Charge	\$12.00/customer
<u>Primary Commercial and Industrial</u>	
Rates 5 and 8	\$160.00/delivery point
<u>Traffic Light Service</u>	
Rate 11	
Less than 914 Active Watts	\$3.00/Intersection
914-3650 Active Watts	\$9.00/Intersection
Greater than 3650 Active Watts	\$15.00/Intersection
<u>Street Lighting Service</u>	
Rates 31 and 32	
Less than 100W Luminaire	\$0.20/Luminaire
100W or greater Luminaire	\$0.50/Luminaire

ECONOMIC DEVELOPMENT RIDER

Purpose – The primary purpose of this rider is to enhance economic development in the Board of Water & Light (BWL) service area. It will be offered to new or existing customers when, in the utilities judgment, the availability of the rider is a major factor for the customer locating or expanding its operations and when the rider will result in a benefit to the BWL and its customers.

Availability – This rider is available to customers on Large General Service Rate 4, Primary Electric Service Rate 5 or Large Capacity Electric Service Rate 8. This rider is available to new or existing commercial or industrial customers who contract for a bona fide increase in connected load resulting in an increase of billing demand of 150 kW or greater. This rate is available for the first six years from the date of service. All provisions of this rider are the same as the demand rates with the following exceptions:

Monthly Rate

Capacity Charge: A discount on the capacity charge will be made available under this rider. For Rates 5 and 8, the discounted capacity charge is the on-peak capacity charge only. The capacity charge will follow the schedule below:

- Capacity Charge Discount (kW)
- Years 1-2: up to 50%
 - Years 3-4: up to 30%
 - Years 5-6: up to 10%

At the start of the seventh year and all years thereafter, the customer will be billed according to the appropriate rate.

Billing Demand

For a new customer, the entire billing demand shall be subject to the capacity charge in this rider and shall never be less than 150 kW. For an existing customer, the contracted demand shall be determined by the average of the three highest registered demands, including metering adjustment, during the twelve (12) month period prior to the contract or as established by mutual consent.

Effective: November 1, 2014

Attachment B

RESIDENTIAL WATER SERVICE

RATE NO. 1

Availability - This rate is available to any single-family residence or multifamily dwelling of 4 units or less served by one meter.

Monthly Rate - Shall be computed in accordance with the following charges.

Basic Service Charge: per customer per month or part thereof:

Meter	<u>11/1/14</u>
5/8"	\$12.20
3/4" *	\$17.08
1"	\$31.76
1¼" or 1½"	\$70.82
2"	\$124.52

Commodity Charge: per ccf of water used per month;
\$2.79

** The BWL standard residential installation is a 1" service line with a ¾" meter. The BWL reserves the right, in its sole judgment, to install 5/8" meters on any new service installation when circumstances warrant.*

Power and Chemical Cost Adjustment - The power and chemical cost adjustment shall consist of an increase or decrease of 0.1¢ per ccf billed for each 0.1¢ increase or decrease in the average cost of power and chemicals required to deliver treated water to the customer's meter above or below 44.7¢ per ccf. The cost per ccf for the billing period shall consist of the weighted average cost of chemicals, electricity, steam and oil used in pumping and treatment facilities during the one month period preceding the month billed by two months.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the Board's property, or its operation, or the production and/or sale of water, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Minimum Charge - The minimum charge shall be the above Basic Service Charge applied for 30 days.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill which is not paid on or before the due date.

Application Charge - A \$10.00 charge shall be added to the first regular bill for all customers turning on service at a service location irrespective of prior service with the Board.

Rules and Regulations - Service under this rate is subject to the Board of Water and Light Rules and Regulations for Water Service which are incorporated herein by this reference.
Effective: November 1, 2014

GENERAL WATER SERVICE
RATE NO. 2

Availability - This rate is available to any customer served on the BWL's water system. Service under this rate is not available for resale.

Monthly Rate - Shall be computed in accordance with the following charges.

