BOARD OF WATER AND LIGHT

REO Town Depot

1201 S. Washington Ave. - Lansing, Michigan September 23, 2014 - 5:30 p.m.

BOARD MEETING AGENDA

- 1. Roll Call
- 2. Pledge of Allegiance
- 3. Approval of Minutes
 - a. Regular Board Meeting of July 22, 2014
- 4. 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.

5. Communications

- a. Thank you card from Joan Flynn of Warren, MI (Commissioner Bossenbery's mother)
- b. Letter of appreciation from the Michigan Institute for Contemporary Art
- c. Letters submitted at the September 18, 2014 Proposed Rate Increase Public Hearing from:
 - 1. David Holtz of Lansing
 - 2. Brad van Guilder representing the Sierra Club

6. Committee Reports

- a. Committee of the Whole Meeting Report (August 19, 2014) Marge Bossenbery, Chair
- b. Committee of the Whole Meeting Report (September 9, 2014) Marge Bossenbery, Chair
- c. Finance Committee Meeting Report (September 9, 2014) Dennis Louney, Chair
- d. Human Resources Committee Meeting Report (September 16, 2014) Cynthia Ward, Chair

7. Manager's Recommendations

- a. Resolution: Rate Adjustments Effective November 1, 2014
- b. Resolution: FY 2014 Audited Financial Statements
- 8. Unfinished Business
- 9. New Business
- 10. Resolutions/Action Items
 - a. Resolution: PA 152 Statutorily Required Insurance Co-Pay
- 11. Manager's Remarks
- 12. Commissioners' Remarks
- 13. Motion of Excused Absence
- 14. Public Comments

Members of the public are welcome to speak to the Board on any Board of Water and Light subject.

15. Adjournment



MINUTES OF THE BOARD OF COMMISSIONERS' MEETING

LANSING BOARD OF WATER AND LIGHT

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, July 22, 2014.

Chairperson Sandra Zerkle called the meeting to order at 5:30 p.m.

Present: Commissioners Margaret Bossenbery, Dennis M. Louney, Anthony McCloud, Tony

Mullen, David Price, Tracy Thomas, Cynthia Ward and Sandra Zerkle.

Absent: None

The Corporate Secretary declared a quorum present.

Commissioner Thomas led the Pledge of Allegiance.

APPROVAL OF MINUTES

Motion by Commissioner Bossenery, seconded by Commissioner Mullen to approve the Regular Board Meeting minutes of May 27, 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.

There was no Public Comment

COMMUNICATIONS

There were no Communications

COMMITTEE REPORTS

EXECUTIVE COMMITTEEJune 2, 2014

The Executive Committee 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 11:45 a.m. on Monday, June 2, 2014.

Executive Committee Chair Sandra Zerkle called the meeting to order. The following committee members were present: Commissioners Sandra Zerkle, Dennis Louney, Tony Mullen and Cynthia Ward. Also present were Board Member Tracy Thomas.

Absent: None.

Public Comments

None.

Approval of Minutes

Motion by Commissioner Ward, seconded by Commissioner Mullen to approve the minutes of the April 16, 2013 Executive Committee meeting.

Action: Carried unanimously.

<u>Dialogue re: Community Review Team (CRT) Suggestion/Recommendation</u>

CRT Executive Summary Item V. I

The BWL Board has the authority to appoint a standing committee that would be a liaison with local communities that hold franchises for services from the BWL. We strongly believe that the Board Chair should appoint a standing committee to be a Liaison Committee to Local Units of Government who hold franchises or agreements for services from the BWL.

Commissioner Ward stated this agenda subject was mentioned at the last Committee of the Whole meeting, in which Commissioner Price requested or asked that, we as a Board begin taking steps to include other communities that we provide service to.

Commissioner Mullen questioned the Board's authority to appoint a standing committee.

Chair Zerkle stated her uncertainty of the Board being able to appoint a liaison as suggested in the CRT Report. She stated that she has had a conversation with the Mayor about personally inviting officials from surrounding communities that we service, to come and express their thoughts at our meetings. She stated that she has thought about the possibility of setting up quarterly forums with officials from the surrounding communities to open the communication lines.

Commissioner Ward read the following section from the CRT Report into the record "The BWL Board has the authority to appoint a standing committee that would be a liaison with local communities that hold franchises for services from the BWL. We strongly believe that the Board Chair should appoint a Standing Committee to be a liaison to local units of government who hold franchises or agreements for services from the BWL." She stated that she believes this means communities are asking us to establish a Standing Committee or Adhoc Committee to serve as a liaison to those communities that we provide service to. We would have a committee that will serve as a liaison, which I interpret to mean; two or three commissioners would comprise as a committee and receive issues that communities would want or need to address.

Chair Zerkle stated that she does not think of the Board of Water and Light as situated in Lansing. The Board of Water & Light is owned, directed and operated by the City of Lansing, and is not sure that it would look good for us to say that we are going to be out there helping other communities above what happens in Lansing. I do not have a problem with us trying to communicate with those outside communities, but we have a Governmental Relations person that does a great job with communicating and keeping the other communities informed. They know who to call, when to call him, and he responds. It is not that I do not want to take care of them and I am not ignoring them, I don't want to make it look like we are treating them as special customers as opposed to the ones that are in Lansing.

Commissioner Mullen suggested a Customer Support Committee that would include municipalities as well as city residents, City Council and whoever else. It would just be more of a formal operation to allow people to come and express their concerns or their admiration.

General Manager Lark stated that when he first came to the Board of Water & Light from the Public Service Commission (PSC) one of the things that he did was have two or three consumer forums. The problem was that we could never get customers to go to them. Since the December outage, I think you will be able to get people to go forums. Typically, at the PSC forum, we would invite board members and the administration/staff. So this is a suggestion and we would be happy to support you on whatever the hot issues are and would be willing to bring along the proper support staff. General Manager Lark stated that he thinks what the recommendation from the CRT is saying is that we need to form a special committee with some designated commissioners and maybe they can help create more of an outreach program that works with management so that those communities have a resource until the Mayor or City Council decide what direction they want to go in.

Chair Zerkle stated that an Adhoc Committee would be established, if that is what the Commissioners want.

Commissioner Mullen stated if it is not written down, it doesn't happen, so maybe we could have some sort of an Adhoc Committee to come up with something that we could present to the Committee of the Whole, and that Adhoc Committee would be charged with coming up with the details specifically about the suggested Customer Care Committee.

Commissioner Louney stated that we are heading into an interesting time as a Board. At the next Committee of the Whole meeting, we are going to hear a report from management in regards to the CRT report. We are also going to be reviewing the MPSC report and look at these recommendations. The CRT says the Board needs to assert greater control over short-term agenda, annual objectives, current and emerging issues, and strategic direction of the Board of Water and Light. We have leadership elections coming up. We have talked about a retreat to do strategic planning. There is a lot coming at us and we need to put a strategic plan together as to what we want to address, and I would be willing to work with Commissioner Mullen on an Adhoc Committee to do this, but I want to make sure the pieces fit together.

Chair Zerkle stated within the next month we could have a couple of Adhoc Committee meetings to help formulate a plan to present to the Committee of the Whole, so that we can move forward with this matter.

Commissioner Thomas stated tonight's discussion has been great and everyone around the table agrees that we need to do something, but it sounds like there's going to be more information coming and before anything is finalized we should have all necessary information so that we are not going in different directions and creating more committees than necessary.

Chair Zerkle stated that she would put out an email asking Commissioners if they would be willing to work as a temporary Adhoc Committee to formulate an actual plan to present to the Commissioners, whether it is liaisons or forums. Everyone who volunteered will be notified and then we can set up a date and time for the meeting, and will obviously coordinate it with Mr. Lark so that we can have one or two of his staff there.

Dialogue re: Crisis Communication Plan

Commissioner Ward stated that this agenda item stems from the Special Meeting of January 7th, where we asked for the Board of Commissioners to have some type of plan or strategy for crisis communications that was deferred to be made a part of the overall Board of Water and Light entity, crisis communication plan. She said that we have since received that plan, and does not think that the issue that she wanted to address is a part of that plan. She commented that over the past few months she has learned that we do not agree as a commission, or Board members, as to what our responsibilities are as it relates to communications. There are Board members who believe that only the Chair can speak to the media and we have the rules of procedures that state clearly that any Commissioner can speak to the media. The rules of procedures say that the Chair should speak on policies and agrees that all policy statements shall be made on behalf of the Board by the Chair. I think that we need to discuss this as a Board because; there are times that we as Commissioners should speak to the media. I have opinions, and when I'm asked what my opinion is, I make it clear that this is my opinion; I'm not speaking on behalf of the Board.

Commissioner Mullen stated that his opinion is the Chairperson or the Vice-Chair speaks for the Board of Commissioners to make sure that we speak with one voice and that we do not give out confusing information. That does not mean that you, or I, do not have our opinions, but we present our opinions in the committee.

Chair Zerkle stated that we need to speak with one voice. She stated having been the Chair, she generally will speak with Mr. Serkaian to make sure that she has any and all correct facts when talking to the media when doing TV interviews or newspaper interviews, and that is one of the reasons that I think that the Board should have one voice coming from this commission.

Commissioner Louney stated if we designate the Chair as that person or the Vice-Chair as that person to speak on behalf of the Board, I think that's good, but I think we haven't done in the past because there hasn't been a need. With this recent crisis, we need to get a better handle on how the Board deals with public relations, and I say the Board of Commissioners,

when I mean the Board because we are being approached on things. I think some good training and a game plan going forward would be helpful because we went into this blind. That is something as a Board we need to look at, and I know you talked about that matter for the retreat, and that can provide us with some guidance on this matter. We should have something in place that we want to bring to the entire Board or discuss with Board members as a policy or something. Moving forward from today, we need a clear understanding as a Board on dealing with the media.

Commissioner Ward stated that she is not really asking specifically for a policy, but an understanding of what we as individual commissioners are permitted to speak to members of the media. She stated nothing in our rules of procedure prohibits an individual member of the Board of Commissioners to speak to the media. I agree that all policy statements shall be made by the Chair, on behalf of the Board. The concern is there have been instances where the Board Chair spoke to the media and the message that came across as if she is speaking for the Board, which she is able to, but she is not able to determine the position of the Board individually and that is her concern.

General Manager Lark said he has reviewed various Board structures in our related industry and in the Lansing area and there are ways to handle some concerns. I think maybe our Board might need a little direction in that area, and maybe a governance type class might get us all there where we can come up with something that works for everybody.

Commissioner Mullen stated that he is in agreement with Mr. Lark. Whatever we choose to do, whichever direction we need to go, we need to all follow it.

Chair Zerkle asked if everyone was willing as a committee to address issue after some training. She stated in the past there has been an unwritten policy or understanding regarding the media. This was something that was originally talked about several years ago and we didn't want to make it a policy, and it was the idea that we spoke from one voice. She stated that we can have further discussion at either Committee of the Whole sometime after the training on this so we have an understanding and it doesn't have to become a policy, but we'll have a clear and better understanding of how to handle things.

After a lengthy discussion regarding what Committee meeting in which a continuation of this subject matter should take place. It was suggested, that the Executive Committee would deal with governance matters. It was also suggested, that the Public Service Commissioner report would be dealt with in the Committee of the Whole.

Other

None

Excused Absence

None

Adjourn

On Motion by Commissioner Ward, Seconded by Commissioner Mullen, the meeting adjourned at 1:15 p.m.

Respectfully submitted, Sandra Zerkle, Chair Executive Committee

COMMITTEE OF THE WHOLE June 10, 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, June 10, 2014.

Committee of the Whole (COW) Chair, Dennis M. Louney called the meeting to order and asked the Corporate Secretary to call the roll.

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

Absent: None

Public Comments

None

Approval of Minutes

Motion by Commissioner Price, Seconded by Commissioner Bossenbery to approve the Committee of the Whole meeting minutes of May 13, 2014.

Action: Motion Carried

Response to CRT and MPSC Reports

Vice Chair Louney stated that there have been many new implementations, and many changes have occurred since the ice storm, which have all been done by the employees and directed by management; however, there are many more changes ahead of us and feels positive about the future.

General Manager Lark stated the following:

Tonight is a time to reflect, really, on the BWL's recent past. More importantly, it is time I think, to clearly understand where we find the BWL today, and to clearly understand where we are going because, I believe that compared to the BWL of December 2013, we are not the same company; we are stronger, and a better BWL. And we are a BWL that needs to be better still. I think we all can agree that the past six months have been difficult for us; perhaps most importantly, difficult for our customers. I think it's clear that nature has dealt us, and our communities, a powerful blow. A storm that I think we can all agree was historic; both in its sheer force and in its impact on the homes, businesses, and lives of nearly all of our BWL customers. Personally and professionally, we were all affected by this storm. None of us, especially our customers, want to go through that again. When the next major storm and outage event happens, and I can tell you it will happen again, we must all be confident that the BWL's response will be significantly improved from that response we saw in December.

Our customers deserve our operations and our communication systems to meet their needs in the worst of times. While we are rightly proud of how our BWL frontline workers responded to the storm, we are equally disappointed in our own systems failure to meet our own expectations and track record of, I think, what could only be called superior performance and superior service. But enough about the past, tonight I can say with absolute confidence that the BWL is an improved utility. I can also assure you that more improvements will be announced and implemented in the coming weeks and in the coming months. The improvements flow really from 3 in-depth assessments of how we responded to the storm. They come from our own top-to-bottom internal review, if you recall the 54 points. They come from the Mayor's Citizens Review Team (CRT) assessment, and they also come from the Michigan Public Service Commission's (MPSC) evaluation. This is all a result of 6 months of exhaustive scrutiny.

We are grateful for the work of the CRT and the MPSC. By adopting their recommendations, I believe the BWL will be a much stronger, better organization, and better prepared to respond to the next major storm. Compared to the BWL of 2013, we are not the same company; today we're a stronger and better BWL. Tonight, I want everyone that the BWL serves to understand clearly that we are making improvements. We are grateful to the CRT and we are grateful to the Public Service Commission for identifying actions that will improve our ability to respond to future outages and emergencies. In fact, some of the improvements are already operational, as this board knows. And if they are not, some are well along their way to being implemented. We have increased crews and staff, which improve the BWL's ability to restore power faster during outages; we have increased internal spotter crews and we have contracted for up to 17 additional spotter crews from a contractor company; we have tripled the number of tree trimmer crews in the field working today; we have tripled the number of line crews available during an outage and really much beyond tripling as to what is available. In addition, we have expanded our Mutual Aid Agreements across Michigan and across the United States to help restore service during any major outage that should befall us.

We also have a more robust tree-trimming program on a 5-year cycle, which will better protect us from falling limbs. We have improved, and stress tested our outage management system that is able to record outage calls and provide restoration estimates. We have improved call center operations. As you know, we have a Social Media Specialist that was hired to better communicate with our customers. In addition, we have an Emergency Manager that will be hired, to better coordinate crises activities. That manager position has been posted and is now closed. We had a plethora of applicants, and we will begin the interview process shortly. We will participate in the City's emergency preparedness work group, which will be announced soon.

The new Emergency Mast Repair and interest-free payment program that the BWL has operating is the first, in utility-industry in the State of Michigan, that I can find. It includes BWL approved contractors, and it will help customers restore their broken power line masts following storms or natural disasters. We have an online outage center that will help customers find out all information necessary, about storms and outages. We have created an interactive outage map that gives customers the information they need when the power is out. We have a more robust system that will provide our customers with accurate outage restoration information when they need it, via multiple communications channels, and

devices. In addition, in the future, we will be announcing additional improvements, including more ways we can communicate with, and receive important information from our customers using the Internet and mobile communications devices. We are going to have additional website improvements that will better serve our customers and by the fall, we will have completed updating our program to identify seniors and customers with medical alerts. This information will be available to government and community officials to perform wellness checks during emergencies. Our customers deserve a BWL with operational and communication systems that are at or above industry standards, and that are designed to function as well as possible in all types of weather.

The BWL today, has many of those operational and communication systems presently in place and we will be adding more of them over time, starting in the very near future. I look forward to sharing details of our improvements directly with our customers and communities in the coming weeks and months. They deserve to hear directly from us, and they will. We have already addressed a number of neighborhood associations, and others. This summer we will continue to hold face-to-face meetings with our service areas, elected officials, business leaders, neighborhood associations, faith-based organizations and human service groups. We will also continue to communicate our improvements to our customers via mail, the website, and other means of communications. At the end of the process, the BWL will once again have the faith and confidence of our customers and our communities. The ball is in our court and we are not going to drop it.

I think we have all read the CRT and the PSC report; in both of those reports, you will see things that are clearly labeled as recommendations. In the document attached to the agenda item for today, you will see the BWL's responses, I am not going to discuss all of them, but I imagine that you will have questions.

Not long ago in a Board Meeting, Commissioner Ward described the CRT Report as a gift, and I want to say that I agree with that. It has provided us with numerous recommendations that will make the BWL and the Lansing community much more resilient, and better-able to respond to severe events. The BWL is grateful for all of the recommendations, including those from the CRT, the PSC as well as the BWL's own 54 points, total of roughly 180 recommendations.

I will begin with the CRT recommendations on System Resilience. Under that heading, you see that the CRT notes that the BWL's role in providing a critical service to the Lansing community is important, and that there is a need to protect critical facilities. I agree with the CRT's characterization of our service and responsibility to help make Lansing a more resilient community. We are implementing the CRT's recommendations to improve resiliency during major emergency events. What we plan to do is: to regularly update critical facilities needed for public safety and welfare, for priority attention during an emergency and share this with local emergency managers. Also, as recommended by the CRT, we're beginning a survey of distributed generation opportunities in the Lansing area. We will work with sites that are promising to determine the potential for micro grids at, or, around those facilities to keep them up and operating during a major outage event.

Underneath *System Resilience*, we go to National Incident Management System, or NIMS Training. As noted by the CRT, NIMS is a systematic approach to incident management providing a unified approach to incident management, creating standard command and

management structures and emphasizing preparedness and mutual aid. We agree that this is best practice for critical infrastructure owners; we are adopting it, as well as the recommendations made by the CRT that go with it. We agree that greater cooperation is needed between the BWL and local emergency managers and leaders.

We are going to participate with local emergency mangers; share information, data, and experience to improve regional emergency response. We will maintain a sustainable ongoing working relationship with local emergency responders and emergency managers to assure that the BWL's emergency response and resources will work cooperatively and effectively with all local responders. We are going to encourage and participate in development of a regional emergency plan and cooperate in building local resiliency during an emergency.

Under *Continuity of Operations*, the CRT notes that the BWL must plan for its own recovery from a disaster or emergencies. It has made several recommendations that will assist the BWL in protecting itself and recovering from a major threat or a major disaster.

The next general heading is *Interagency Communications and Emergency Operation Center*. In this area, the CRT emphasizes the need for cooperation and coordination between the BWL, local ELCs and any regional ELC; I agree. This cooperation will improve the BWL's and the community's response to an emergency event. The BWL's personnel have already contacted 115 neighborhood associations, the Power of We, the Red Cross, and "Do One Thing," to help educate local organizations on emergency preparedness and coordinate communications among these organizations.

The next heading in general, talks about the BWL's crisis communications. It notes that our crisis communications were insufficient for the size of Lansing's community. We agree that consistent, accurate, and timely information upon which, our customers can make decisions, is something our customers, local officials, and the media should expect, and, should receive. To that end, the CRT has provided very useful recommendations to improve the BWL's communications process. The BWL has developed a crisis communications plan based on industry best practices. Based on the CRT's recommendation, however, more can be done. We will integrate our crisis communications plan into the BWL's emergency plan; we will review additional studies and reports to refine the BWL crisis communications plan; we will require communications personnel to receive NIMS training; and we will continually monitor changes in social media to keep abreast of the latest communication sites.

The next general heading of concern revolves around our storm response. In that area, the CRT has noted that, a bottleneck in our storm responses was the number of qualified spotters; the board has heard this before. Consistent with recommendations, we have increase our internal crews, and by June 30th, we will have completed a review of additional qualified spotters to add to our internal crew number. We have also signed an agreement with an outfit, called Osmos, a storm restoration firm to supply up to 17 crews to assist with spotter duty. We have also arranged to use mutual aid crews for spotter duty.

The next large section is entitled *Outage Management System*. The failure of the OMS to operate as planned created a number of problems; tracking of outage numbers, locations, and contributing to the inability to acknowledge and verify customer outage increase, as this board is well aware. The CRT made a number of recommendations concerning the BWL's

OMS, including testing and building redundancy into the system. On March 11th, the BWL successfully tested our OMS System at 35,000 calls per hour, which is roughly equivalent to a disaster where we would have a 100% customer outage.

Another area that has been of concern following this outage involved record keeping. The CRT made a number of recommendations regarding record keeping, and one of the duties of our new emergency operations director will be to produce a records retention policy for emergency operations. As this Board knows, it has approved a general records retention policy; we will charge the new Emergency Operations Director with generating a records retention policy for emergency operations. This policy will be an integral part of the BWL's emergency operations plan, and restoration personnel will be required to adhere to that policy. This will assist with our lessons learned process, and help improve our emergency response procedures.

Another area that the CRT covered was entitled: *Trees and Vegetation Management*. The CRT has recommend that the BWL focus on our quality assurance report regarding our vegetation management program. We have done this by tasking our Supervisor of Vegetation Management with inspecting all trimming work performed by contract crews, and by publishing the supervisor's phone number so we can respond to customer concerns as quickly as possible.

The next area of concern is *Grid Asset Management*. The BWL's reliability is not dependent on, proper maintenance and management of its electrical distribution system, however, the CRT has made recommendations for maintenance budgets and grid asset replacement. We agree with the recommendations and will incorporate them into our asset management process.

Another area of concern for the CRT is securing downed lines and service masts. I am going to combine those areas and title it "Securing Downed Lines and Masts." The CRT has observed that many of the downed lines during the ice storm were due to service masts failing; to help remedy this effect, the CRT has recommended investigating breakaway service drops. The BWL is committed to studying these types of service masts to determine how effective they may be. In the meantime, the BWL is providing a funding mechanism for customers to pay for damaged or destroyed service masts in an interest-free manner.

The next areas of review involve Hardening the Primary Distribution System, Accelerating Repairs to the Primary Distribution System and Accelerating Repairs to the Secondary Distribution System. I am going to bring all of those into one and indicate that the CRT has made a number of recommendations on distribution maintenance investment and design to improve the BWL's transmission and distribution resiliency. Some of these recommendations were already part of the BWL's process, but those that are not, will help make the BWL's system more robust and more resilient, and will be incorporated into our planning design maintenance and capital investment programs.

There is also an area on Medical needs and Senior Citizens in the CRT Report. We believe that the CRT Team's recommendations in those regards are particularly important during an extended outage, and we are moving on with these recommendations. Once we secure

permission from our customers to share their information with local emergency operations centers, we will make sure that this information is available to local responders.

The next area with recommendations in the Report is an Energy self-reliance area and islanding. We again, agree with the CRT that much more has to be done to prepare the entire Lansing community for a catastrophic emergency, and that the BWL should play its part in building community resiliency.

The next item is entitled *Recommendations from the MPSC Staff Report*. I must mention that there is another item in the report pertaining to governance matters, which we are not taking up today and there were no recommendations. Then there is a Board of Commissioners oversight area. With all due respect, I find that it would be presumptuous of me to suggest the Board of Commissioners oversight, so I will not address those, but merely put it in the documents you have before you for the Board's considerations.

Then we come to the recommendation from the MPSC staff report. That might be a little confusing in that it is not the MPSC review of the CRT, it is the MPSC review of Consumer's Energy and Detroit Edison's outage problems and from them, there were some recommendations that the CRT wanted to include. The CRT has recommended that the BWL adopt some of the PSC's service quality standards, and we agree that these standards should be adopted to assure quality service to our customers. Therefore, we are adopting the following standards:

- We are going to take our customer call-answer time to less than 90 seconds. There is
 a call blockage factor; these are calls that were not answered. The CRT recommends
 that they be 5% or less; we are going to adopt that standard as well;
- There are time limits during which non-utility personnel can guard downed power lines. The limit is 90% of the time utilities must relieve non-utility personnel within 240 minutes, which is 4 hours; we are going to accept that as well. Also, according to the CRT, and according to the PSC, we should maintain enough certified employees to guard downed power lines and we will also do that.

The next section talks about BWL senior leadership and makes recommendations regarding senior management, and how it could be made more responsive to customer needs and concerns, and help assure that the BWL can officially implement these recommendations. I am in the process of realigning senior managers and although the details still need to be worked out, generally, I intend to do the following: have senior operations staff report directly to me; create a new administrative position responsible for finance, accounting, human resources, and other administrative functions, all reporting directly to me; and the director of governmental relations and community service will also report directly to me.

PSC recommendations of the CRT's review

The PSC has also provided us with recommendations that, among other things, will improve our performance during major storm events, help us identify and improve circuits that may be less reliable, keep the public better informed, back up storm responders, and improve service quality. The PSC's recommendation to monitor service quality in a circuit-by-circuit basis is very useful, and we are determining if this is possible with our existing software. If

not, we intend to procure that capability and that is because some of the circuits that we have now cross individual lines.

We are implementing the PSC's recommendations advocating trained and knowledgeable secondary role employees so that they can help out and quickly expand our response staff to deal with a major outage. Both the CRT and the PSC have made recommendations to expand and train our spotter staff. And we agree, as I've stated before, that this was a significant restoration bottleneck during the December ice storm, and as you know, the BWL has increased its own spotter crews, we have contracted with outsiders we have upped our mutual aid and this really does represent a formidable increase in our spotter resources.

There was a lengthy Question and Answer session following General Manager Lark's report.

Commissioner Price stated since the ice storm, other municipalities that we serve beyond the city of Lansing felt like they were not represented. I think the Executive Committee had a missed opportunity last week and recommendation number 67 in the CRT report is quite clear, to create a local government liaison committee and meet quarterly, and have a clear process for consideration of things for the board.

Chair Zerkle in response stated that, many options were discussed at the Executive Committee meeting last week regarding how to deal with surrounding communities, and the Committee decided to form an Ad Hoc Committee that will come up with recommendations as to how to best represent and address outside communities, and then present those recommendations to the Committee of the Whole for review and consideration.

There was discussion on the "Board Oversight" and recommendations section of the CRT's report.

Committee of the Whole Chair Louney, stated based on tonight's discussion that he would send an email to seek advice from Board members regarding suggestions of items that can added to the agenda for upcoming Committee of the Whole meetings. Regarding agenda items for Committee of the Whole, there was discussion regarding the Crisis Communication Review report being presented at the next Committee of the Whole meeting. Committee of the Whole Chair Louney stated that it is his understanding that there would be a presentation from management and that would lead into a discussion of how the Board of Commissioners wish to proceed as a board for internal communications amongst board members and outside parties because there was no clear policy when this crisis occurred.

Commissioner Ward stated that there was some discussion about how are we are going to communicate as a board and it was suggested that we were going to get some training, but putting that aside we do have a communications plan that is in place and we are still responsible for knowing what that communications plan is moving forward.

Committee of the Whole Chair Louney asked General Manager Lark, if we are better prepared for the next outage. In response, General Manager Lark said "I think there is no doubt of that." Committee of the Whole Chair Louney stated he believes that's what our customers want to know and that's what we've seen from all the actions that everyone's been taking. He thanked all of the employees and management for their efforts in doing so.

Other

General Manager Lark informed the Board that the Board of Water & Light's 1St Step program was nominated, and won the Capital Area Michigan Works 2014 Prosperity Award. This Award was for working with local partners to develop an innovative demand driven solution to local talent development.

General Manager Lark also spoke about the great job that was done for the Chili Cook-off by all the employees and everyone who participated. It was a very successful event.

Excused Absence

None

Public Comments

None

Adjourn

On Motion by Commissioner Price, Seconded by Commissioner Bossenhery, the meeting adjourned at 7:08 p.m.

Respectfully Submitted Dennis M. Louney, Chair Committee of the Whole

HUMAN RESOURCE COMMITTEE

June 10, 2014

The Human Resource Committee 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 6:00 p.m. on Tuesday, June 10, 2014.

Human Resource Committee Chairperson Tracy Thomas called the meeting to order and asked the Secretary to call the roll. The following members were present: Commissioners Tracy Thomas, Anthony McCloud, Cynthia Ward and Sandra Zerkle. Also present: Commissioners Margaret Bossenbery, Dennis Louney, Tony Mullen and David Price.

Absent: None

Public Comments

There were no public comments.

Approval of Minutes

Motion by Commissioner Ward, seconded by Commissioner Zerkle to approve the Human Resource Committee meeting minutes of May 20, 2014.

Action: Carried unanimously.

FY 2014 Board Appointee Performance

a. Corporate Secretary

Human Resource Chair Thomas stated that he would like to continue with the evaluation of the appointed employees and asked if there was any business or any dialogue regarding the Corporate Secretary's review. Chair Thomas said that he would like to recommend that the Board restore the assistant that the Corporate Secretary had in the past and, for consideration to be under the direction of the Board.

After some discussion regarding the Assistant for the Corporate Secretary the following motion occurred.

Motion by Commissioner Zerkle, Seconded by Commissioner McCloud to forward a recommendation to the Finance Committee to appropriate in the budget a full time employee to assist the Corporate Secretary.

Commissioner Zerkle, **rescinded** her motion and stated that she would reintroduce the motion under other later in the Agenda.

After dialogue regarding the Corporate Secretary's evaluation Human Resource Chair Tracy Thomas provided another opportunity for the Commissioners to express any thoughts or opinion or have dialogue regarding the Corporate Secretary's review.

Motion by Commissioner Zerkle and seconded by Commissioner McCloud to forward the resolution for the reappointment of Ms. Griffin to the Charter position of Corporate Secretary for fiscal year 2014-2015 to the full Board for consideration.

Action: Carried Unanimously

FY 2014 Board Appointee Performance

a. Internal Auditor

Internal Auditor Phil Perkins requested a closed session for the purpose of receiving his contractual year-end performance evaluation as permitted by the Open Meetings Act exemption MCL 15.268(a).

Motion by Commissioner McCloud, seconded by Commissioner Zerkle to go into closed session.

Roll Call Vote: Yeas: Commissioners' Thomas, McCloud, Ward and Zerkle

Nays: None

Human Resource Chair Tracy Thomas conveyed to Internal Auditor Perkins the following:

"Before we go into closed session, please know that you may rescind your request at any time. You must verbally or directly rescind your request, at which time closed session will end immediately and we will continue consideration of your evaluation in open session."

The Human Resource Committee meeting went into closed session at 6:21 p.m.

Motion by Commissioner Zerkle, seconded by Commissioner McCloud that the Human Resource Committee return to open session.

Action: Carried unanimously

The Human Resource Committee meeting reconvened in open session at 7:05 p.m.

Upon conclusion of the closed sessions, Human Resource Committee Chair Thomas conveyed that now would be the time for any dialogue regarding any business dealing with the Internal Auditor's review. There being none, the meeting proceeded.

Motion by Commissioner McCloud and seconded by Commissioner Zerkle to forward the resolution for the reappointment of Mr. Perkins to the Charter position of Internal Auditor for fiscal year 2014-2015 to the full Board for consideration.

Action: Motion Carried

FY 2014 Board Appointee Performance

a. General Manager

General Manager J. Peter Lark requested a closed session for the purpose of receiving his contractual year-end performance evaluation as permitted by the Open Meetings Act exemption MCL 15.268(a).

Motion by Commissioner Zerkle, seconded by Commissioner McCloud to go into closed session.

Roll Call Vote: Yeas: Commissioners' Thomas, McCloud, Ward and Zerkle

Nays: None

Human Resource Chair Tracy Thomas conveyed to General Manager Lark the following:

"Before we go into closed session, please know that you may rescind your request at any time. You must verbally or directly rescind your request, at which time closed session will end immediately and we will continue consideration of your evaluation in open session."

The Human Resource Committee meeting went into closed session at 7:10 p.m.

Motion by Commissioner Zerkle, seconded by Commissioner McCloud that the Human Resource Committee return to open session.

The Human Resource Committee meeting reconvened in open session at 8:28 p.m.

Upon conclusion of the closed sessions, Human Resource Committee Chair Thomas conveyed that now would be the time for any dialogue regarding any business dealing with the Internal Auditor's review. There being none, the meeting proceeded

Motion by Commissioner McCloud and seconded by Commissioner Zerkle to forward the resolution for the reappointment of Mr. Lark to the Charter position of General Manager for fiscal year 2013-2014 to the full Board for consideration.

Action: Motion Carried (3/1 Ward)

Other

Commissioner Zerkle thanked Human Resource Chair Thomas for his due diligence on the evaluation process. She stated that this was a difficult process and appreciates all the efforts that he has put into this process. Chair Zerkle also requested that a recommendation be forwarded to the Finance Committee to appropriate funds in the 2015 budget for an assistant for the corporate secretary.

Motion by Commissioner McCloud, Seconded by Commissioner Ward to forward a recommendation to the Finance Committee to appropriate in the budget for a full time employee to assist the Corporate Secretary.

Motion by Chair Thomas, Seconded by Commissioner Zerkle to make a friendly amendment to the main Motion to include that the employee would be under the direction of the Board of Commissioners.

Action: Motion Carried with Friendly Amendment

Adjourn

The Human Resource Committee meeting adjourned at 8:48 p.m.

Respectfully submitted, Tracy Thomas, Chair Human Resource Committee

NOMINATING COMMITTEE MINUTES June 26, 2014

The Nominating Committee 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 5:00 p.m. on Thursday, June 26, 2014.

Committee Chair Tony Mullen called the meeting to order and asked the Corporate Secretary to call the roll. The following committee members were present: Commissioners Tony Mullen, Anthony McCloud, Tracy Thomas and Cynthia Ward. Board Member Louney arrived at 5:30 p.m.

Absent: None

Approval of Minutes

Motion by Commissioner Thomas, seconded by Commissioner McCloud to approve the Nominating Committee meeting minutes of June 26, 2013.

Action: Motion Carried

Public Comment

There were no public comments.

Officer & Committee Survey Form/Memo

There was no dialogue under this section of the Agenda.

Nominate Board Officer Candidates for FY 2014-2015

The Nominating Committee met to review the Commissioner Survey responses for consideration of board officer nominations for the Board of Water & Light Board of Commissioner's Chair and Vice Chair for fiscal year 2014-2015.

Nominating Committee Chair Mullen opened the floor for nominations and the following nominations were made:

• **Motion** by Commissioner Ward, seconded by Commissioner McCloud to nominate David Price as Chair and Dennis Louney as Vice Chair:

Discussion: Commissioner Thomas questioned how the process would be handle this year and if we are forwarding candidates as a slate.

Nominating Chair Mullen stated after some thought he concluded that the nominating committee was set up for a purpose and one of the purposes is to allow for the committee to express the pro and cons of each individual candidate. He suggested a slate would be the way to go. I think that we should put all four individuals that want these positions of Chair and Vice Chair on a slate and forward to the full Board.

Action: Motion Failed (2/2)

• **Motion** by Commissioner Thomas, Seconded by Commissioner Mullen to nominate Margaret Bossenbery as Vice Chair:

Action: Motion Failed (2/2)

• **Motion** by Commissioner Mullen to nominate Margaret Bossenbery as Vice Chair and David Price as Chair.