Basic Service Charge: per customer per month or part thereof;

Meter	<u>11/1/14</u>
5/8"	\$12.20
3/4" *	\$17.08
1"	\$31.76
1¼" or 1½"	\$70.82
2"	\$124.52
3"	\$280.79
4"	\$500.55
6"	\$1,125.53
8"	\$1,999.74
10"	\$3,125.37

Commodity Charge: per ccf of water used per month;
\$2.79

** The BWL standard residential installation is a 1" service line with a ¾" meter. The BWL reserves the right, in its sole judgment, to install 5/8" meters on any new service installation when circumstances warrant.*

Power and Chemical Cost Adjustment - The power and chemical cost adjustment shall consist of an increase or decrease of 0.1¢ per ccf billed for each 0.1¢ increase or decrease in the average cost of power and chemicals required to deliver treated water to the customer's meter above or below 44.7¢ per ccf. The cost per ccf for the billing period shall consist of the weighted average cost of chemicals, electricity, steam and oil used in pumping and treatment facilities during the one month period preceding the month billed by two months.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision

which levies taxes, license fees, franchise fees, or any other charges against the Board's property, or its operation, or the production and/or sale of water, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Minimum Charge - The minimum charge shall be the above Basic Service Charge applied for 30 days.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill which is not paid on or before the due date.

Application Charge - A \$10.00 charge shall be added to the first regular bill for all customers turning on service at a service location irrespective of prior service with the Board.

Rules and Regulations - Service under this rate is subject to the Board of Water and Light Rules and Regulations for Water Service which are incorporated herein by this reference.

Effective: November 1, 2014

FIRE SERVICE

RATE NO. 4

Fire Service - A fire service line will be installed to a fire hydrant(s) or a customer's detector check valve in accordance with the schedule of charges for water system connection fees (Rate 3) and the current water service installation charges set forth in the Rules and Regulations for Water Service. The location of the detector check valve shall be determined by the Water Distribution Engineering Department.

Fire service lines shall be used for fire protection purposes only. No additional charges will be made for water used for testing and fire purposes. The customer shall maintain the detector check valve and fire protection system connected thereto in good condition in compliance with Section 34-9, Repair and Protection of Equipment, of the Code of the City of Lansing, Michigan.

Monthly Fire Service Charge - Water supply and maintenance of a fire service line to a detector check valve shall be provided in accordance with the following schedule of charges:

Service Size	<u>11/1/14</u>
4" or smaller	\$78
6"	\$177
8"	\$312
10" or larger	\$487

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the Board's property, or its operation, or the production and/or sale of water, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Minimum Charge - Billings subject to this rate are not subject to a minimum charge.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill which is not paid on or before the due date.

Rules and Regulations - Service under this rate is subject to the Board of Water and Light Rules and Regulations for Water Service which are incorporated herein by this reference.

Effective: November 1, 2014

LAWN SPRINKLING WATER SERVICE
RATE NO. 5

Availability - This rate is available to any customer served on the BWL's water system where the meter or service is installed solely for lawn sprinkling. Municipalities having jurisdiction over sewer system rates may designate other uses of water which are subject to this rate.

Monthly Rate - Shall be computed in accordance with the following charges.

Basic Service Charge: Billings subject to this rate are not subject to a Basic Service Charge.

Commodity Charge: per ccf of water used per month

11/1/14

all ccf \$2.79

Power and Chemical Cost Adjustment - The power and chemical cost adjustment shall consist of an increase or decrease of 0.1¢ per ccf billed for each 0.1¢ increase or decrease in the average cost of power and chemicals required to deliver treated water to the customer's meter above or below 44.7¢ per ccf. The cost per ccf for the billing period shall consist of the weighted average cost of chemicals, electricity, steam and oil used in pumping and treatment facilities during the one month period preceding the month billed by two months.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the Board's property, or its operation, or the production and/or sale of water, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Minimum Charge - Billings subject to this rate are not subject to a minimum charge.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill which is not paid on or before the due date.

Application Charge - A \$10.00 charge shall be added to the first regular bill for all customers turning on service at a service location irrespective of prior service with the Board.

Rules and Regulations - Service under this rate is subject to the Board of Water and Light Rules and Regulations for Water Service which are incorporated herein by this reference.

Effective: November 1, 2014
FIRE HYDRANT CHARGES
RATE NO. 6

Annual Fire Hydrant Charge - Water Supply and maintenance of a fire service line to a public or private fire hydrant shall be provided in accordance with the following annual schedule of charges:

	<u>11/1/14</u>
All Hydrants	\$517

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the Board's property, or its operation, or the production and/or sale of water, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Minimum Charge - Billings subject to this rate are not subject to a minimum charge.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill which is not paid on or before the due date.

Rules and Regulations - Service under this rate is subject to the Board of Water and Light Rules and Regulations for Water Service which are incorporated herein by this reference.