Action: Motion Died, No Second

• **Motion** by Commissioner by McCloud, Seconded by Commissioner Mullen to nominate David Price as Chair.

Action: Motion Carried (3/1)

Motion by Commissioner Thomas to nominate Margaret Bossenbery as Chair.

Action: Motion Died, No Second

Motion by Commissioner McCloud to nominate Cynthia Ward as Vice Chair.

Action: Motion Died, No Second

• Motion by Commissioner Mullen to nominate Anthony McCloud as Vice Chair.

Action: Motion Died, No Second

• **Motion** by Commissioner McCloud, Seconded by Commissioner Mullen to nominate Tracy Thomas as Vice Chair.

Action: Motion Fails (2 Nays/1 No/1 Abstain)

• **Motion** by Commissioner McCloud, Seconded by Commissioner Ward to nominate Dennis Louney as Vice Chair.

Action: Motion Fails (2 Nays/1 No/1 Abstain)

Commissioner Ward stated reasons why she supports Dennis Louney in the position of Vice Chair. She stated that he has earned the position over the past six months.

Nominating Chair Mullen in response to the previous response he would like to add that he appreciate the work of the current leadership but personally believes that we need a breath of fresh air coming through the Board, both chair and vice chair position.

Commissioner McCloud stated reasons why he supports Commissioner Louney as Vice Chair. He stated that he has moved us forward during the rough times and deserves the opportunity continue the work he started.

Commissioner Thomas stated his appreciation for the current vice chair. He also stated his support for Commissioner Bossenbery as Vice Chair, stating that she would bring in fresh, open, cooperative and collaborative leadership that will not hurt the Board as we move forward in this transition period.

• **Motion** by Commissioner Ward, Seconded by Commissioner McCloud to nominate Commissioner Loney to be included in the slate to serve as Vice Chair.

Action: Motion Fails (2/2)

Motion by Commissioner Thomas to nominate Dennis Louney as Chair.

Action: Motion Died, No Second

Commissioner Louney said that he appreciates the opportunity to serve in the role as Vice Chair and would like to continue in that role; however, he is open to other possibilities if other positions are being considered. He said that he has always indicated that the serves at the pleasure of the Board, wherever they see him fitting.

Motion by Commissioner Thomas to nominate Dennis Louney as Vice Chair.

Action: Motion Died, No Second

It seems that we are at an impasse and suggest that we bring this back to the full Board for consideration and nominating from the floor on July 22, 2014. Moving forward the nominating of Commissioner David Price for Chair.

Since there was, only a partial slate of officers recommended from this committee this business matter will be taken up at the Regular Board meeting to be held on July 22, 2014 and nominations will be taken from the floor.

Commissioners McCloud stated that he would like to have more discussion regarding the slate. He said that it is his hope that we can come away with a slate and want to make sure that we explore all possibilities and options.

• **Motion** by commissioner McCloud, Seconded by Commission Ward to nominate Commissioner Price as Vice Chair.

Action: Motion Failed (2Yay, 1Nay, 1Abstain)

Commissioner Mullen suggested either Commissioner's Thomas or McCloud step up and serve as vice chair. That way we would have full slate.

• **Motion** by Commissioner Ward, seconded by Commissioner McCloud to nominate Commissioner Louney as Chair and Commissine Price as Vice Chair.

Action: Motion Fails (2/2)

• **Motion** by Commissioner to nominate Commissioner Louney as Chair and Commissioner as Vice Chair.

Action: Motion Died, No Second

 Motion by Commissioner Thomas to nominate Commissioner Louney as Chair and Commissioner McCloud as Vice Chair

Action: Motion Died. No Second

• **Motion** by Commissioner McCloud, Second by Commissioner Ward, to nominate Commissoner Louney as Chair and Commissioner Ward as Vice Chair.

Action: Motion Failed (2/2)

• **Motion** by Commissioner Ward, Second by Commissioner McCloud to nominate Commissioner Ward as Chair and Commissioner Louney as Vice Chair.

Action: Motion Failed (2/2)

• **Motion** by Commissioner Thomas to nominate Commissioner Bossenbery as Chair and Commissioner Louney as Vice Chair.

Action: Motion Died, No Second

• **Motion** by Commissioner McCloud, Seconded by Commissioner Ward, to nominate Commissioner Ward as Vice Chair.

Action: Motion Failed (2/2)

• **Motion** by Commissioner Thomas, seconded by Commissioner Ward to nominate Commissioner Louney as Chair and Commissioner McCloud as Vice Chair.

Action: Motion Failed (2/2)

We have reached an impass and Noinimanting Chair Mullen repeated that a partial slate of officers recommended from this committee this business matter will be taken up at the Regular Board meeting to be held on July 22, 2014 and nominations will be taken from the floor.

The only Motion Passed at this meeting was to forward to the full Board the consideration of David Price as the Chair of the Board.

There being no further business, the meeting adjourned at 5:51 p.m.

Respectfully submitted, Tony Mullen, Chair Nominating Committee

COMMITTEE OF THE WHOLE July 8 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, July 8, 2014.

Committee of the Whole (COW) Chair Dennis M. Louney called the meeting to order and asked the Corporate Secretary to call the roll.

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

Absent: None

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

CRT/MPSC Reports Recommendations update

General Manager Lark stated that at the last meeting we talked about the Community Review Team's (CRT) recommendations and how we hope that those recommendations, together with the Public Service Commission's (PSC) thoughts, as well as our own 54 points would operate to make the BWL a much stronger utility; in fact, ensuring that during outages that customers get their power back more quickly, and have access to better information than they had. As you know, we have begun the process of putting together a new BWL that incorporates a lot of those activities.

We have been working the 54-point outage report for some months longer than we have the CRT, and for those of you who had access to your email know I did send to you that 54 point update, and you can see that many of the items are completed; those that are not will be completed shortly and some will never be completed because they are ongoing items.

General Manager Peter Lark provided an update of the BWL's response to the CRT, PSC, and its own 54 recommendations. (See attached)

	II. Planning and Preparation		
Item #	Division	CRT Recommendation	BWL Division Response
Syster	n Resilience		
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.	Agreed. The BWL will work jointly with local emergency planners and municipal governments to update the Critical Facilities Inventory for both electric and water services. The updated inventory will be completed by August 31, 2014. By September 30, 2014, the BWL will secure critical infrastructure agreements with local EOC's for sharing its Critical Facilities inventory. The BWL will then work with the Lansing EOC, and through them with other local emergency planners and municipal governments on integrating the Critical Facilities Inventory into the Regional Emergency Operations Plan. After August 31, 2014, the Critical Facilities Inventory update and integration process will take place on an as-needed basis but no less frequently than annually by the 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.	Agreed. As part of the process and timing described in CRT#1 above, the BWL will assist all units of government representing its customer base with identifying the Special Needs facilities identified in this Recommendation.
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.	Agreed. By March 31, 2015, the BWL will complete a survey of critical facilities for possible combined heat and power (CHP) opportunities. The survey will include existing distributed generators in the BWL service territory as demand response resources. The BWL will then work with the identified facilities to provide technical assistance in determining the feasibility of implementation of projects, including purchase power agreements. This work will be completed by May 31, 2015. The BWL will also expand its distributed solar energy program by August 1, 2014. The BWL will continue

	1		Page 22 o
			its program of grid sectionalizing to help preserve service to critical facilities with onsite generation.
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.	Agreed. As indicated in CRT#3 above, by May 31, 2015, the BWL will explore participation options with those candidates identified in its survey of CHP and distributed generation facilities.
Nation		ent System Implementation & Training	
	iai incident ivianagemi I		T
5		Recognize its role to assist Regional, City and Township Emergency Management in disaster response by implementing all of the following:	
а	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.	Agreed. On April 4, 2014, the BWL assigned three electric liaisons to the Lansing EOC and on April 8, 2014, the BWL assigned three water liaisons to the Lansing EOC. Each liaison is familiar with and either experienced in design or operations of the BWL electric or water distribution systems. Status: Completed.
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	Agreed. Within 60 days of being hired, the Emergency Operations Director will survey local EOC's for scheduled EM exercises and request participation. The BWL's Emergency Operations Director will be tasked with ensuring BWL communicates with local units of government including coordinating BWL participation in local emergency exercises.
С	Lead: Emergency Operations Director Support: All LBWL Managers	Assure that all operations employees receive basic NIMS training, 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; that all first-line supervisors take those courses, plus ICS-200, Basic ICS; that all senior management officials take those 3 courses, plus ICS-400, Advanced ICS.	Agreed. The BWL currently has the following ICS trained employees: 100 Introduction to Incident Command: 17 ICS 200 ICS for Single Resources and Initial Action Incidents: 13 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: 12 IS: 800 National Response Framework, An Introduction: 2 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.
d	Lead: Emergency Operations Director Support: Appropriate BWL Managers	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	Agreed. The BWL 's Emergency Operations Director will be tasked with participating and coordinating BWL participation with units of government representing its customer base in all after action reviews, including exercises, major outages, disasters and emergencies. The BWL will share information, data, and its experiences with other participants to improve regional emergency response. This will be an ongoing responsibility of the Emergency Operations Director with support from BWL Management and Staff.

е	Lead: Emergency Operations Director Support: Dave Bolan, Dick Peffley, and Calvin Jones	Develop and maintain good working relationships with the first-responder community for all units of government representing its customer base	Agreed. To develop and maintain a good working relationship with the first-responder community for all units of government representing its customer base, by the end of the third quarter FY15 the BWL's Emergency Operations Director and GRCSD staff will have met with first responders from throughout its service territory to discuss emergency plans and responder roles. This recommendation will be an ongoing responsibility of the Emergency Operations Director. The BWL recognizes this on-going relationship as an important component of the Unified NIMS structure and guidelines.
Contin	gency Planning, Traini	ing and Exercises	
		Statements Provided (pg. 27)	
	uity of Operations		
6	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	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.	Agree. The BWL's Emergency Operations Director will oversee and complete the consolidation of BWL Emergency Plans by October 31, 2014. The BWL Emergency Operations Director will be tasked with coordinating BWL plan with local or regional plans by December 31, 2014 and on an ongoing basis as updates are adopted. The Emergency Operations Director will also be tasked with coordinating the BWL's participation in City or regional exercises.
7	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	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.	Agreed. The BWL's Emergency Operations Director will develop and coordinate an Emergency Management training program for all Managers and staff with emergency responsibilities. The program will include annual training. The initial training will be completed within 120 days of the Emergency Operations Director's hire. The Emergency Operations Director will also conduct and coordinate emergency training with other local or regional emergency exercises.
8	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	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.	Agreed. The BWL will work with local officials and others on a regional planning effort, coordinating as appropriate with the State Police EMHSD District 1 Coordinator. When complete, the BWL will coordinate its Emergency plans with local EOC's and will participate with local EOC's in regional planning and training.
9	Lead: Emergency Operations Director Support: Dave Bolan, Gennie Eva, Dick Peffley, Bruce Cook, and Nick Burwell	Include Business Continuity Planning in its development of a comprehensive Emergency Operations Plan.	Agreed. The BWL's Emergency Operations Director will coordinate development of a business continuity plan as part of the BWL's EOP, with completion by March 30, 2015.
Inter-a	gency Communication	 ns and Emergency Operations Center	

10	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	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)	Agreed. The BWL's Emergency Operations Director will consolidate BWL's emergency plans into a single BWL EOP by October 31, 2014 per CRT#6 above. The BWL Emergency Operations Director will be tasked with coordinating the BWL plan with local or regional plans by December 31, 2014 and on an ongoing basis as updates are adopted. The BWL is committed to a sustained partnership with local EOC's and a Regional EOC and will support development of a regional EOC, should one be adopted.
11	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	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.	Please see response to CRT # 10
12	Lead: Emergency Operations Director Support: Dave Bolan, Gennie Eva, and Dick Peffley	Develop, in coordination with the governments representing its customer base, an Energy Annex to a Regional Emergency Operations Plan.	Agreed. The BWL Emergency Operations Director will coordinate the BWL Emergency Plan with local governments and a Regional Emergency Operations plan. The BWL Emergency Operations Director will coordinate the BWL plan with local units of government by December 31, 2014.
13	Lead: Calvin Jones Support: Emergency Operations Director and Dan Barnes	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.	Agreed. On January 23, 1014, the BWL's Governmental Relations and Community Services Department (GRCSD) began a program of outreach to neighborhood associations. To date, the GRCSD has been in direct communications; in person, by phone, or by email; with all 124 known neighborhood associations who's members, in part, or entirely, fall within the BWL Service territory. The GRCSD goal has been to promote communications and education regarding preparations for future emergencies. The GRCSD is also collaborating with Do1Thing, the Red Cross, and The Power of We to make the BWL an emergency preparedness resource for the BWL's customer base. As an ongoing responsibility, the GRCSD will continue outreach to neighborhood associations and other local organizations in order to provide information, coordination, and assistance with emergency preparedness plans. Status: Completed except for Emergency Management portion.
—	risis Communications	Contract the state of the state	Accord The DMI has bird a social and
14	Lead: Stephen Serekaian 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.	Agreed. The BWL has hired a social media specialist and has tasked the position with undertaking and coordinating social media communications with BWL customers including, among other media, updating the BWL's Facebook, twitter, Nixle, and website. The BWL has recently created a near real time outage map with restoration times on its website. Status: Completed.
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.	Agreed. The BWL communication, GRCSD staff, and leadership have already begun NIMS training. The BWL's Emergency Operations Director will be tasked with assuring communications staff annually update their training and that BWL's communications staff and leadership team participate in local and regional emergency exercises.

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.	Agreed. The Crisis Communications plan was developed by consultants based on industry best practices. The BWL agrees that customer communications must be timely, accurate, consistent, meet customer expectations, and provide sufficient information for customers to make informed decisions. To ensure that the BWL's crisis communications plan meets those objectives, the BWL will continue to review crisis communications studies and reports and make any necessary modifications to its plan by August 31, 2014. Following this, 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.	Agreed. The BWL Emergency Operations Director will be tasked with consolidating BWL emergency plans and will include the crisis communications plan in the consolidated plan as an annex. Emergency communications staff will undergo NIMS training, which will be completed by November 1, 2014, and at least one staff member will complete training for qualification through NIMS protocols.
	nergency Planning & t	he Collaborative Planning Process	
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).	Agreed. 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.	Agreed. 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.	Agreed. 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 tricounty region, to take place annually.	Agreed. The BWL will participate in full scale regional training exercises.
Emerg	ency Declarations		

24	That all units of government within or partially	City of Lansing and local units of government
	within the BWL customer service area review	
	their emergency operations plans to include a	
	process for assessing the need for an anticipatory	
	emergency declaration.	

		ACTIONS		FOLLOW-UP
table resp	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			d completion date 10/16/14
The		implementing a set of triggers	Complet	ed 4/14
Dist		ate its Transmission and its ry response plans into one	maintair will not l docume	ed 6/30/14, both plans updated and led simultaneously, however plans be fully consolidated into one int due to need to demonstrate insmission compliance.
with	_	te the benefit of collaborating tilities to track and estimate nt weather.	Expected	d completion date 8/29/14
the i	ice storm, the BW	operience with the impact of L will make use of additional yees and these roles will be nt sections.	seconda identifica for the re	ry role program which inlcudes ation of position and roles required estoration plan completed.
			employe	mpleted 6/30/14. Training les to fill secondary roles uled for completion November 30,
unde mair seer impi syste and	erground to be contenance practices as to be a more resolving the resilientem. However, for are willing to pay	tound placing overhead lines of effective. Instead reviewing sand construction standards easonable method for cy of the BWL's distribution those customers who want for undergrounding existing provide the service.	Complet	ed 5/8/14
cycle trim bran	e and is in the proming standards ar	dhere to a 5 year trimming cess of modifying its tree and procedures to remove all we distribution lines and better a major storm.	Complet	ed 3/24/14
cont past reco work num	rractors and assigr performance. The ord of performance k. Recently, the B aber of tree trimm	use multiple tree trimming work to contractors based on e contractor with the best will get a larger portion of the WL temporarily increased the ing crews under contract to	reschedu	expected completion date 5/16/14 uled to 8/29/14 due to contractors develop deployment plan including evels.
eighteen. 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.		Complet	ed 2/18/14	

	Page
The BWL is in the process of carefully revies spotter duty during the ice storm and deter how many additional trained spotters wou needed to efficiently secure down lines an timely damage assessment during an even destructive impact of the ice storm. Based analysis, the BWL will survey its staff for acceptance who would be suitable for spott and train personnel for both spotter and dassessment duty.	rmining Id be d provide t with the I on this dditional er duty
The BWL will also utilize retired line worked perform damage assessments and serve as	, , , , , , , , , , , , , , , , , , ,
The BWL will consider contracting with ele service firms for damage assessment servi supplement its own staff.	
The BWL is developing common reporting methods to be used by all spotters and da assessors and will stress the importance or to these during the annual training session	rescheduled to 8/29/14; working with adhering Osmose, contract firm for spotter and line
The BWL will evaluate the use of damage proof tools to determine if these tools could help assessing possible damage earlier in a storapproach.	o in
The BWL will remind customers that lines with red and white tape are power lines are indicates that the BWL is aware that the line. The BWL will publish this information on it and Customer Connections newsletter.	nd the tape ne is down.
The BWL has expanded the number of util non-utility electric service contractors with has mutual aid agreements or service contlist is shown below. Existing Agreements• Municipal Electric Association (35 Municip Utilities)• Consumers Energy New Agreem American Public Power Association• Asplut Power• Hydaker-Wheatlake• FEMA Mutual (Upon a Declaration of a State of Emergen Pending Agreements• DTE Energy (Under Negotiations)These agreements both increnumber of potential crew sources and progeographical diversity as well. For example agreement would enable the BWL to bring from a number of different states. In the declaration of emergency, the FEMA agree would allow the BWL to bring in crews from anywhere in the United States.	n which it racts. The Michigan all ents • ndh • Kent al Aid ccy) ease the wide e the APPA crews in event of a ement m nearly
The BWL is in the process of hiring 3 additional dispatcher to suits workforce and to help manage crews directoration process.	pplement with dispatcher.

	Page
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 6/30/14, triple number of crews available.
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.	Original expected completion date 11/14/14. Electric Transmission and Distribution plans updated 6/30/14. Update of critical list expected 8/29/14. Consolidation of BWL emergency plans scheduled for 10/31/14, and coordination of BWL consolidated plan with local officials expected to be completed by 12/31/14. Consolidation of BWL emergency plans along with table top exercises have increased the scope of this recommendation resulting multiple steps and a new final completion schedule.
The BWL will review it's storm inventory based on the recent ice storm.	Completed 3/21/14
The BWL will investigate connecting its line truck laptops to its OMS system as a tool to assist crews with storm responses.	Completed 3/18/14
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 and tested 3/11/14
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 3/11/14
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
The BWL is hiring additional call center staff.	Completed 2/24/14
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 2/13/14
The BWL will trigger the IVR in the 877 system to direct non-matched callers to voicemail during major outage events.	Completed 2/13/14
The BWL has reconfigured the Call Center to send messages in the voice mailbox to CSR's automatically.	Completed 3/1/14

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 1/24/14
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 1/24/14
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 3/6/14
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.	Original expected completion date 6/20/14 rescheduled to 7/31/14. Date moved due to technical issues: vendor has changed the way the call back files must be sent and BWL is making the necessary technical adjustments.
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 4/25/14
The BWL has added text outage reporting to the 877 system to offer customers another method for reporting outages.	Expected completion date 7/25/14
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 6/28/14
The BWL is working to improve its ability to automatically call back customers and provide them with updated outage information.	Completed 6/27/14
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.	Expected completion date 7/25/14
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

	Pag
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 3/11/14
Although the external email to Customer Service functioned normally during the storm, the BWL is investigating establishing a redundant external email system.	Expected completion date 8/15/14
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 3/11/14
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 6/28/14
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 5/9/14
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. The BWL will be more proactive informing customers of where their responsibility for service ends, the	The process of identification and notification has been completed. The process will be operational in the first quarter FY15 after permission to share information has been secured from customers. Completed
service mast, and the BWL's begins. 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 June 4, 2014
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

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
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
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
Communication improvements have been noted on Facebook and Twitter with positive comments by our customers.	Completed
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
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 2/17/14
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

The Committee of the Whole reviewed the following:

CRT and Governance Recommendations

The CRT recommends that the Board of the BWL and the City:

1) Hire an "operational auditor" to conduct annual performance audits of the BWL operations and planning.

Outcome: Instruct Auditor Perkins to come back with a proposal outlining what he sees as being an operational audit scope and the estimated level of work needed from an outside contractor. That information will be brought back to committee for consideration.

Establish a standing committee for review of, and contract with outside expertise for, an annual operational audit.

Outcome: Deferred until further conversation with the Internal Auditor

 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.

Outcome: Agreed On/In Process

4) Request the City to consider provision to the BWL Board of expense reimbursement and/or some minor stipend for attendance.

Outcome: Deferred

5) 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

Outcome: An Ad Hoc Committee has been established headed by Chair Zerkle. The Committee will examine this recommendation with the goal in mind to look at involving all those other local units and then determining the procedures that that would occur. The Ad Hoc committee is charged with finding the best way to implement the recommendation.

6) 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.

Outcome: In Process/Based on the Mayor's recommendations

Board of: Commissioner Crisis Communication Plan

The Committee had dialogue regarding the Board of Water & Light Board of Commissioners establishing own Crisis Report. After a lengthy conversation, it was determined the Committee would like to consider a draft of the Lansing City Council recommendations, and use their plan as a temple to create our own. Committee of the Whole Louney stated that he

would work with the Corporate Secretary to revise the template and bring it back to the Committee of the Whole for review.

Board of Water & Light Crisis Communication Plan

General Manager Lark stated that the Board of Water & Light's Communication Plan was created by the firm of Martin Waymire, who surveyed a number of utilities throughout the country, a number of relevant utilities and came up with what they believe, was the best practices of crisis communications plan.

General Manager Lark introduced, Board of Water & Light Communications Director Steve Serkaian to provide details of the plan.

Mr. Serkaian stated the following:

We asked Martin Waymire to look at best practices of utilities all across the country and without exception, found that our customers wanted to know three important things during an outages: 1) are you aware that my power is out; 2) what caused the outage, and 3) when will my service be restored. During the ice storm, quite frankly, we could only answer one of those questions - what caused the outage. Moving forward, these three questions, and answers to these questions have become our guiding mantra. Any customer outage, large or small since the ice storm, whether it's 12 outages like we had over the 4th of July, or larger outages, I think our biggest one was perhaps 3,500; we have communicated answers to all three questions, both through traditional media and through social media.

Before we get to the actual crisis document and your questions, it is important to look at what the research found and how we address the research; because, those elements and those changes are every part of this plan, and something that we operate under every day; both with regular communications to our customers through social media, and traditional media about our day to day activities. Outages and everything in between, the research came back and suggested a number of things; the changes I am going to describe and the improvements I'm going to describe, have been the direct result of work by dozens of people at the BWL. I only had a small part of it; dozens of folks continue to work on improvements lead by our general manager, Mr. Lark, and it's important to tell this Board and the public that, in my experience in working for public entities there has been a sea change of ways we have done things differently. These are important changes that we're communicating though our newsletters and to the media, but at some point there's going to be an end point to the focus on us, so that we do our day-to-day business and do it well, as we have for more than 100 years.

Mr. Lark mentioned a lot of things in his review of the CRT recommendations. Let me get back to the findings of the research of Martin Waymire made, they found the best practices across the country that additional communications channels are necessary to allow customers to communicate easily and conveniently with us. During the ice storm, we only had one 877 line, and because of the problems with the OMS, we were unable to communicate with customers. They were only able to effectively communicate with us, and we couldn't tell them when their power was going to be restored. Those problems have been fixed, addressed, and tested. We now have additional sources of how we can communicate

with our customers, and our customers with us; our interactive outage map, which is in our outage center, now has the ability for customers to report an outage. They can check whether the power is on or off, and will be able to get right-now restoration time, as they were able to get that through the 877 number. Targeted for early August, we are going to launch a mobile app for all of our customers to download on their mobile platforms whether it is a smart phone, tablet, and so on; the mobile app would be able to allow customers to report outages and get updates on outages, and this coming December, we are going to launch a new feature that will allow our customers to report outages via texting from their phones. Therefore, from December and January, the communication vehicle will have multiple communication vehicles that our customers can communicate with us.

During the ice storm, we had outage information scattered throughout our website, and not easily found. Since then, we have created an icon on our front page; if you click on it, it goes directly to the outage center and on that outage center is an outage map, and you can click that to see an outline of our service territory and inside our service. If there is anything inside the map relative to outages, you can just hover over it with your mouse. The site refreshes every 15 minutes. It has changed the way that I have done business with reporting outages because, once I get the alert, I go directly to the outage center to see the outage map and what the boundaries are; that has streamlined and made my job more efficient in communicating with Amy Akers' support, and reporting to the social media what the boundaries are, what the restoration time is, and through our other Internal information, what the cause of the outage is. Therefore, the outage center has been, and is interesting to see because our customers are giving each other updates; I call that the market correcting itself, and it's wonderful to observe. Now with our ability to push people to our outage map and the outage center, it is a really convenient thing, for which our customers screamed for during the ice storm, and that we now have, six months after the fact.

We've got the outage center prominently displayed on our home page; the outage map has been updated to allow folks to post their outages and to get updates on restoration, that's going to be in the August "Connections," so it will go customer-to-customer directly through the billing insert. We also have a number of tabs that talk about what to do when the lights go out, how to prepare for outages, how the BWL handles outages, vegetation management information. We've got a sign up on the site along with social media streams, both on Facebook and Twitter. The research also told us that we have to do a better job communicating with all of our key audiences before the crisis happens, and before the storm hits; now at least two days before a forecasted storm, we are communicating with our customers and media both, though traditional media and social media. Advising that a big storm is on its way and we think it's going to hit, if it does we're ready, we've got crews on stand-by and that these are things that you need to do if your power goes out; in particular, we push them to two places one the 877 number.

We've also expanded our constituent groups through which we send social media and traditional media updates; to those constituent groups beside the board, our internal list, all master media lists, including an expanded governmental list of all local, county, and state officials throughout our service territory. We have created our neighborhood association list throughout our service territory, we have a faith-based list and, in all press release communications, we sent emails to them not only during outages and crises, but also in our day-to-day stuff because, it is important that these constituent groups know the kind of

things that we are doing. Now in every outage, even minor outages of 10, 100, 500 or more than 1000, we always post, that we know about the outage, we know where it is, and we try to give a restoration time. Information is always posted on social media, as that's where all our customers are going for information. We post a Twitter message about an outage, and we find many times that the media, the Lansing State Journal and Channels 6 and 10 are retweeting our posts. A number of commissioners are also re-tweeting our posts. So there is no longer, a silver bullet of how we are communicating with our customers, it is multiple mediums and it is multiple ways that people are getting the information. We have also created an email group list that we send to our constituent groups, we have also created a number of templates, that give us direction on how to address a small outage, a medium sized outage and a large sized outage, and the same is on the back of the crisis plan that was included in your packets today. I believe there were about 9 templates that we included in March, when we released the plan and has now grown to about 17.

The crisis plan itself is sort of a living breathing document that is always being adjusted. For instance, when the emergency manager comes on board, we will have to fold this new position into it to reflect this person's leadership with a crisis. Therefore, we are constantly making tweaks to the templates. We are also developing a power point presentation that senior leadership including Mr. Lark will be taking to the community. These are all things that we're doing to communicate the changes we have made since the ice storm. The BWL was also told that the tone of communications needs to be improved, and that that traditional media communications and social media posts regarding outages should reflect our humility; that we should apologize to customers for the outage; that we should thank them for their patience in enduring an outage and we try to do that in every instance of an outage. Lastly, the research said to put standard operating policies and protocols in place to guide communications during routine practices, outages, whether large or small, and crises that the ice storm reflected; we have done that. The kinds of changes that I have characterized, the elements that have gone into the crisis plan is something that we operate under every day, and if a major outage hits our community tomorrow, we are going to be in much better shape in terms of communicating with our customers and being able to respond in appropriate way both in terms of communications and operationally so that we can get our customers power back on, as quickly as possible.

Mr. Sarkaian spoke about marketing efforts that have taken place, or have been put into place since the ice storm. For Example "The Power of We" and "Do 1 Thing" have been implemented as a tool to help with outreach.

There was a lengthy question and answer session regarding the responsibilities of the Emergency Manager, the Board of Commissioner communicating with media, and the inclusions of a Board member on the crisis communication team.

Committee of the Whole Chair Louney thanked Mr. Sarkain for his efforts on the presented crisis communication plan.

<u>Dialogue re: Board of Commissioners Governance Training.</u>

The Committee of the Whole had dialogue regarding the desire for governance training. Board Chair Zerkle presented a proposed agenda as well as a bio on a recommended presenter for the training. After some dialogue and reviewing the presented proposed agenda, it was determined that this may be a good place to begin, however, there was uncertainty regarding this proposed agenda, and the proposed presenter regarding obtaining the desired educated outcome. Upon conclusion of the discussion, it was determined that the Board Chair would have the Corporate Secretary send an email asking the Board of Commissioner to submit to their expected learning outcome and/or specific agenda subjects that you would like addressed in the governance training.

Other

Board Chair Zerkle conveyed that she and Human Resource Chair Thomas are prepared to start the process for negotiating the contract for the 3 appointed employees. There was a lengthy conversation regarding the evaluation and negation process. Human Resource Chair Thomas stated that there was a process established last year and the same process would be used this year. Committee of the Whole Chair Louney stated during this dialogue what he heard was that we had a process in place and some board members are saying that they think the process needs to be reviewed and I feel that that is an issue for the HR committee to look at, if the chair deems it necessary.

Committee of the Whole Chair Louney stated that he was notified last week about a legal case that was not on their legal update, and asked that the General Manager contact the Commissioners' by email and provide some details. General Manager Lark in response stated that he was not aware of such a case but would look into it.

Excused Absence

None

Public Comments

None

<u>Adjourn</u>

On Motion by Commissioner Price, Seconded by Commissioner Bossenhery, the meeting adjourned at 8:12 p.m.

Respectfully Submitted Dennis M. Louney, Chair

Committee of the Whole

FINANCE COMMITTEE

July 8, 2014

The Finance Committee of the Board of Water and Light met at the BWL Headquarters-REO Town Depot located at 1201 S. Washington Ave., Lansing, MI, at 8:23 p.m. on Tuesday, July 8, 2014.

Finance Committee Chairperson Margaret Bossenbery called the meeting to order and asked the Corporate Secretary to call the roll. The following members were present:

Commissioners Margaret Bossenbery, Tony Mullen, Dennis M. Louney; Also present Commissioners David Price, Tracy Thomas, Cynthia Ward and Sandra Zerkle.

Absent: None

Public Comments

Chuck Slammer, Lansing, MI, spoke in opposition of the proposed rate increase.

Approval of Minutes

Motion by Commissioner Price, seconded by Commissioner Louney to approve the Finance Committee meeting minutes of May 21, 2014.

Action: Carried Unanimously

Finance Chair changed the order of the Agenda.

External Audit Communication to the Board – Presented by Plante & Moran

General Manager Lark introduced external auditor Doug Rober, Partner with Plante Moran (P&M) and Marie Stiegel, Manager with P&M, who reviewed and presented the Auditing Process.

Mr. Rober said this is the beginning of the audit process and part of that process is to meet and present governance with an overall analysis of the audit plan. This also provides an opportunity for the Commissioners to provide any insight on whether there is anything specific that they are aware of or would like us to focus our time on in addition to what is planned in the audit.

Mr. Rober stated that the scope of the Audit that will be performed is to express an opinion of the financial statements of the Board as well as each of the pension plans. He stated there will also be a management letter or significant deficiency letter if required at the end of the engagement, ultimately issuing an AU260 communication letter. He said their focus is to perform procedures on the financial information that is the responsibility of the management and the Board. He stated they will be getting together with the Board again to discuss the results. One of the required communications is a letter summarizing how the audit went and what the findings are, and that is in addition to the report letter pertaining to the financial statements. If there were financial matters found, that warranted the Board's attention that would also be communicated in a letter.

Ms. Stiegel reviewed Management's responsibility in the Audit process as well as the following:

- Audit Process
- Auditor Responsibility
- Management Responsibility
- Testing Phases
- Required Discussion Points
- Significant Risk Misstatement
- Responses to Significant Risk Misstatement
- Additional Required Discussion Points
- Communication to those Charged with Governance

Commissioner Price questioned the status of the pension plans with all that is going on in the economy, and wanted some reassurance that the Board of Water & Light is in good shape. In response Ms. Stiegel stated through GASB 67, you will have some disclosures that provide a measurement of that.

Commissioner Louney questioned if Plante Moran did operational audit for utilities. In response Mr. Rober stated that they do have experience in that area. He stated when performing an operational audit, they listen to the scope of what an organization wants them to focus on, and then a specific audit is designed against those particulars.

Mr. Rober asked the Board of Commissioners if there were any areas of concern that warrant attention or additional procedures.

In response to Mr. Rober's question the Board of Commissioners stated no areas of concern.

Request to Publish Notice Re: Proposed Rate Changes

General Manager Lark said what is before you is a resolution a Resolution requesting approval to set a Public Hearing date of September 18, 2014 on the rate recommendations. A notice would be published in the newspaper by August 27th. There would be a Committee of the Whole of meeting on September 9, 2014, in which we would give you embellished upon, as well as refined documents regarding the rate changes, so that you can have a good idea of what we are going to put forward at the Public Hearing. The Board would meet on September 23, 2014 to decide on whether or not to invoke the rate increase.

General Manager Lark reviewed the Impact of Proposed Rates Increases. He said that the proposed rate increases are Electric 7%, Water 9%, Steam 9% and Chilled Water 3%. What this increase would do is bring us a net income of approximately \$8M. If we are to have a return on assets on 6.18% as the Board instructed back in 2008, that net income would be \$33M. So you can see the return on assets with these increases for a full year would amount to 1.12% return on assets. The return on assets is an important figure, the money that we use to keep our plants up, refurbish, and take of the depreciation that we have at the Board of Water & Light. Without the increases, the net income becomes (\$11M).

General Manager Lark reviewed the following:

idential Electric Bill Osli	ng 550 kV	Nh of Electricit	y <u>Per</u> Mo
ELECTRIC:			
	6/1/2014		11/1/2014
Service Charge (per month)	\$8.10		\$10.00
Renewable Energy Plan	\$2.50		\$0.75
Commodity (per kWh) 1st 500 kWh	\$0.0937	> increase>	
Commodity (per kWh) Excess kWh	\$0.0989	> increase>	4
ECA	\$0.022095		\$0.022095
Energy Optimization	\$0.001853		\$0.001853
Estimated Monthly Use	550 <u>kwh</u>		
Service Charge			\$10.00
Renewable Energy Plan	4		\$0.75
Commodity			\$ 68.50
Total Bill	\$75.57		\$79.25
		Increase>	\$ 3.69
		Increase %>	4.88%

Effect of a 9% Rate Increase on a Typical Monthly Residential Water Bill Using 6 ccf of Water Per Month

WATER:				
	<u>6/1/2014</u>		11	/1/201
Service Charge (per month)	\$11.19	9.0% increase>	\$12	2.20
Commodity (per ccf)	\$2.56	9.0% increase>	\$2	.79
PCA	\$0.128		\$0.	.128
Estimated Monthly Use	4,500 gallons		4,500 ga	allons
,	6 ccf			ccf
Service Charge	\$ 11.19		\$	12.2
Commodity	\$ 16.13		\$	17.5
Tatal Bill	+ 27.22		_	29.7
Total Bill	\$ 27.32		\$	29.7
		Increase>	\$	2.39
		Increase %		8.759

General Manager Lark stated that the Board should strongly consider approving a rate increase. Among the reasons is in the last 2 years, we have not had a rate increase and during that time there has been inflation. Over the last 2 years, there has been roughly 6% increase in inflation and that is certainly a contender for reasons for a rate increase. There are expenses related to hardening our system for the storm (new hires, tree trimming expense) and the Return on Equity that is now 6.1%.