Effective: November 1, 2014

Attachment C
GENERAL STEAM SERVICE
RATE NO. 1

Availability - This rate is available to any customer receiving service from the Board of Water and Light (BWL) steam distribution system with a maximum gauge pressure of fifteen pounds per square inch (15 psi). Steam services at gauge pressures above 15 psi but not exceeding 100 psi, when available, may be supplied at the option of the BWL or upon request by the customer.

Nature of Service - Saturated steam up to a maximum gauge pressure of 15 psi except as indicated above.

Monthly Rate

	<u>11/1/14</u>	
Basic Service Charge	\$13.56	per customer per month
Commodity Charge		Billing Months of June through November

\$15.47	per 1000 lbs. for the first 200,000 lbs.
\$16.24	per 1000 lbs. for all 1000 lbs. over 200,000 lbs.
	Billing Months of December through May
\$15.65	per 1000 lbs for the first 200,000 lbs.
\$16.44	per 1000 lbs. for all 1000 lbs. over 200,000 lbs.

Surcharge - A surcharge of ten (10) percent shall be added to the above rates for steam service supplied upon customer's request for service at gauge pressure above 15 psi but not exceeding 100 psi.

Fuel Cost Adjustment - This rate is subject to a Fuel Cost Adjustment factor added to the above charges and calculated as defined on a separate rate schedule incorporated herein by this reference.

Amine Treatment Adjustment - The amine treatment adjustment allows for the monthly adjustment of rates to reflect the actual cost incurred due to amine feed. The factor shall be applied to each 1000 pounds (lbs) billed. The factor shall consist of 1.124 times the weighted average amine cost per 1000 lbs treated during the previous month.

Environmental Charge – This rate is subject to an Environmental Charge as defined on a separate rate schedule incorporated herein by this reference. The current Environmental Charge is \$0.30/Mlb.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the BWL's property, or its operation, or the production and/or sale of steam, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Minimum Charge - The Basic Service Charge included in the rate except that Special Minimum Charges shall be billed when the revenue received does not adequately compensate the BWL for the cost of furnishing service.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill which is not paid on or before the due date.

Reconnect Charge - A reconnect charge shall be added to any account which discontinues and reconnects service at the same address within a twelve (12) month period. The reconnect charge is specified in the BWL Rules and Regulations for Steam Service.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Steam Service which are incorporated herein by this reference.

Effective: November 1, 2014

INDUSTRIAL STEAM SERVICE
RATE NO. 2

Availability: This rate is available to any customer engaged in mining or manufacturing and receiving

steam at any BWL plant wall at a minimum gauge pressure of 250 psi. Service will be provided upon customer entering into a steam supply contract with the BWL. Terms and conditions of the contract may vary due to customer requirements and the impact on BWL facilities.

Monthly Rate:

	<u>11/1/14</u>
Demand Charge:	\$1.56 per pound per hour (lb/hr) for all lb/hrs of contract demand
	\$1.35 per pound per hour (lb/hr) for all lb/hrs exceeding contract demand
Commodity Charge:	\$9.52 per thousand pounds (Mlb)

Fuel Cost Adjustment - This rate is subject to a Fuel Cost Adjustment factor added to the above charges and calculated as defined on a separate rate schedule incorporated herein by this reference.

Environmental Charge – This rate is subject to an Environmental Charge as defined on a separate rate schedule incorporated herein by this reference. The current Environmental Charge is \$0.30/Mlb.

Minimum Charge: Monthly Demand Charge above.

Tax Adjustment: Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, or any other charges against the BWL's property, or its operation, or the production and/or sale of steam, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Billing Demand: The billing demand is the maximum demand (lb/hrs) supplied during the 15 minute period of maximum use during the month, but not less than the contract demand.

Delayed Payment Charge: A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill which is not paid on or before the due date.

Rules and Regulations: Service under this rate is subject to the BWL Rules and Regulations for Steam Service which are incorporated herein by this reference.

Effective: November 1, 2014

RESIDENTIAL STEAM SERVICE
RATE NO. 5

Availability - This rate is available to any single-family or multifamily dwelling of 4 units or less when the entire service requirements are supplied at one point of delivery through one meter.

Service under this rate is not available to any single-family or multifamily dwelling unit of 4 units or less when a portion of the dwelling unit is used for commercial, industrial, or resale purposes unless the service is so arranged that residential and non-residential purposes are metered separately.

Nature of Service - Saturated steam up to a maximum gauge pressure of 15 psi. Steam services at gauge pressures above 15 psi but not exceeding 100 psi, when available, may be supplied at the option of the BWL or upon request by the customer.