General Manager Lark respectfully requested that the Finance Committee forward the proposed Resolution setting a Public Hearing for September 18, 2014 to the full Board for consideration.

Motion by Commissioner Price, seconded by Commissioner Mullen to forward the proposed Resolution to set a Public Hearing to the full Board for consideration.

Action: Motion Carried

Internal Audit Update

Internal Auditor Phil Perkins, presented an overview of :

Internal Auditor Status Update

- FY 2014 Audit Plan Progress Report
- Proposed FY 2015 Audit Plan
- Other Upcoming Items

FY 2014 Audit Plan Progress Report

Engagement Completed:

- 1. Fuel Procurement Audit
- 2. Records Retention Audit
- 3. Accounts Payable Audit
- 4. Close the Books Audit complete; report to be issued shortly.
- 5. Surprise Cash Counts (2)
- 6. Time Reporting Reviews

Engagement in Progress:

- 1. Software Licensing Compliance Audit—fieldwork about complete; report to be issued in August.
- 2. Draft Report to be issued shortly; audit 95% complete.

Proposed FY2015 Audit Plan

Basic for plan:

- 1. Risk assessments and ratings for each of 100-plus auditable activities at BWL.
- 2. Consideration of rotational audits, audit areas with risk/scoping assessments, first-time audits, etc.
- 3. Review and input by management.
- 4. Selection of the top audit candidates based on (1) through (3) above.

Proposed FY 2015 Audit Plan

Planned Audits:	Estimated Hours
Materials Inventory Management	400
Engineering Services – Annual Projects	400
Health Insurance & Prescription Drug Plans	400
Follow-up on Post-Outage Recommendations	400
IT – Payment Card Industry (PCI) Compliance	300
IT – Management of Non-Desktop Field Devices	300
Other Engagements:	
Surprise Cash Counts (2)	40
Time Reporting Reviews (2)	160
IT Risk Assessment (continued from FY2014)	100
Potential Consulting or Other Engagement	100
Total Estimated Hours	2,600

Motion by Commissioner Mullen, seconded by Commissioner Louney to approval to adopt the Audit Plan.

Action: Motion Carried

Motion by Commissioner Mullen, seconded by Commissioner Price, to maintain the Internal Audit Charter as currently written.

Action: Carried Unanimously

Internal Auditor Perkins informed the Committee that he recently made some changes to the Internal Auditing procedures and would provide the Commissioners with an electronic list of the changes.

Finance Chair Bossenbery introduced a proposed policy for the Finance Committee to take a look at, and consider forwarding to the full Board for consideration and approval. Chair Bossenbery stated that we get Audit reports from Mr. Perkins periodically and part of those audits include actions from management that need to be taken care of. There is not a formalized procedure for management to get back with Mr. Perkins in response to the

completion of actions and recommendations. Mr. Perkins has drafted a procedure, so that he has a tracking system to ensure implementation of actions, thus a policy.

Mr. Perkins stated that it is important to have this policy in place because it gives him, as well as the Board, a window as to how progress is being made, and getting corrective actions completed and in turn will help with future audit planning.

Draft – Proposed Board Policy on Follow-up to Internal Audit Findings & Recommendations

General Responsibilities:

Internal Audit. The Internal Auditor is responsible for performing the annual Internal Audit Plan approved by the Finance Committee of the Board. This includes but is not limited to:

- Informing management of any potential issues during audit engagements and briefing the results of audits including any findings prior to releasing a draft audit report to management.
- Formally presenting the results of each audit engagement in writing. Reports of audit will include any reportable findings, recommendations, and management's responses to the findings and recommendations.
- Following up on previous audit findings and management responses to ensure that the corrective action(s) noted in the responses were in fact taken, and that those actions corrected the problem(s) identified.

<u>Management.</u> Management is to respond with actionable responses to each reported finding and recommendation in the internal auditor's report within an agreed-upon timeframe. Each management response should contain the following:

- Acknowledgement of agreement (or disagreement if applicable) with the audit finding and recommendation.
- A specific action or actions being taken (or already taken) to address the problem(s) noted in the finding and recommendation.
- 3. A statement that either affirms that the stated corrective action(s) has/have already been completed or, if not, an estimated date when management believes the corrective action(s) will be completed. The estimated completion date should be management's best estimate, based on available resources, priorities and schedules as to when the corrective action(s) can reasonably be expected to be completed.

Follow-Up of Open Management Responses to Audit Findings:

- Schedule of Open Actions. For each management response for which the corrective action is to be completed by an estimated future date, a schedule will be developed to track, on at least a quarterly basis, the status of such corrective actions until they are completed.
 - There should be a notation each quarter regarding progress, if any, toward completion of the corrective action. If other priorities precluded further progress during a quarter, this should be so stated.
 - b. The Internal Auditor will receive an updated schedule each quarter and keep the Finance Chair apprised of action completion and status.

2. Schedule Usage.

- Management, Management will use the schedule as a tool for reporting progress on open corrective actions to the Finance Committee quarterly
- Internal Auditor. The Internal Auditor will use the schedule to help in future planning efforts and to ensure that management's corrective actions are being implemented as stated in the management responses to audit reports.

Motion by Commissioner Price, seconded by Commissioner Louney, to approve the Policy on following up to the Internal Auditors finding and recommendations.

Action: Motion Carried

Excused Absence

None

Other

None

Adjourn

On Motion by Commissioner Price, seconded by Commissioner Louney, the meeting adjourned at 9:15 p.m.

Respectfully submitted
Margaret Bossenbery, Chair
Finance Committee

MANAGER'S RECOMMENDATIONS

General Manager Lark presented the Resolution for the 2015 Rate Adjustments. The Resolution provides that there a proposed rate adjustments and that they should be subject to further consideration after a Public Hearing and the Resolution further provides that this Public Hearing should take place on September 18, 2014 at 5:30 p.m. and that notice should go out. The proposed rate increases are 7% for Electric, 9% for Water, 9% for Steam and 3% for Chilled Water. When it comes to water there is a \$1.75 reduction for the Renewable Energy Charge, so thus the average residential customer will see a 4.88% increase if the Board approves the rate increases. General Manager Lark respectfully requested that the Board approve the Resolution setting the Public Hearing for September 18, 2014.

RESOLUTION #2014-07-01

Public Hearing for 2015 Rate Adjustments

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, the proposed rate adjustments will not take effect until November 1, 2014,

RESOLVED, the proposed rate adjustments will be subject to further consideration after a public hearing is held.

FURTHER RESOLVED, that the Finance Committee hereby sets the date of September 18, 2014 at 5:30 p.m. for a public hearing to solicit public input on the proposed rate adjustments. The hearing will be held in the Board of Water and Light offices, 1201 S. Washington Avenue, in the Depot facility. The Corporate Secretary is directed to file with the City Clerk no later than August 4, 2014 information regarding proposed rate adjustments with an effective date of November 1, 2014.

Motion by Commissioner Price, Seconded by Commissioner Mullen, to approve the Resolution setting a Public Hearing for September 18, 2014 to considerate 2015 Rate Adjustment.

Action: Motion Carried

UNFINISHED BUSINESS

There was no Unfinished Business

NEW BUSINESS

Nominating Committee Chair Mullen stated there were no nominees for the Officer position of Vice Chair forwarded to the full Board for consideration. Committee Chair Mullen asked if

there were any nominations from the floor for the Officer position of Vice Chair. There were no nominations from the floor and the nominations were closed.

Motion by Dennis Louney, Seconded by Commissioner McCloud to nominate Commissioner Margaret Bossenbery for the Officer position of Vice Chair.

Action: Motion Carried

Nominating Committee Chair Mullen stated consistent with the committee report, David Price is the nominee being forwarded to the full Board for consideration of the Officer position of Chair. Nominating Committee Chair Mullen asked if there were any nominations from the floor for the Officer position of Chair. There were no nominations from the floor and the nominations were closed.

Motion by Commissioner Ward, Seconded by Commissioner Bossenbery to nominate Commissioner David Price for the Officer position of Vice Chair.

Action: Motion Carried (6/2 Thomas, Zerkle)

Chair Zerkle stated that the Executive Committee consist of the Chair, Vice Chair, Past Chair and a 4th Member elected by the Board.

There was a Point of Order raised by Commissioner Price regarding the process pertaining to the selection of the Executive Committee members. After some dialogue and confirmation from the Board of Water & Light's Rules of Procedure, Commissioner Price withdrew his objection.

Motion by Commissioner Zerkle, Seconded by Commissioner Mullen, to nominate Commissioner Thomas at the 4th Member of the Executive Committee.

Action: Motion Carried

RESOLUTIONS

RESOLUTION #2014-07-02

Appointment of the Charter Position of Corporate Secretary

The Board's Rules of Administrative Procedures specify that the Board is to appoint a Director and General Manager, Internal Auditor, and Corporate Secretary, respectively at its first regular meeting following July $\mathbf{1}^{\text{st}}$ of each year or as soon thereafter as may be appropriate.

RESOLVED, That the Board of Commissioners hereby appoints the following individual to the Charter position of Corporate Secretary for fiscal year 2014-2015, or, until a successor is appointed, whichever last occurs:

M. Denise Griffin, Corporate Secretary

Motion by Commissioner Louney, Seconded by Commissioner McCloud Ward, to reappoint M. Denise Griffin to the Charter position of Corporate Secretary for fiscal year 2014-2015

Action: Carried Unanimously

RESOLUTION #2014-07-03

Appointment of the Charter Position of Internal Auditor

The Board's Rules of Administrative Procedures specify that the Board is to appoint a Director and General Manager, Internal Auditor, and Corporate Secretary, respectively at its first regular meeting following July 1^{st} of each year or as soon thereafter as may be appropriate.

RESOLVED, That the Board of Commissioners hereby appoints the following individual to the Charter position of Internal Auditor for fiscal year 2014-2015, or, until a successor is appointed, whichever last occurs:

Philip Perkins, Internal Auditor

Motion by Commissioner Bossenbery, Seconded by Commissioner Mullen to reappoint Philip Perkins to the Charter position of Internal Auditor for fiscal year 2014-2015.

Action: Carried Unanimously

RESOLUTION #2013-07-04

Appointment of the Charter Position of Director and General Manager

The Board's Rules of Administrative Procedures specify that the Board is to appoint a Director and General Manager, Internal Auditor, and Corporate Secretary, respectively at its first regular meeting following July 1^{st} of each year or as soon thereafter as may be appropriate.

RESOLVED, That the Board of Commissioners hereby appoints the following individual to the Charter position of Director and General Manager for fiscal year 2014-2015, or, until a successor is appointed, whichever last occurs:

J. Peter Lark, Director and General Manager

Motion by Commissioner Bossenebery, Seconded by Commissioner McCloud to reappoint J. Peter Lark to the Charter position of Director and General Manager for fiscal year 2014-2015.

Action: Motion Carried (7/1Ward)

RESOLUTION #2013-07-05

Board Policy on Follow-up to Internal Audit Findings & Recommendations

General Responsibilities:

<u>Internal Audit.</u> The Internal Auditor is responsible for performing the annual Internal Audit Plan approved by the Finance Committee of the Board. This includes but is not limited to:

- Informing management of any potential issues during audit engagements and briefing the results of audits including any findings prior to releasing a draft audit report to management.
- 2. Formally presenting the results of each audit engagement in writing. Reports of audit will include any reportable findings, recommendations, and management's responses to the findings and recommendations.
- 3. Following up on previous audit findings and management responses to ensure that the corrective action(s) noted in the responses were in fact taken, and that those actions corrected the problem(s) identified.

<u>Management</u>. Management is to respond with actionable responses to each reported finding and recommendation in the internal auditor's report within an agreed-upon timeframe. Each management response should contain the following:

- 1. Acknowledgement of agreement (or disagreement if applicable) with the audit finding and recommendation.
- 2. A specific action or actions being taken (or already taken) to address the problem(s) noted in the finding and recommendation.
- 3. A statement that either affirms that the stated corrective action(s) has/have already been completed or, if not, an estimated date when management believes the corrective action(s) will be completed. The estimated completion date should be management's best estimate, based on available resources, priorities and schedules as to when the corrective action(s) can reasonably be expected to be completed.

Follow-Up of Open Management Responses to Audit Findings:

- Schedule of Open Actions. For each management response for which the corrective
 action is to be completed by an estimated future date, a schedule will be developed
 to track, on at least a quarterly basis, the status of such corrective actions until they
 are completed.
 - a. There should be a notation each quarter regarding progress, if any, toward completion of the corrective action. If other priorities precluded further progress during a quarter, this should be so stated.
 - b. The Internal Auditor will receive an updated schedule each quarter and keep the Finance Chair apprised of action completion and status.

2. Schedule Usage:

- a. <u>Management</u>. Management will use the schedule as a tool for reporting progress on open corrective actions to the Finance Committee quarterly.
- b. <u>Internal Auditor</u>. The Internal Auditor will use the schedule to help in future planning efforts and to ensure that management's corrective actions are being implemented as stated in the management responses to audit reports.

Motion by Commissioner Bossenebery, Seconded by Commissioner McCloud to approve said Policy on follow up to the Internal Audit Findings and Recommendations.

Motion: Carried Unanimously

MANAGER'S REMARKS

General Manager Lark stated the following:

The clock of life is always ticking forward pushing us in the next moment, but to embrace our future we often have to look back and appreciate our past. Chair Sandra Zerkle has lead the Board for the past five years with strength, grace and integrity. She has been at the forefront of change often without recognition. After five years of being Chair, It seems only fitting that I take a minutes to give a few examples of how her leadership improved the Board of Water & Light. Under her leadership, with the full support of the Board, we replaced ageing Chilled Water production facilities located in the floodplain with state of the art electric chillers, in a new plant located downtown Lansing Capital complex. With her firm support in July of last year, we launched our new Co-generation Plant, that replaced steam boiler that was more than one-half a century old added electric generation and provided the Board of Water & Light with a new headquarters. Our community is healthier now that less coal is being burned and for that, we applaud Sandy and the Board. Thanks to her backing and that of her colleagues, we are now Michigan's largest municipally owned solar array. The Cedar St. solar ray expansion has nearly tripled the arrays generating capacity. But these are more than just words on paper, they are reminders of how our community has grown and improved in the last five years and all of these accomplishments were successful because of the Board actions under the leadership of Sandra Zerkle. Mr. Lark thanked Chair Zerkle on behalf of everyone at the Board of Water & Light and the customers for leading this company forward and making it better. General Manager Lark presented Chair Zerkle with a commemorative plaque for her time as Chair.

COMMISSIONERS' REMARKS

In response to Mr. Lark's comments, Chair Zerkle, stated this was highly unexpected and very greatly appreciated. What we do here is not done by one person, it is done by eight Commissioners and she thoroughly enjoyed the support and working with the Commissioners. It has been great working with the staff and the Board's three employees. It has been a great honor to serve.

Chair Zerkle announced that former Commissioner Bob Cochran passed away last week. She said that he was very helpful to her when she first became a Commissioner. Chair Zerkle also

said that she wanted to make note of Commissioner Thomas's efforts pertaining to the evaluation and the contract process for the Board's three employees, it has been a very transparent effort on Mr. Thomas's part.

Commissioner Bossenbery, expressed her gratitude to her colleagues on the Board for selecting her as Vice Chair and said that she is looking forward to working with everyone in the Vice Chair capacity over the next year. She said that she has served on the Board for five years and during that time the Board has achieve much, but more can be done. She stated that the Board has been through a trying time and there is a lot of work to do to move forward. She stated while those of us around this horseshoe may have differences of opinions on issues that may come before us, at the end of the day we all agree that what we all want is to make the Board of Water & Light the best it can be.

Commissioner Price said that he looks forward to working with all of his fellow Commissioners, the three staff members and the Board of Water & Light's staff. It has been a tough six months for everyone but believes that we are over the biggest hump. We have a road map and we are grateful to the CRT Team for their suggestions; The Board of Water & Light's staff has gone a long way with implementing most of the CRT's suggestions and will continue to work on those. The Board of Commissioners' have some work to do on the suggested recommendations in which we started working on at the last Committee of the Whole meeting. He said that he is looking forward to implementing the recommendations and thanked everyone for their support.

Commissioner Thomas thanked his fellow Commissioners for their vote of confidence regarding the Executive Committee. He congratulated the new Chair and Vice Chair on the election to their new positions. For the Record Commissioner Thomas stated that he is looking forward to working under the leadership of newly elected Vice Chair Bossenbery and is ready, willing and able to serve. He also congratulated the Board's three appointed employees on their reappointments and he thanked Legal Counsel Ekren for her assistance over the last few months.