Monthly Rate

	<u>11/1/14</u>	
Basic Service Charge	\$10.05	per customer per month
Commodity Charge		Billing Months of June through November
	\$11.98	per 1000 lbs. for the first 200,000 lbs.
	\$12.54	per 1000 lbs. for all 1000 lbs. over 200,000 lbs.
		Billing Months of December through May
	\$12.12	per 1000 lbs for the first 200,000 lbs.
	\$12.69	per 1000 lbs. for all 1000 lbs. over 200,000 lbs.

Surcharge - A surcharge of ten (10) percent shall be added to the above rates for steam service supplied upon customer's request for service at gauge pressure above 15 psi but not exceeding 100 psi.

Fuel Cost Adjustment - This rate is subject to a Fuel Cost Adjustment factor added to the above charges and calculated as defined on a separate rate schedule incorporated herein by this reference.

Amine Treatment Adjustment - The amine treatment adjustment allows for the monthly adjustment of rates to reflect the actual cost incurred due to amine feed. The factor shall be applied to each 1000 pounds (lbs) billed. The factor shall consist of 1.124 times the weighted average amine cost per 1000 lbs treated during the previous month.

Environmental Charge – This rate is subject to an Environmental Charge as defined on a separate rate schedule incorporated herein by this reference. The current Environmental Charge is \$0.30/Mlb.

Tax Adjustment - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the BWL's property, or its operation, or the production and/or sale of steam, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Minimum Charge - The Basic Service Charge included in the rate except that Special Minimum Charges shall be billed when the revenue received does not adequately compensate the BWL for the cost of furnishing service.

Delayed Payment Charge - A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill which is not paid on or before the due date.

Reconnect Charge - A reconnect charge shall be added to any account which discontinues and reconnects

service at the same address within a twelve (12) month period. The reconnect charge is specified in the BWL Rules and Regulations for Steam Service.

Rules and Regulations - Service under this rate is subject to the BWL Rules and Regulations for Steam Service which are incorporated herein by this reference.

Effective: November 1, 2014

Attachment D

GENERAL CHILLED WATER SERVICE

RATE NO. 1

Availability – this rate is available to any customer desiring service from the Board of Water and Light (BWL) district cooling system. Service will be provided upon the customer entering into a contract with the BWL. The contract will govern the customer's contract demand and terms and conditions of service, which may vary due to customer requirements and the impact on BWL facilities. This rate is not available for standby or emergency service.

Monthly Rate – Shall be computed in accordance with the following charges:

Capacity Charge: \$45.05 per ton for all tons of billing demand less than or equal to 105% of the contract demand, and \$63.08 per ton for all tons of billing demand exceeding 105% of the contract demand.

Commodity Charge: \$0.128 per ton-hr

Tax Adjustment – Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the BWL's property, or its operation, or the production and/or sale of electrical energy, to offset any such cost and thereby prevent other customers from being compelled to share such local increases.

Minimum Monthly Charge – The capacity charge included in the rate.

Billing Demand – The billing demand shall be the maximum demand (tons) supplied during the 15-minute period of maximum use, but not less than 85% of the contract demand. The General Manager is authorized to waive billing demand in excess of 105% of the contract demand where such billing demand is incurred is the result of emergency conditions on a customer's system and such emergency condition is caused by equipment or piping failure and the BWL concurs in the existence of an emergency condition.

Temperature Factor Adjustment – During the months of May through October; if the customer's return water temperature is below 57 degrees Fahrenheit (F), the customer's commodity charge will be increased by 2.0% for either; (1) each degree Fahrenheit the customer's supply and return water temperature differential is less than 10⁰ F or, (2) each degree Fahrenheit the customer's return water temperature is below 57⁰ F, whichever is less. The General Manager is authorized to waive the application of the Temperature Factor Adjustment where warranted in cases of customer hardship where such hardship is caused by facilities constructed prior to the BWL's District Cooling System.

Metering – All services using chilled water from the BWL chilled water system shall be metered. The BWL shall, through consultation with the customer, determine the form in which the commodity shall be metered.

Delayed Payment Charge – A delayed payment charge of 5% of the unpaid balance, excluding delayed payment charges, shall be added to any bill that is not paid on or before the due date.

Rules and Regulations – Service under this rate is subject to the BWL Rules and Regulations for Chilled Water Service that are incorporated herein by this reference.