EXCUSED ABSENCE

None

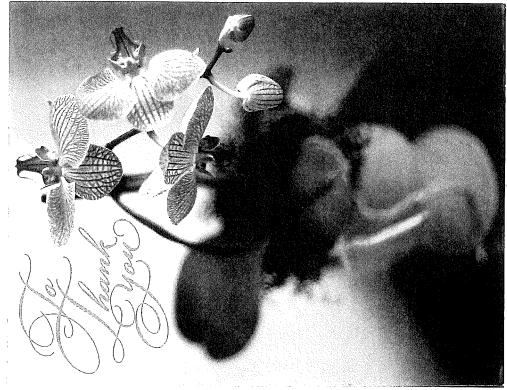
PUBLIC COMMENTS

Mary Brady Anderson of Lansing spoke on behalf of Clean Water Action. She congratulated the Board of Water & Light on being the largest solar array municipality in Michigan. She provided the Board with information pertaining to results from a survey that her organization performed regarding community solar. She stated that complete results would be provided at a later date.

ADJOURNMENT

The Gavel was passed from Chair Zerkle to Commissioner Price to assume the duties of Chairperson of the Board of Water & Light Board of Commissioners' for 2014-2015.

On motion by Commissioner Bossenbery, seconded by Commissioner Mullen the meeting adjourned at 6:00 p.m.



Thank you so much.

and generous heart

four special ways

make a beautiful difference.



BOARD OF

DIRECTORS

Terry Terry, President



1210 TURNER STREET LANSING, MI 48906 PH: 517-371-4600 FX: 517-371-1454

September 10, 2014

Mr. J. Peter Lark General Manager and CEO Lansing Board of Water and Light 1201 S Washington Lansing, MI 48910

Dear Mr. Lark:

The Michigan Institute for Contemporary Art (MICA) hosted Fish Rodeo, an inaugural festival, in June at Adado Riverfront Park. People of all ages enjoyed ethnic and country music, great food and educational experiences sponsored by the Michigan Department of Natural Resources and U.S. Fish and Wildlife Services.

One of our events was a rubber duck race, much the same as Lansing Board of Water and Light's (BWL) event at the Chili Cook-Off. In order to find out what was involved with planning this race, we reached out to Calvin Jones. Imagine our delight when Calvin enthusiastically supported our race and followed that by saying BWL would be happy to assist with supplying the rubber ducks and assisting the day of the race.

We met with two wonderful BWL staff, Bob Perialas and Abigail Boyd, who were extremely helpful during the planning process and on race day. They gave up a Saturday afternoon to help dump the ducks from the Shiawassee Bridge and fish out of the Grand River the first 10 ducks as they crossed the finish line. I must also mention the crew who installed the boom in the Grand River to guide the ducks along. We could not have had such success for our first Fish Rodeo if it were not for these great BWL employees.

MICA also produces two festivals in Old Town – JazzFest and BluesFest. JazzFest just celebrated its 20^{th} year. We have always appreciated the great working relationship we've had with BWL over the years. Once again, Bob Perialas and his team were instrumental in ensuring that we had adequate electricity with all of the construction going on in Old Town.

We thank you for BWL's strong community support for the festivals that bring such vitality to our great city and we look forward to partnering with you in the future on Fish Rodeo, JazzFest and BluesFest.

At your service,

Terry N. Terry President

CC:

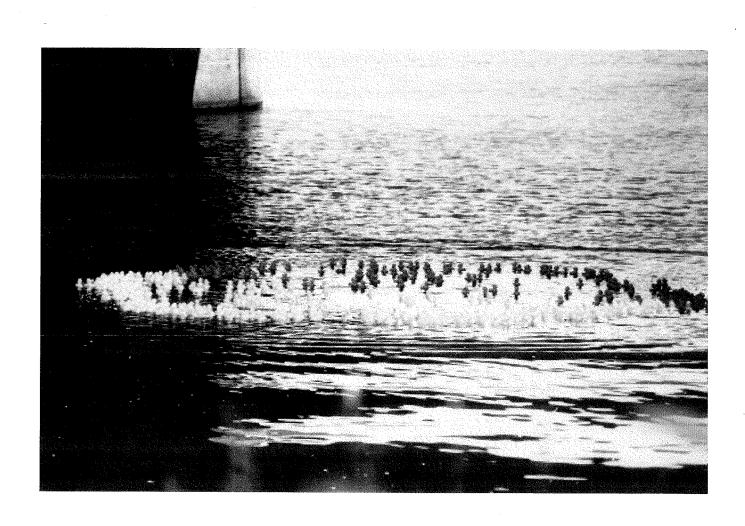
LBWL Board of Commissioners

Mr. Calvin Jones Mr. Robert Perialas Ms. Abigail Boyd Tom Cathey, Secretary Anne Hodgins, Treasurer Ray Tadgerson, Member Glenna DeJong, Member David Hollister, Member

ADMINISTRATIVE MANAGER
Katrina Daniels

GALLERY CURATORS Jack Bergeron Kirby M. Milton





Lansing Board of Water & Light Comments submitted on Proposed Rate Changes Thursday, September 18, 2014

The six-year capital budget that was provided to the Lansing City Council calls for large electric rate increases. This is especially true for 2016, 2017 and 2018. I am retired. I live on social security and a small pension. I want to know that any rate increases make sense but it's hard for me to know that because the details of the increased capital budgets aren't easily available to the public.

Those details should include costs and a timetable for the retirement and decommissioning of all the units of the Eckert power plant.

Although the Lansing Board of Water & Light announced the retirement of units 1 through 3 in July 2013, two of those units have continued to operate. Units 4 through 6 should be retired on an expedited schedule to avoid wasteful temporary measures for these inefficient and dirty units. Running them intermittently is expensive. At least one of these units should be retired by April 2016.

I also believe what is needed is a comprehensive community planning process. The budget should detail the anticipated renewable energy replacement for the Eckert power plant to allow for community participation in planning. To avoid the delays and expensive short-term measures currently happening with the Eckert retirement, a comprehensive community planning process should take place soon on how to replace the aging Erickson power plant. The investment in a community planning process should be reflected in the budget.

Budgets should also reflect extra measures to support and maintain the LBWL workforce during this transition period that all utilities in the United States are facing. The budget should include turning on Mercury controls at the Erickson power plant NOW rather than waiting until April 2016. They should be fully operational with all start-up problems resolved by no later than April 2015 - the original implementation date of the EPA Mercury and Air Toxics Rule. As reported in the media this represents an operational and maintenance cost of less than 0.5%, but will result in at least a 94% decrease in mercury emissions.

This is well worth the cost to reduce toxic mercury poisoning for children and future generations.

Sincerely,

David H. Holtz

720 North Jenison Avenue

Lansing, MI 48915



109 E. Grand River Ave Lansing, MI 48906 www.sierraclub.org/coal/MI

September 18, 2014

Comments on Lansing Board of Water and Light Proposed Rate Schedule

The six year capital budget provided to city council has large increases for the electric utility especially for FYs 2016, 2017, and 2018. In order to justify the proposed rate increases the details of these increased capital budgets should be made easily available to the public and should include:

- Costs and a timetable for the retirement and decommissioning of all of the units of the Eckert power plant. The LBWL announced the retirement of units 1-3 in July 2013 but units 1 and 3 have continued to operate.
- The rates and budget should reflect the work for Eckert units 4-6 to be retired on an expedited schedule to avoid wasteful temporary measures for these inefficient and dirty units. Running these units intermittently is the most expensive way to run the facilities. At least one of these units should be retired by April 2016
- The budget should detail the anticipated efficiency measures and renewable energy replacement for the Eckert power plant to allow for community participation in planning.
- To avoid the delays and expensive short-term measures currently happening with the Eckert retirement, a comprehensive community planning process should take place soon on how to replace the aging Erickson power plant. The investment in a community planning process should be reflected in the budget.
- The budget should reflect extra measures to support and maintain the LBWL workforce during this transition period that all utilities in the United States are facing.

The budget should include turning on the activated carbon injection mercury controls at the Erickson power plant NOW rather than waiting until April 2016. The mercury controls should be fully operational with all start-up problems resolved by no later than April 2015 - the original implementation date of the EPA Mercury and Air Toxics Rule. As reported in the media this represents an operations and maintenance cost increase of less than 0.5% to ratepayers, but will result in at least a 94% decrease in mercury emissions. In 2012 the mercury emissions of the Erickson plant, 46 lbs, was the equivalent of more than 10,000 mercury thermometers. This is well worth the cost to reduce toxic mercury poisoning for children and future generations. The budget should reflect LBWL's commitment to a timeline for replacing the aging Erickson plant. Until that time, the LBWL should run the mercury controls.

Brad van Guilder, Beyond Coal to Clean Energy Organizing Representative brad.vanguilder@sierraclub.org
313.205.6386 mobile

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 Board? 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

140,00

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)

DIAIL Division Despense

Item	5		BWL Division Response
#	Division	CRT Recommendation	·
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.
С	Lead: Emergency Operations Director Support: All LBWL Managers	Assure that all operations employees receive basic NIMS training, 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; that all first-line supervisors take those courses, plus ICS-200, Basic ICS; that all senior management officials take those 3 courses, plus ICS-400, Advanced ICS.	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 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.

d	Lead: Emergency Operations Director Support: Appropriate BWL Managers	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	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.
e	Lead: Emergency Operations Director Support: Dave Bolan, Dick Peffley, and Calvin Jones	Develop and maintain good working relationships with the first-responder community for all units of government representing its customer base	BWL's Emergency Operations Director and GRCSD 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.
6	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	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.	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.
7	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	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.	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.
8	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	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.	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.
9	Lead: Emergency Operations Director Support: Dave Bolan, Gennie Eva, Dick Peffley, Bruce Cook, and Nick Burwell	Include Business Continuity Planning in its development of a comprehensive Emergency Operations Plan.	Coordinate development of a business continuity plan as part of the BWL's EOP within 270 days of Emergency Director hire.
10	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	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)	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.

11	Lead: Emergency Operations Director Support: Dave Bolan and Dick Peffley	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.	Please see response to CRT # 10
12	Lead: Emergency Operations Director Support: Dave Bolan, Gennie Eva, and Dick Peffley	Develop, in coordination with the governments representing its customer base, an Energy Annex to a Regional Emergency Operations Plan.	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.
13	Lead: Bob Perialas Support: Emergency Operations Director and Dan Barnes	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.	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
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, GRCSD 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	The crisis communications plan must be an annex to the Emergency Operations Plan and should be guided by a qualified communications	Consolidating BWL emergency plans including crisis communications plan as an annex. Provide emergency communications staff with NIMS

	Support: Stephen Serkaian	professional certified through the NIMS protocols.	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 tricounty 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,	Develop and implement records retention requirements in emergency plans within 120 days of Emergency Director hire.

		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	
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.
С	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 is 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 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. PSC #30, Study worst performing circuits and cost benefit of undergrounding service	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.
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.
С	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. GRCSD 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 August 31, 2014 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	The BWL will include its distribution plan in its	Expected completion date 10/16/14
	Manager	annual table top tests designed to stress its	
		emergency response and will use the results to	
		continually improve its emergency plans	

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 have 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 secondaries 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 has 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.

<u>Other</u>

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

(See attachment)

CRT Recommendations Completed or Ongoing

Item # Division	Recommendation	Status
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I	l and.	I	J 1
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
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

Item #	Division	Recommendation	Status
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
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
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

Item#	Division	Recommendation	Status
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

	Lead: Gennie	Consider plans to own the system, including the mast, through to their meter box, as	
54	Eva	part of its benefit cost analysis to determine whether a proactive effort to install breakaway service drops is warranted.	Completed
	Lead: Dave	Setting a vegetation management schedule and budget & complying with it (pgs. 23-	,
72	Bolan	26 of MPSC staff report)	Completed
	Lead: Gennie	Service quality credits (rule 461.744-746, pg. 34 of MSPC staff report)	
76	Eva	PSC #7, customer standards	Completed
77	Lead: Dave Bolan	Time limits for relief of non-utility personnel guarding downed power lines	Completed
		(Rule 460.723, pg. 37 of MPSC staff report) sets time limits for non-utility employees	
	Lead: Dave Bolan	(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	
78	Dolan	report).	Completed
	Lood, L Doton	Establish a Customer Ombudsman, Chief Customer Officer or expand the duties of the	·
	Lead: J. Peter Lark	Director of Governmental Affairs and Customer Relations, directly reportable to the	
79	Laik	General Manager.	Completed
	Lead: J. Peter	Restructure its organizational chart so that the positions of Strategic Planning,	
80	Lark	Information Technology, and Operations direct reporting to the General Manager.	Completed
	Lead: Susan	Implement a utility-wide quality assurance plan. The testimony on vegetation management (that they looked at bills submitted by contractor monthly, and only now	
	Devon	are adding a competitor and checking performance after trimming) suggests the lack	
82	50000	of a comprehensive quality assurance plan.	Completed
		Consider revision of the 54 Recommendations, using the SMART analysis to include	
	Lead: George	specific metrics, including the tasks to be performed, the directorate or section within	
83	Stojic	BWL charged with performance and the time need for accomplishment.	Completed
	Lead: J. Peter	Require staff reports monthly to the Board of Commissioners on specific actions that	Completed
0.4	Lark	have been taken on all of the 54 recommendations made in the Ice Storm Outage	and .
84		Report and that the BWL post those reports on its website for the next 18-24 months.	ongoing
		MPSC Recommendations Completed or Ongoing	
Item #	Division	Recommendation	Status
	Lead: Stephen	Develop a Communication Plan, as part of an overall emergency operations plan,	
	Serkaian	aligning with industry best practices for customer service obligations for major service	
8	Support: Calvin Jones	outage responses and during restoration periods.	Completed
0	Calvill Jolles		Completed
	Bruce Cook	Maintain single phone number for customer inquiries	
10			Completed
		Consider use of the Local Energy Assistance Program (LEAP) process to serve as the	
		conduit for establishing private-public partnerships focused on improving community	
	Calvin Jones	resiliency to a prolonged energy disruption. The CRT was explicit in recommending	
15		that the BWL develop an emergency operations plan in the context of a regional plan. This would satisfy that suggestion.	Completed
13	Dave Bolan	Work in conjunction with the Michigan Municipal Electric Association (MMEA) to	Completed
	Support:	share the lessons learned and best practices with other municipal utilities within the	
	Emergency	state in an effort to improve the resiliency and outage response of all municipal	
16	Manager	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

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
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

Item #	Recommendations	Status
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
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
Item#	Recommendations	Status
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 tress 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 nixel 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.

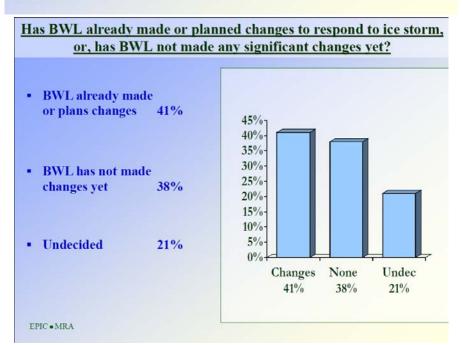


Lansing Board of Water and Light Customer Satisfaction Survey

Importance of actions taken/planned in response to ice storm, rating specific communications and operational actions, and approval of those actions

> Conducted August 9-10, 2014 Live telephone interviews Sample size: 400 Error rate: ± 4.9%

EPIC . MRA



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 being 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

<u>Adjourn</u>

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

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
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

Item#	Division	Recommendation	Status
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
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
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

Item #	Division	Recommendation	Status
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

part of its benefit cost analysis to determine whether a proactive effort to install breakway service drops is warranted. Completed 2. Lead: Dave Setting a vegetation management schedule and budget & complying with it (pgs. 23-2 completed). Lead: Gennie Service quality credits (rule 461,744-746, pg. 34 of MSPC staff report). Completed Service quality credits (rule 461,744-746, pg. 34 of MSPC staff report). Completed Service quality credits (rule 461,744-746, pg. 34 of MSPC staff report). Time limits for relief of non-utility personnel guarding downed power lines. (Rule 460-723, pg. 37 of MPSC staff report) sets time limits for non-utility employees (i.e. police) (lire personnel) guarding a downed wire. & adequate number of persons certified to perform wire down duty during high volume event (pg. 38 of MSPC staff report). Lead: J. Peter Lark General Manager. Lead: J. Peter Lark General Manager. Lead: Susan Lead: Sorpe Stopic Lead: George Stopic Lead: George Stopic Lead: George Stopic Lead: George Stopic Lead: Stopic Lead: Stopic Lead: Stopic Butter Lead: Stopic Lead: Stopic Lead: Stopic Lead: Stopic Butter Lead: Stopic Butte		Lead: Gennie	Consider plans to own the system, including the mast, through to their meter box, as	
Lead: Dave Bolan Setting a vegetation management schedule and budget & complying with it (pgs. 23- 26 of MPSC staff report) Lead: Gennie PSC #7. customer standards Completed PSC #7. customer pSC #7.	54		part of its benefit cost analysis to determine whether a proactive effort to install	
Lead: Genile Service quality credits (rule 461.744-746, pg. 34 of MSPC staff report) Completed		Landa Davia	·	Completed
Lead: George Service quality credits (rule 461.744-746, pg. 34 of MSPC staff report) PSC 47, customer standards Time limits for relief of non-utility personnel guarding downed power lines (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 of the	72			Completed
Lead: Dave Bolan Completed Complet	12	+		Completed
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 (i.e. police /fire personnel) guarding a downed wire. & adequate number of persons (i.e. police /fire personnel) guarding a downed wire. & adequate number of persons (i.e. police /fire personnel) guarding a downed wire. & adequate number of persons (i.e. police /fire personnel) guarding a downed wire. & adequate number of persons (i.e. police /fire personnel) guarding a downed wire. & adequate number of persons (i.e. police /fire personnel) guarding a downed wire. & adequate number of persons (i.e. police /fire personnel) guarding a downed wire. & adequate number of persons (i.e. police /fire personnel) guarding a downed wire. & adequate number of persons (i.e. police /fire personnel) guarding a downed wire. & adequate number of persons can guarding a competitor and charged vibrations of strategic Planning. (completed by contractor morthy), and only now are adding a competitor and checking performance after trimming) suggests the lack of a comprehensive quality assurance plan. Lead: George Stojic Consider revision of the 54 Recommendations, using the SMART analysis to include gwarding and persons of the sakes to be performed, the directorate or section within BWL charged with performance and the time need for accomplishment. Completed Completed and that the BWL post those reports on its website for the next 18-24 months. MPSC Recommendations Completed or Ongoing Private ## Division Recommendation Recommendations made in the lice Storm Outage Report and that the BWL post those reports on its website for the next 18-24 months. MPSC Recommendation Completed or Ongoing Private ## Division Recommendation R	76			Completed
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Lead: Susan Devon	73	Lead: Peter	-	Completed
Lead: Susan Devon are adding a competitor and checking performance after trimming) suggests the lack of a comprehensive quality assurance plan. Completed 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 Completed 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. MPSC Recommendations Completed or Ongoing MPSC Recommendations Completed or Ongoing Aligning with industry best practices for customer service obligations for major service outage responses and during restoration periods. 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 Bruce Cook Maintain single phone number for customer inquiries 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 Completed Manager Dave Bolan Support: Share the lessons learned and best practices with other municipal twith the state in an effort to improve the resiliency and outage response of all municipal Completed Unities in Michigan. 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	80			Completed
Stojic specific metrics, including the tasks to be performed, the directorate or section within BWL charged with performance and the time need for accomplishment. 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. MPSC Recommendations Completed or Ongoing MPSC Recommendation Completed or Ongoing Division Recommendation Completed or Ongoing Division Recommendation Completed or Ongoing Division Recommendation 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. Bruce Cook Maintain single phone number for customer inquiries 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. Dave Bolan Support: Emergency Manager 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. 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	82		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	Completed
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Item # Lead: Stephen Serkaian Support: Calvin Jones Bruce Cook Maintain single phone number for customer inquiries Completed			MPSC Recommendations Completed or Ongoing	
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Calvin Jones Completed	10	Bruce Cook	Maintain single phone number for customer inquiries	Completed
Dave Bolan Support: Emergency Manager Executive Management 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 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	15	Calvin Jones	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.	
Executive Management Executive			Work in conjunction with the Michigan Municipal Electric Association (MMEA) to	
16 Manager utilities in Michigan. Completed Executive Management Management Completed 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				
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	16			Completed
I Management I	10	Executive	Perform its own action items 10 through 15 from the BWL December 2013 Ice Storm	Completed
· · · · · · · · · · · · · · · · · · ·	19	Management		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

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	
20	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
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	Completed
	conduct annual stress tests of all its restoration tools including, but not limited to the OMS, outage	and .
	call in number, Customer Service Center, and Communications plans.	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

Item#	Recommendations S	
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
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.	
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 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
Item #	Recommendations	Status
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	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

Item#	Lead	CRT Remaining Recommendation	BWL Response
1	Emergency Operations Manager	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 infrastructue 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	Emergency Operations Director	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	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 jpower 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 Exapnd distributed solar energy program by August 1, 2014, Completed Continue grid sectionalizing investments. Completed
4	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	Emergency Operations Manager	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 particiaption in local EM exercises as an ongoing basis.
С	Emergency Operations Manager	Assure that all operations employees receive basic NIMS training, 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; that all first-line supervisors take those courses, plus ICS-200, Basic ICS; that all senior management officials take those 3 courses, plus ICS-400, Advanced ICS.	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 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.
d	Emergency Operations Manager	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	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.
e	Emergency Operations Manager	Develop and maintain good working relationships with the first-responder community for all units of government representing its customer base	BWL's Emergency Operations Director and GRCSD 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.
6	Emergency Operations Manager	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.	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.

Item #	Lead	CRT Remaining Recommendation	BWL Response
7	Emergency Operations Manager	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.	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.
8	Emergency Operations Manager	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.	Assist and particiapte 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.
9	Emergency Operations Manager	Include Business Continuity Planning in its development of a comprehensive Emergency Operations Plan.	Coordinate development of a business continuity plan as part of the BWL's EOP within 270 days of Emergency Director hire.
10	Emergency Operations Manager	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)	Consolidate BWL's emergency plans into a single BWL EOP within 120 days of Emergency Director hire. 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.
11	Emergency Operations Manager	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.	Please see response to CRT # 10
12	Emergency Operations Manager	Develop, in coordination with the governments representing its customer base, an Energy Annex to a Regional Emergency Operations Plan.	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.
15	Emergency Operations Manager	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, GRCSD staff, and leadership with NIMS training. Annual update training fo rcommunications staff on ongoing basis. BWL's communications staff and leadership team will participate in local and regional emergency exercises on an ongoing basis.
17	Emergency Operations Manager	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.
19	Emergency Operations Manager	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.

Item#	Lead	CRT Remaining Recommendation	BWL Response
22	Emergency Operations Manager	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.	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	Emergency Operations Manager	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.
33	Emergency Operations Manager	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.	Develop and implement records retention requirements in emergency plans within 120 days of Emergency Director hire.
34		Information to be retained should include:	
а	Emergency Operations Manager	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	Emergency Operations Manager	A full log of output, as in #1 above.	Please see response to CRT #33.
С	Emergency Operations Manager	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	Emergency Operations Manager	Full log of personnel engaged in restoration activities.	Please see response to CRT #33.
e	Emergency Operations Manager	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	Emergency Operations Manager	Log of field engineer actions; optimally with enough specificity to distinguish technical actions vs. administrative actions.	Please see response to CRT #33.
35	Emergency Operations Manager	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.	Agreed. This has been and continues to be a part of BWL's procedures.
42	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 scedulijng of major infrastructure projects. Meetings will be completed by end of 3rd quarter FY15.
44	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 is 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	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	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 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.	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.
50	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	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.
60	Calvin Jones	Create a Community Resilience Planning Coalition which would take a broad approach to building community level resilience to extreme events by:	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 pract\ces and procedures Encourage and participate community coalition, adopt as practices and procedures

Item #	Lead	CRT Remaining Recommendation	BWL Response
а	Emergency Operations Manager	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 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	George Stojic	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.
d	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	George Stojic	Include regional resiliency, including energy self-reliance, as a strategic goal	Part of ongoing planning and investment progam. See also CRT #3.
62	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.
73	Bruce Cook	Customer call answer time – rule 460.724 (pg. 29 of MSPC staff report)	Estimated time to comply with this standard is June 1, 2015.
75	Bruce Cook	Blockage time of customer ability to report outage – (reference to rule at pgs. 32-33 of MPSC staff report)	Estimated time to comply with this standard is June 1, 2015.Agreed
81	George Stojic	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 fby end of third quarter FY15.

Item#	Lead	MPSC Remaining Recommendation	BWL Response
MPSC 4	Dave Bolan		
		Develop metrics that allow the BWL to analyze the performance of all reliability investments.	MPSC #5
MPSC 5	Dave Bolan	Develop an annual reliability report that can be publicly available.	Estimated completion date end of FY15
MPSC 6	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			
	Emergency Operations Manager	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 13	F	Expand emergency training and exercise programs to include the Board so they are educated on	
	Emergency Operations Manager	the BWL's electric system infrastructure and emergency operations plan.	Please see response to CRT #22.
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 24	Emergency Operations Manager	Develop a procedure to collect system outage data during and post storm events for future	
		reliability analysis.	Please see response to CRT # 33
MPSC 30	Dave Bolan		
1			

This will be completed by the end of FY15

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.

ltem #	Lead	BWL 54 Remaining Action Item	BWL Response
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 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.

Item #	Lead	CRT Recommendation	Status
5a	Emergency Operations Director	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
13	Bob Perialas	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.	
14	Stephen Serekaian	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
16	Stephen Serkaian	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.	Completed
20	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	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.	Completed
26	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	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.	Completed
28	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	Nick Burwell	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	Completed
30	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.	Completed
31	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	Bruce Cook	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	Emergency Operations Director	Log of physical access entries, either IAW or similar to NERC CIP standards for Physical Access to BES sites.	Completed

Item #	Lead	CRT Recommendation	Status
34h	Emergency Operations Director	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	Emergency Operations Director	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
36	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. Evaluate its 5-year schedule to determine whether vegetation management needs to be even more	Completed
37	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.	Completed
38	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	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	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.	Completed and ongoing
41	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.	Completed and ongoing
43	Dave Bolan	Undertake a value engineering analysis of the potential deployment of automatic circuit interrupters in its distribution grid and implement them accordingly.	Completed and ongoing
46	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.	Completed and ongoing
47	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	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	
а	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
b	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
51	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

Item#	Lead	CRT Recommendation	Status
52	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	Dave Bolan	Deploy smart meters first to those residences located on lateral circuits.	Completed
33	Dave Bolan		and ongoing
54	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
56	Bruce Cook	Develop through voluntary customer participation, and maintain, a list of all elderly customers and those with medical needs. 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	Completed
57	Emergency Operations Director	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	Completed
58	Emergency Operations Director	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.	Completed
59	Emergency Operations Director	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.	Completed
60 c	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	Completed
72	Dave Bolan	Setting a vegetation management schedule and budget & complying with it (pgs. 23-26 of MPSC staff report)	Completed
74	Calvin Jones	Community outreach activities (no rule – but see comparison pg. 32 of MPSC staff report)	Completed and ongoing
76	Gennie Eva	Service quality credits (rule 461.744-746, pg. 34 of MSPC staff report)	Completed
77	Dave Bolan	Time limits for relief of non-utility personnel guarding downed power lines	Completed
78	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	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	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	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.	
83	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.	
84	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

Item#	Lead	MPSC Recommendation	Status
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.	Completed
2	Dave Bolan	Analyze and determine if the BWL's current budget and expenditures on vegetation management and maintenance of the distribution and transmission system are adequate to continue to provide safe and reliable service.	Completed
3	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. Completed 8/26/14	
8	Stephen Serkaian	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
9	Calvin Jones	Provide consumer education material through multiple media so that customers may be prepared to handle outages including free outreach to educate the public on electric line safety, preparation for storm events, and who to contact in the event of an outage. Please see response to CRT #60. The BWL routinely educates its customers regarding lines down and other safety issues and storm outage information through its Connections newsletter, its website, GRCSD outreach activities, through press releases, and social media.	Completed
10	Bruce Cook	Maintain single phone number for customer inquiries	Completed
11	Bruce Cook	Identify the account holders who are seniors and maintain a database of facilities servicing vulnerable populations.	Completed
14	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.	Completed and ongoing
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	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	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	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

Item #	BWL 54 Items	Status
1	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	Completed
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
8	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. Completed: Purchasing is working to finalize the agreements with Asplundh and Alpine for tree timming services.	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
10	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.	Completed and ongoing
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

Item #	BWL 54 Items	Status
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
19	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 8/26/14. 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	Completed
20	The BWL will review it's 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
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
24	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:	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

Item#	BWL 54 Items	Status
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
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
44	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.	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

Item #	BWL 54 Items	Status
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

CRT/MPSC Board of Commissioners Recommendations

Item #	Lead		Reco	mm	endation

ICCIII II	LCaa	1100011111011011011			
CRT 63	LBWL Board of Commissioners	Hire an "operational auditor" to conduct annual performance audits of the BWL operations and planning;			
CRT 64	LBWL Board of Commissioners	Establish a standing committee for review of, and contract with outside expertise for, an annual operational audit.			
CRT 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.			
CRT 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.			
CRT 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;			
CRT 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.			
CRT 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.			
CRT 70	LBWL Board of Commissioners	Create and drive the system for implementation of the Internal Report and the CRT Report.			
CRT 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.			
MPSC 7	LBWL Board of Commissioners	Adopt Service and Reliability Standards similar to those ordered by the Commission in Case No. U-12270 (R 460.732), and include a customer catastrophic outage credit (R 460-744 - R 460.746), as well as comparable rules to the Unacceptable Levels of Performance for Electric Distribution Systems by regulated utilities (R 460.721 - R 460.724).			

CRT/MPSC City of Lansing Recommendations

Item#	Lead	Recommendation

CRT 18	City Government	Consider amendment of the City Charter to clarify the powers of the Mayor and to provide the					
CKI 10		Mayor executive authority over the BWL during disasters or emergencies					
CRT 21	City Government	Consider fully integrating BWL employees into the City EM structure.					
		That all units of government within or partially within the BWL customer service area review their					
CRT 24	City Government	emergency operations plans to include a process for assessing the need for an anticipatory					
		emergency declaration.					
	City Government						
MPSC V.		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.					

CRT Remaining Recommendations

	Task Name	Start	Finish	Q1 '13	Q1 '14	Q1 '15	Q1 '16	Q1 '1
1	Work Jointly with local emergency planners to update Critical Facilities Inventory	Tue 2/18/14						
2	Assist all units of government representing its customer base with identifying special needs facilities for power restoration	Tue 2/18/14			Е			
3	Assistance of micro-grid evaluation of critical facilities in service area	Tue 2/18/14			E			
4	Explore options to participate finacially in implementing micro-grid at critical facilities	Tue 2/18/14						
5	Recognize its role to assist Regional, City and Township Emergency Management in disaster response by implementing all of the following	Tue 2/18/14			<u>-</u>			
5b	Participate in all EM exercises sponsored by any units of government representing its customer base	Tue 2/18/14			E			
5c	Assure that all operations employees receive basic NIMS training,	Tue 2/18/14			E			
5d	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	Tue 2/18/14			E			
5e	Develop and maintain good working relationships with the first-responder community for all units of government representing its customer base	Tue 2/18/14	Tue 3/31/15		C			
6	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.	Tue 2/18/14			С			
7	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 responsi	Tue 2/18/14			С			
8	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	Tue 2/18/14			Е			
9	Include Business Continuity Planning in its development of a comprehensive Emergency Operations Plan.	Tue 2/18/14	Mon 3/30/15		C			
10	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)	Tue 2/18/14						
11	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.	Tue 2/18/14						
12	Develop, in coordination with the governments representing its customer base, an Energy Annex to a Regional Emergency Operations Plan.	Tue 2/18/14	Wed 12/31/14					
15	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 coordi	Tue 2/18/14	Fri 8/1/14					
17	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.	Tue 2/18/14	Sat 11/1/14					
19	Emergency Management Director, working with all other member communities, including Ingham, Clinton and Eaton Counties, create a regional emergency operations plan (EOP).	Tue 2/18/14	Wed 12/31/14		C			
22	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.		Tue 6/30/15		C			
23	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.	Tue 2/18/14	Tue 7/1/14					
33	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 I	Tue 2/18/14	Tue 6/17/14					
34	Information to be retained should include:	Tue 2/18/14	Tue 7/8/14					
а	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.	Tue 2/18/14	Fri 11/21/14					

CRT Remaining Recommendations

Item#	Task Name	Start	Finish	Q1 '13	Q1 '14		Q1 '15
b	A full log of output, as in #1 above.	Tue 2/18/14	Mon 7/21/14				
С	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 resto		Wed 8/20/14				
d	Full log of personnel engaged in restoration activities.	Tue 2/18/14	Tue 9/23/14			3	
е	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.	Tue 2/18/14	Tue 6/10/14				
f	Log of field engineer actions; optimally with enough specificity to distinguish technical actions vs. administrative actions.	Tue 2/18/14	Fri 6/13/14				
35	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 compariso	Tue 2/18/14			Е		
42	Establish a process of long-term scheduling and annual work coordination in conjunction with each of its host communities.	Tue 2/18/14			С		
44	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.	Tue 2/18/14	Sun 5/31/15				
45	Perform a benefit cost analysis to determine whether a proactive effort to install breakaway service drops is warranted.	Tue 2/18/14	Sun 5/31/15				
49	Harden the Secondary Distribution System						
С	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 co	Tue 2/18/14	Fri 6/30/17		E		
50	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 s	Tue 2/18/14			С		
55	Consider plans to install breakaway service drops first to those customers on lateral circuits or to special needs customers.	Tue 2/18/14	Sun 5/31/15		-		
60	Create a Community Resilience Planning Coalition which would take a broad approach to building community level resilience to extreme events by:	Tue 2/18/14			C		
а	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 acros	Tue 2/18/14	Wed 12/31/14				
b	Providing a forum for consideration of new risk reducing technologies and design in the built environment;	Tue 2/18/14	Wed 12/31/14		C		
d	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.	Tue 2/18/14			С		
61	Include regional resiliency, including energy self-reliance, as a strategic goal	Tue 2/18/14			С		
62	Explore the potential for "islanding" to protect the local electrical grid, with BWL taking the lead in creating an innovative, strategic solution	Tue 2/18/14			С		
73	Customer call answer time – rule 460.724 (pg. 29 of MSPC staff report)	Tue 2/18/14	Mon 6/1/15		C		
75	Blockage time of customer ability to report outage – (reference to rule at pgs. 32-33 of MPSC staff report)	Tue 2/18/14	Mon 6/1/15				
81	Hold an Annual Meeting of Stakeholders, with explicit invitations and opportunities for public debate on innovation and strategy.	Tue 2/18/14	Wed 12/31/14		C	3	