Effective: November 1, 2014

Board Comments: Commissioner Ward commented on the criticism from customers of the Board's process of passing a budget with a presumed rate increase. Commissioner Ward offered her apologies to the customers who believed the decision for the rate increase had already been made and that it is understood that the Board's process might have had a chilling effect on the customers. Commissioner Ward suggested that the Finance Chair Louney consider a resolution to be brought before the entire board for management to submit periodic cost containment or cost savings report, either quarterly or biannually. Stating that she believed cost containing should be something that is in the forefront of our thinking and regularly discussed not just at a time when we are seeking a rate increase.

Commissioner Zerkle commented that she appreciated Mr. Lark's response to the public concerns at the public hearing. Commissioner Zerkle commented that to the public it may seem like the Board had absolutely nothing to say in response to the public during the public hearing on the rate increase. She stated that the rate increase has been before the Board for the last four or three months and they have had many opportunities to ask questions to get a full explanation on the rate increase. Commissioner Zerkle stated that the Board does take this rate increase very seriously and do care about the public's concerns.

Motion by Commissioner Mullen, Seconded by Commissioner Bossenbery to approve Rate Adjustments to be effective November 1, 2014.

Action: Motion Carried (7/1 Louney)

RESOLUTION #2014-09-02

**Fiscal Year 2014 Audited Financial Statements
Of the Enterprise Fund and Pension Fiduciary Funds**

RESOLVED, that the fiscal year 2014 Audited Financial Statements of the Board of Water and Light have been reviewed and are hereby accepted as presented.

FURTHER RESOLVED, that the Corporate Secretary is hereby directed to file a copy of the fiscal year 2014 Audited Financial Statements of the Board of Water and Light and the report on auditing procedures with the State Treasurer as required by the Uniform Budgeting and Accounting Act (Public Act 2 of 1968, as amended) no later than December 31, 2014.

FURTHER RESOLVED, that the Corporate Secretary is hereby directed to file a copy of the fiscal year 2014 Audited Financial Statements of the Board of Water and Light with the City of Lansing.

Motion by Commissioner Louney, Seconded by Commissioner Ward, to accept the fiscal year 2014 Audited Statements.

Action: Motion Carried

UNFINISHED BUSINESS

There was no Unfinished Business

NEW BUSINESS

There was no New Business

RESOLUTIONS

RESOLUTION #2014-09-03

Employer 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 coverage year beginning January 1, 2012, so that a public employer may not pay more of the annual costs for medical benefit plans than a total equal to \$5,857.58 for single person coverage, \$12,250 for individual and spouse coverage, and \$15,975.23 for family coverage adjusted October 1, 2014. These caps are to be adjusted by October 1 each year to apply to the following calendar year, based on the change in the medical care component of the United States consumer price index (CPI), 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;

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, 2015.

FURTHER RESOLVE that the Board desires to continue to implement a 12 % premium sharing for all active employees for medical benefits effective January 1, 2015.

Vote called by Chair Price

There was an 8-0 Vote in support of the proposed Resolution.

MANAGER'S REMARKS

General Manager Lark stated that Scott Hamelink, Manager of the Water Management Production Unit, received the annual American Water Works Association's (AWWA) Operator Meritorious Service Award, which recognizes individuals for special performances which includes providing continuous compliance with public health standards, outstanding plant maintenance, special efforts in training new employees and development of new processes to provide a more efficient or effective treatment.

General Manager Lark stated that the Board of Water and Light received the AWWA Water Landmark Award for its Water Dye Plant. This award recognizes water plants that are at least 50 years old and have a direct and significant relationship with water supply distribution treatment or technical development.

COMMISSIONERS' REMARKS

Commissioner Mullen asked how customers who have trouble paying their bills would be able to access the community programs Mr. Lark mentioned.

Mr. Lark stated that there are a number of ways to do so, one of which would be to contact Bob Perialas of the Board of Water and Light or Dr. Joan Jackson Johnson of the City of Lansing. He also indicated that anyone one in upper management at the Board of Water and Light would be happy to help any customer get in contact with the right person as well.

Commissioner Thomas thanked Thomas Gray and Dallas Burdick for representing the Board of Water and Light in the First Step Program. He stated that they represented the Board of Water and Light in a very good light.

PUBLIC COMMENTS

There was no Public Comments

ADJOURNMENT

On motion by Commissioner Ward, seconded by Commissioner Bossenbery the meeting adjourned at 6:15 p.m.

M. Denise Griffin, Corporate Secretary

Official Minutes filed (electronically) with Lansing City Clerk: November 20, 2014