MPSC Remaining Recommendations

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Item #	Task Name	Start	Finish	%	Q4 '13	Q1 '14	Q2 '14	Q3 '14	Q4 '14	Q1 '15	Q2 '15
4	Develop metrics that allow the BWL to analyze the performance of all reliability investments.	Tue 2/18/14	Tue 6/30/15	14%							
5	Develop an annual reliability report that can be publicly available.	Tue 2/18/14	Tue 6/30/15	15%							
6	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.	Tue 2/18/14	Tue 6/30/15	19%							
12	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.	Tue 2/18/14	Mon 6/30/14	10%							
13	Expand emergency training and exercise programs to include the Board so they are educated on the BWL's electric system infrastructure and emergency operations plan.	Tue 2/18/14	Tue 6/30/15	0%							
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.		Tue 6/30/15	9%							
18	Keep the BWL Board and Lansing City Council continually informed on mutual assistance agreements should any contracts expire or have cause to be amended.	Tue 2/18/14	Tue 6/30/15	0%							
24	Develop a procedure to collect system outage data during and post storm events for future reliability analysis.	Tue 2/18/14		0%							
30	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.	Tue 2/18/14	Thu 6/19/14	50%							

BWL Outage Review 54 Items Remaining

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Item #	Task Name	Start	Finish	%	Q3 '13	Q1 '14	Q3 '14
17	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.	Tue 2/18/14	Fri 10/31/14	66%			
32	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.	Tue 3/25/14	Sat 11/1/14	75%			
34	The BWL has added text outage reporting to the 877 system to offer customers another method for reporting outages.	Thu 1/30/14	Mon 12/1/14	60%			-

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

<u>Adjourn</u>

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

<u>Adjourn</u>

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

Proposed Resolution 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)

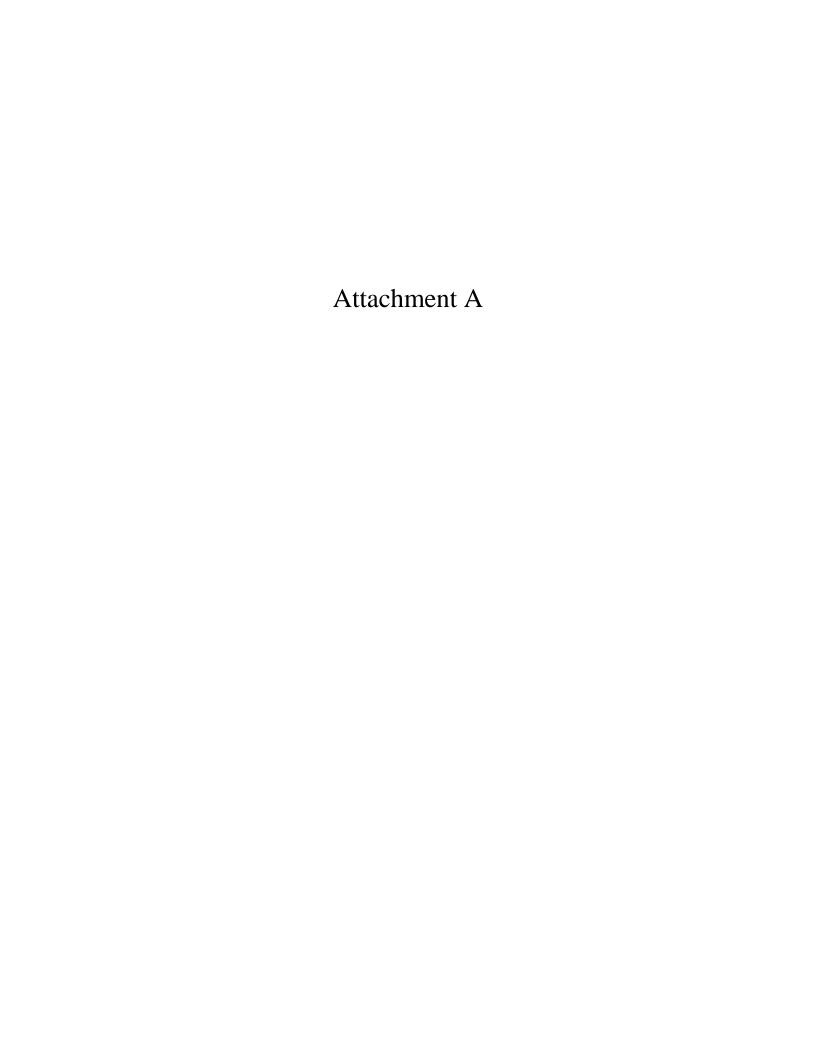
General Service – Rate 1

Industrial Service – Rate 2

Residential Service – Rate 5

Chilled Water: (Attachment D)

General Services – Rate 1



RESIDENTIAL ELECTRIC SERVICE RATE NO. 1

<u>Availability</u> - 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
C	\$0.1197 \$0.1252 \$0.1197	Summer Billing Months of June through October Per kWh for the first 500 kWh Per kWh for all over 500 kWh Winter Billing Months of November through May Per kWh for the first 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.

<u>Environmental Charge</u> – 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.

<u>Tax Adjustment</u> - 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.

<u>Delayed Payment Charge</u> - 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.

<u>Application Charge</u> - 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.

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

GENERAL ELECTRIC SERVICE RATE NO. 3

<u>Availability</u> - 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.

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

<u>Environmental Charge</u> – 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.

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

<u>Tax Adjustment</u> - 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.

<u>Metering</u> - 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.

<u>Delayed Payment Charge</u> - 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.

<u>Application Charge</u> - 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.

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

LARGE GENERAL ELECTRIC SERVICE RATE NO. 4

<u>Availability</u> - 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.

<u>Nature of Service</u> - 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	\$6	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.

<u>Environmental Charge</u> – 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.

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

<u>Tax Adjustment</u> - 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.

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

<u>Metering</u> - 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.

<u>Delayed Payment Charge</u> - 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.

<u>Application Charge</u> - 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.

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

PRIMARY ELECTRIC SERVICE RATE NO. 5

<u>Availability</u> - 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.

<u>Nature of Service</u> - 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:

	11/1/14	
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
	,	8

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.

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

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

<u>Tax Adjustment</u> - 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.

<u>Schedule of on-peak and off-peak periods</u> - 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.

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.

<u>Metering</u> - 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.

<u>Application Charge</u> - 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.

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

MUNICIPAL WATER PUMPING ELECTRIC SERVICE RATE NO. 7

<u>Availability</u> - 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.

<u>Nature of Service</u> - 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.

11/1/14

Basic Service Charge \$16.00 Per customer per month

Commodity Charge \$0.1102 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.

<u>Environmental Charge</u> – 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.

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

<u>Tax Adjustment</u> - 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.

<u>Metering</u> - 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.

<u>Delayed Payment Charge</u> - 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.

<u>Application Charge</u> - 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.

LARGE CAPACITY ELECTRIC SERVICE RATE NO. 8

<u>Availability</u> - 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.

<u>Nature of Service</u> - 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:

Basic Service Charge	11/1/14 \$400.00	per delivery point per month
Capacity Charge	\$ 10.74 \$ 2.02	per kW for all kW of On-Peak Billing Demand, plus 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.

<u>Environmental Charge</u> – 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.

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

<u>Tax Adjustment</u> - 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.

LARGE CAPACITY ELECTRIC SERVICE RATE NO. 8

<u>Schedule of on-peak and off-peak periods</u> - 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.

<u>Metering</u> - 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.

<u>Application Charge</u> - 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.

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

OUTDOOR LIGHTING SERVICE RATE NO. 9

<u>Availability</u> - 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		11/1/14
	100 W	\$12.59
	250 W	\$19.99
	400 W	\$22.72
Mercury	\mathbf{Vapor}^1	
•	175 W	\$13.22
	400 W	\$22.72
LED		
	End Mount	\$10.49

Floodlighting Luminaires on Bracket Arm on existing BWL poles

High Pre	essure Sodium	
	100 W	\$16.74
	250 W	\$22.53
	400 W	\$26.42
Metal Ha	alide	
	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

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

1.67% of estimated cost

Adopted: Proposed Effective: November 1, 2014

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

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OUTDOOR LIGHTING SERVICE RATE NO. 9

<u>Tax Adjustment</u> - 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.

<u>Delayed Payment Charge</u> - 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.

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

<u>Service Contract</u> - 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.

TRAFFIC LIGHT SERVICE RATE NO. 11

<u>Availability</u> - 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.

<u>Tax Adjustment</u> - 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.

<u>Determination of Active Load</u> - 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.

<u>Delayed Payment Charge</u> - 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.

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

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.

<u>Nature of Service</u> - 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.

11/1/14

Basic Service Charge 530.00

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.

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

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

<u>Tax Adjustment</u> - 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.

<u>Delayed Payment Charge</u> - 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.

<u>Application Charge</u> - 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.

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

RESIDENTIAL ELECTRIC SERVICE, SENIOR CITIZEN RATE NO. 21

<u>Availability</u> - 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.

11/1/14

Basic Service Charge \$5.22

Commodity Charge \$0.0961 per kWh for the first 300 kWh

\$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.

<u>Environmental Charge</u> – 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.

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

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

<u>Tax Adjustment</u> - 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.

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:

Basic Service Charge 11/1/14 \$1.95

\$1.95 Per customer per month

Commodity Charge \$ 0.0

\$ 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.

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.

STREET LIGHTING SERVICE BOARD OWNED SYSTEMS RATE NO. 31

<u>Availability</u> - 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.

<u>Nature of Service</u> - 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.

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

High Pressure S	Sodium Luminaire	11/1/14
	70 W	\$ 94
	100 W	\$107
	150 W	\$125
	250 W	\$152
	400 W	\$193
	1000 W	\$396
Mercury Vapor	Luminaire ¹	
, 1	100 W	\$100
	175 W	\$121
	250 W	\$143
	400 W	\$183
	1000 W	\$347
Metal Halide Li	uminaire	
	175 W^1	\$212
	250 W^1	\$242
	400 W	\$244
	1000 W	\$474
	1500 W	\$727
Induction Lumi	naire	
	85 W	\$100
	165 W	\$122
LED Luminaire		
	Decorative	\$143
	End Mount	\$94
	Rectilinear	\$124
	Flood	\$202

Adopted: Proposed Effective: November 1, 2014

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

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STREET LIGHTING SERVICE 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.

<u>Customer Contribution</u> - 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.

<u>Unit Replacement</u> - 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 undepreciated value of the unit plus the cost of removal.

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

<u>Tax Adjustment</u> - 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.

<u>Delayed Payment Charge</u> - 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.

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

STREET LIGHTING SERVICE BOARD OWNED SYSTEMS RATE NO. 31a

<u>Availability</u> - 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.

<u>Nature of Service</u> - 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.

<u>Annual Rate-</u> 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

<u>Annual Facilities Charge</u>- 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.

<u>Unit Replacement</u> - 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 undepreciated value of the replaced unit plus the cost of removal.

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

<u>Tax Adjustment</u> - 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.

<u>Delayed Payment Charge</u> - 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.

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

CUSTOMER OWNED SYSTEMS RATE NO. 32

<u>Availability</u> - 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.

<u>Nature of Service</u> - 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, 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 ¹	
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.

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

Adopted: Proposed Effective: November 1, 2014

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

STREET LIGHTING SERVICE CUSTOMER OWNED SYSTEMS RATE NO. 32

<u>Special Terms and Conditions</u> - 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.

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

<u>Tax Adjustment</u> - 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.

<u>Delayed Payment Charge</u> - 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.

<u>Rules and Regulations</u> - 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.

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.

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:

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

ECONOMIC DEVELOPMENT RIDER

<u>Purpose</u> – 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.

<u>Availability</u> – 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.



RESIDENTIAL WATER SERVICE RATE NO. 1

<u>Availability</u> - 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
11/4" or 11/2"	\$70.82
2"	\$124.52

Commodity Charge: per ccf of water used per month;

\$2.79

Power and Chemical Cost Adjustment - The power and chemical cost adjustment shall consist of an increase or decrease of 0.1ϕ per ccf billed for each 0.1ϕ 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 ϕ 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.

<u>Tax Adjustment</u> - 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.

<u>Delayed Payment Charge</u> - 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.

<u>Application Charge</u> - 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.

<u>Rules and Regulations</u> - 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.

^{*} 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.

GENERAL WATER SERVICE RATE NO. 2

<u>Availability</u> - 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;

Power and Chemical Cost Adjustment - The power and chemical cost adjustment shall consist of an increase or decrease of 0.1ϕ per ccf billed for each 0.1ϕ 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 ϕ 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.

<u>Tax Adjustment</u> - 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.

<u>Delayed Payment Charge</u> - 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.

<u>Rules and Regulations</u> - 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.

^{*} 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.

FIRE SERVICE RATE NO. 4

<u>Fire Service</u> - 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.

<u>Monthly Fire Service Charge</u> - 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:

<u>11/1/14</u>
\$78
\$177
\$312
\$487

<u>Tax Adjustment</u> - 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.

<u>Delayed Payment Charge</u> - 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.

<u>Rules and Regulations</u> - 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.

LAWN SPRINKLING WATER SERVICE RATE NO. 5

<u>Availability</u> - 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 0.1ϕ per ccf billed for each 0.1ϕ increase or decrease in the average cost of power and chemicals required to deliver treated water to the customer's meter above or below 44.7ϕ 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.

<u>Tax Adjustment</u> - 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.

<u>Delayed Payment Charge</u> - 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.

<u>Application Charge</u> - 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.

<u>Rules and Regulations</u> - 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.

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:

11/1/14

All Hydrants

\$517

<u>Tax Adjustment</u> - 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.

<u>Delayed Payment Charge</u> - 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.

<u>Rules and Regulations</u> - 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.



GENERAL STEAM SERVICE RATE NO. 1

<u>Availability</u> - 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.

<u>Surcharge</u> - 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.

<u>Fuel Cost Adjustment</u> - 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.

<u>Amine Treatment Adjustment</u> - 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.

<u>Tax Adjustment</u> - 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.

<u>Minimum Charge</u> - 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.

<u>Delayed Payment Charge</u> - 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.

<u>Rules and Regulations</u> - Service under this rate is subject to the BWL Rules and Regulations for Steam Service which are

incorporated herein by this reference.

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:

11/1/14

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)

<u>Fuel Cost Adjustment</u> - 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.

<u>Environmental Charge</u> – 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.

<u>Tax Adjustment:</u> 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.

<u>Billing Demand:</u> 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.

<u>Delayed Payment Charge:</u> 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.

RESIDENTIAL STEAM SERVICE RATE NO. 5

<u>Availability</u> - 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.

<u>Nature of Service</u> - 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.

<u>Surcharge</u> - 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.

<u>Fuel Cost Adjustment</u> - 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.

<u>Amine Treatment Adjustment</u> - 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.

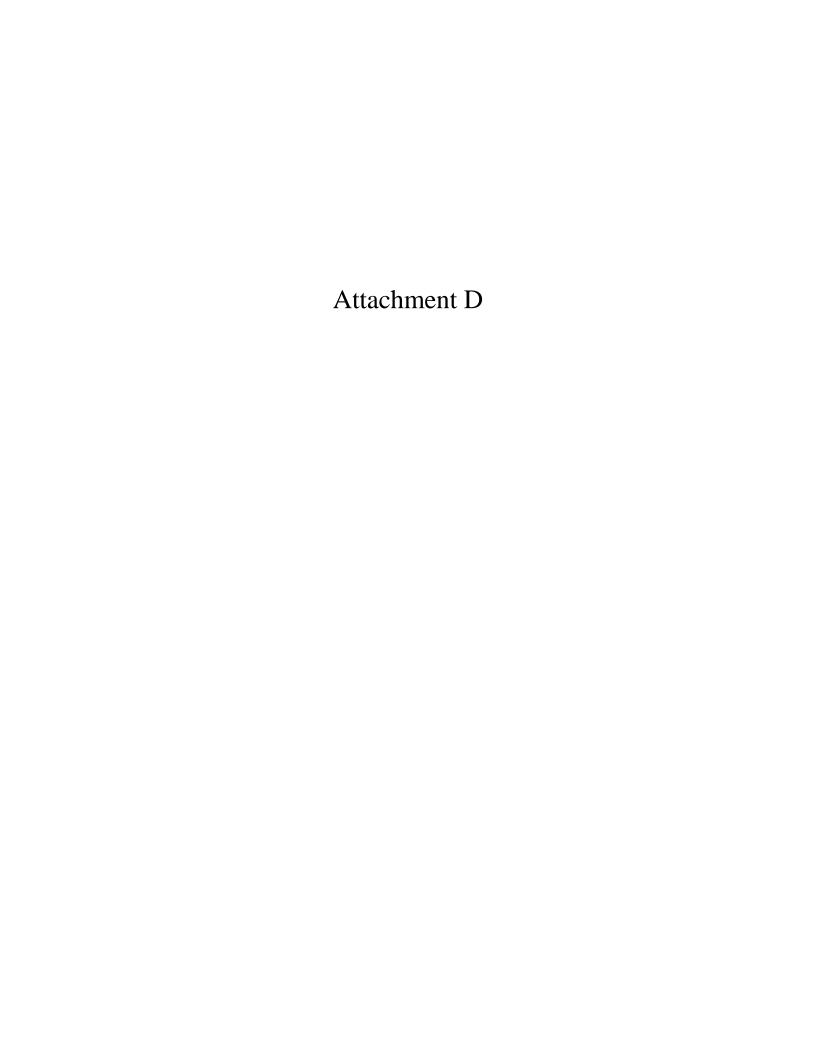
<u>Tax Adjustment</u> - Bills shall be increased within the limits of any governmental authority or political subdivision which levies taxes, license fees, franchise fees, or any other charges against the BWL's property, or its operation, or the production and/or sale of steam, to offset any such cost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

<u>Minimum Charge</u> - 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.

<u>Delayed Payment Charge</u> - 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.

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



GENERAL CHILLED WATER SERVICE

RATE NO. 1

<u>Availability</u> – 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

<u>Tax Adjustment</u> – 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 10° F or, (2) each degree Fahrenheit the customer's return water temperature is below 57° 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.

<u>Metering</u> – 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.

<u>Delayed Payment Charge</u> – 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.

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

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.

Proposed Resolution 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.